DRAFT ENVIRONMENTAL IMPACT ASSESSMENT

&

ENVIRONMENT MANAGEMENT PLAN

"B1" CATEGORY – MINOR MINERAL –CLUSTER–NON-FOREST LAND-PATTA LAND

M/s. VKP ENGINEERING IND PVT LTD ROUGH STONE AND GRAVEL QUARRY

IN CLUSTER OVER AN EXTENT OF 14.00.33 Ha

<table>
<tr><th colspan="3">PROPONENT</th></tr>
<tr><td colspan="3">M/s. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No. 11/32, Vettukattu Valasu,
Ingur, Perundurai, Erode District – 638 052.</td></tr>
<tr><th>PROJECT DETAIL P1</th><th>PROJECT DETAIL P2</th><th>PROJECT DETAIL P3</th></tr>
<tr><td>Location Details
S.F. No. 543/2
Peruntholuvu Village, Tiruppur South Taluk,
Tiruppur District
Extent 1.64.38 Ha</td><td>Location Details
S.F. No. 538/2A, 538/2B and 539/2 (P),
Peruntholuvu Village,
Tiruppur South Taluk,
Tiruppur District
Extent 2.90.0 Ha</td><td>Location Details
S.F.Nos. 536, 537/1, 537/2 & 537/3,
Peruntholuvu Village,
Tiruppur South Taluk,
Tiruppur District
Extent 4.51.0 Ha</td></tr>
<tr><td>Production Details
Mineable Reserves :
1,23,550m^3 of Rough Stone
99,800m^3 of Weathered rock
23,868m^3 of Gravel
Depth : 47m (9m AGL + 38m BGL)</td><td>Production Details
Mineable Reserves :
1,50,770m^3 of Rough Stone
1,73,090m^{3}of Weathered rock
42,192m^3 of Gravel
Depth : 42m (9m AGL + 33m BGL)</td><td>Production Details
Mineable Reserves :
8,33,355m^3 of Rough Stone
3,05,978m^3 of Weathered rock
75,408m^3 of Gravel
Depth : 72m (12m AGL + 60m BGL)</td></tr>
<tr><td colspan="3">ToR obtained vide
File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated:03.06.2025-P1
File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated:03.06.2025-P2
File No. 11961 TOR Identification No. TO25B0108TN5609691N Dated:15.06.2025-P3</td></tr>
<tr><td colspan="2">Environmental Consultant
GEO EXPLORATION AND MINING SOLUTIONS
Old No. 260-B, New No. 17,
Advaitha Ashram Road, Alagapuram,
Salem – 636 004, Tamil Nadu, India
Accredited for sector 1 Cat 'A', sector 31 & 38 Cat 'B'
Certificate No : NABET/EIA/2225/RA 0276
Phone: 0427-2431989,
Email: infogeoexploration@gmail.com
Web: www.gemssalem.com</td><td>Laboratory
GLOBAL LAB AND CONSULTANCY SERVICES,
Approved by ISO:9001:2015, NABL, FSSAI,
Experts in QHSE
S.F No:92/3A2, Geetha Nagar,
Alagapuram Pudur, Salem-636016.</td></tr>
<tr><td colspan="3"><u>Baseline Monitoring Period</u>
MARCH to MAY 2025</td></tr>
</table>

*PROPOSED QUARRIES				
CODE	**Name of the Proponent and Address**	**S.F. Nos & Village**	**Extent in Ha**	**Status**
P1	**M/s. VKP Engineering Ind Pvt., Ltd.,** Thiru. P. Jagadeesan, Director No. 11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District – 638 052**.**	543/2 & Peruntholuvu Village	1.64.38Ha	Obtained ToR vide, File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated:03.06.2025
P2		538/2A, 538/2B and 539/2 (P) & Peruntholuvu Village	2.90.0 Ha	Obtained ToR vide, File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated:03.06.2025
P3		536, 537/1, 537/2 & 537/3 & Peruntholuvu Village	4.51.0 Ha	Obtained ToR vide, File No. 11961 TOR Identification No. TO25B0108TN5609691N Dated:15.06.2025
	Total		**9.05.38 Ha**	
***EXISTING QUARRIES**				
CODE	**Name of the Proponent and Address**	**S.F.Nos , Village & Taluk**	**Extent in Ha**	**Lease Period**
E-1	**M/s. VKP Engineering Ind Pvt., Ltd.,**	538/1(P),539/1(P) & 539/2(P)	4.94.95	19.06.2020 to 18.06.2030
		Total	**4.94.95 Ha**	
ABANDONED/EXPIRED QURRIES				
CODE	**Name of the Proponent and Address**	**S.F. Nos, Village & Taluk**	**Extent in Ha**	**Lease Period**
	Nil			
***TOTAL CLUSTER EXTENT**			**14.00.33 Ha**	

Note:-

- **Cluster area is calculated as per MoEF & CC Notification – S.O. 2269 (E) Dated: 01.07.2016**

As per above notification S.O.2269(E) dated : 01.07.2016 in para (b) in Appendix XI,- (ii)(5): The lease not operative for three years or more and leases which have got environmental clearance as on 15th January, 2016 shall not be counted for calculating the area of cluster, but shall be included in the Environment Management Plan and the Regional Environmental Management Plan"

TERMS OF REFERENCE (ToR) COMPLIANCE

M/s. VKP Engineering Ind Pvt., Ltd (1.64.38 Ha)- P1

"ToR issued vide File No.11950 TOR Identification No. TO25B0108TN5971334N Dated: 03.06.2025"

SPECIFIC CONDITIONS		
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.	**Noted and Agreed** Cluster Management committee has been detailed in the chapter - 7
2	The Boundary pillars to be erected as per the mine rules and the evidence should be submitted along with the EIA report.	Noted and Agreed. Boundary pillars has been erected in all the boundaries of the proposed quarry.
3	Since waterbodies are situated nearby, the PP shall carry out the hydrological study including the details of waterflow pattern to determine the impacts of the mining operation in the waterbodies.	**Noted and Agreed.** The hydrogeology study has been detailed in chapter – 3
4	The details of enumeration of structures including schools, colleges, primary health centres should be submitted along with the EIA report	**Noted and Agreed** The structure study has been detailed in the chapter - 3
5	The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m & 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.	**Noted and Agreed** The structure study has been detailed in the chapter - 3
6	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.	**Noted and Agreed**
7	The Proponent shall carry out Bio diversity study as a part of EIA study and the same shall be included in the Report.	**Noted and Agreed** It has been detailed in chapter No - 3
8	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.	**Noted and Agreed** The EMP has been detailed in Chapter - 10
9	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	**Noted and Agreed**
10	The PP shall prepare a conceptual working plan accommodating the inclusion of haul road accessibility keeping the benches intact, by ensuring the slope stability	**Noted and Agreed**

	of the working benches to be constructed and existing quarry wall.	
11	The PP shall install the CCTV camera for the continuous surveillance of mining activity & furnish the photographic/videographic evidence along with the EIA report.	**Noted and Agreed**
	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.	Not Applicable It is a fresh 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.	**Noted and agreed.** Letter obtained from the VAO regarding surface features within 300m radius
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.	**Noted and agreed** The structure study has been carried out within the radius of 300m. There is no habitation within the radius of 300m from the project site the details of the structures is given in the EIA report, Chapter No.III
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.	**Noted and agreed.** The hydro-geological assessment was carried out to assess the potential effects on the groundwater table. It is expected that there will be no major impacts on the water bodies in the vicinity of the project site. Further information is given in Chapter 3.
5	The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.	**Noted and agreed** The Bio diversity study has been conducted by the Functional Area Expert approved by the NABET. The same has been detailed in the Chapter No. 3.
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.	Request to consider the secondary source data detailing the nearest reserve forest from Tamil Nadu Geographical Information System (TNGIS). The Nearest Reserve Forest Vellikaradu RF – 12.6km – North East
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	**Noted and agreed**. It is a fresh quarry. The slope stability report will be submitted together with the half-yearly compliance report once the depth reaches 30 meters.

	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.	**Noted and agreed**. It is a fresh quarry. The slope stability report will be submitted together with the half-yearly compliance report once the depth reaches 30 meters.
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.	**Noted and agreed** The Proponent given affidavit stating that the blasting operation will be carried out by the 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.	**Noted and agreed** The details of design for carrying out controlled blasting operation involving line drilling and muffle blasting to minimize blast-induced ground vibrations and controlled fly rock travel beyond 30 m from the blast site is detailed in Chapter 4.
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	**Noted and agreed.** The Existing Quarry is in name of V.K.P. Enginneering Ind Pvt Ltd.Extent: 4.94.95 ha
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,	**Noted and agreed**
13	What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?	It is a fresh quarry
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 is a fresh 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).	**Noted and agreed** The project site has been superimposed on the high resolution imagery. The Satellite imagery of the project site is enclosed in Chapter II Geomorphology map of the area is enclosed in Chapter II. Lithology and Geology Map of the area is enclosed in Chapter II.
16	The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,	**Noted and agreed** The Drone Video of the project site is taken covering the Greenbelt and Fencing around the Project site.

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.	Noted and agreed As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 850 Nos of trees were planted as a part of greenbelt development programme all along the periphery of the lease applied area and approach roads and village roads. As well the pp has provided wire fencing as recommended all along the boundary of the lease applied area.
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.	**Noted and agreed** Details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology justifications are provided in Chapter 2. The anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same are provided in Chapter 4.
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.	**Noted and agreed** The Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act, 1952 and the MMR, 196l 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.	**Noted and agreed** The hydro-geological study was conducted to evaluate the possible impact on the ground water table. No significant impacts are anticipated on the water bodies around the project area. Details are discussed under Chapter No. 3.
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	**Noted and agreed** Baseline Data were collected for Post monsoon season March to May 2025. The Details of the Baseline Monitoring is given in the Chapter No. 3.
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.	**Noted and agreed** Cumulative impact study has been carried out covering proposed and existing quarries in the cluster and results related to air pollution, water pollution, & health impacts have been given in chapter No. 7, Based on the results, environmental management plan has been prepared and given in Chapter No. 10.
23	Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.	**Noted and agreed** The lower part of the mine pit will be utilized as rain water harvesting structure (Temporary) and the water will be used for the water sprinkling on haul roads and Greenbelt development purpose. Rainwater harvesting structure will be constructed near the mine office.
24	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary,	Noted and Agreed

	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.	Land use and land cover of the study area is discussed in Chapter No. 3. Land use plan of the project area showing pre-operational, operational and post-operational phases are discussed in Chapter No. 3, Table No 3.3
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.
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.	Not Applicable. Project area / Study area is not declared in 'Critically Polluted' Area and does not come under 'Aravalli Range.
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.	**Noted and agreed** The lower part of the mine pit will be utilized as rain water harvesting structure (Temporary) and the water will be used for the water sprinkling on haul roads and Greenbelt development purpose. Rainwater harvesting structure will be constructed near the mine office.
28	Impact on local transport infrastructure due to the Project should be indicated.	**Noted and agreed** Traffic density survey was carried out to analyze the impact of transportation in the study area as per IRC guidelines 1961 and it is inferred that there is no significant impact due to the proposed transportation from the project area. Details have been provided in Chapter No. 2.
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.	**Noted and agreed**
30	A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific	**Noted & agreed.** Mine closure plan is detailed in Chapter No. 4.
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	**Noted and agreed**
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.	**Noted and agreed** As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 850 Nos of trees were planted as a part of greenbelt development program all along the periphery of the lease applied area and approach roads and village roads.
33	Taller/one-year-old Saplings raised in appropriate size of bags, preferably eco-friendly 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	**Noted and agreed** As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 850 Nos of trees were planted as a part of greenbelt development program all along the periphery of the lease applied area and approach roads and village roads.

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	Noted and agreed. Disaster management Plan is explicated in chapter 7.
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	Noted and agreed. Risk Assessment and management Plan is explicated in chapter 7.
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.	Noted and agreed Occupational Health impacts of the project elaborately discussed in chapter 10.
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.	Noted and agreed No Public Health Implications anticipated due to this project. The anticipated impact and effective mitigation measures are discussed in the Chapter No. 4
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.	**Noted and agreed** Socio-economic studies were conducted within a 5-kilometer radius of the quarry site. Details of report given in Chapter 3.
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.	No Litigation is pending against this project
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.	**Noted and agreed.** The details of the Project benefits are given in the Chapter No. 8.
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.	**Noted and agreed.**
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.	**Noted and agreed** The EMP has been prepared for the entire life of the mine i.e., up to the lease period.
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.	**Noted and agreed**

SEIAA STANDARD CONDITIONS		
Cluster Management Committee		
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.	**Noted and agreed** The Cluster management committee has been formed covering the existing and proposed quarries in the cluster

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.,	**Noted and agreed** The information will be shared to the cluster management committee during the monthly meeting.
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.	**Noted and agreed** The list of members of the committee formed will be submitted to AD/Mines before resuming the mining operation.
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.	**Noted and agreed** It is a Fresh Quarry the blasting will be used occasionally for the removal of overburden only the blasting frequency and usage of haul roads are discussed.
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.	**Noted and agreed** The risk management plan and disaster management plan has been prepared and enclosed in this EIA report, Chapter No. 7.
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.	**Noted and agreed** Environmental policy of the cluster management committee is detailed in the EIA Report Chapter No. 6
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.	**Noted and agreed** The Restoration strategy is discussed in the progressive mine closure plan and enclosed in the Scheme of Mining plan.
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.	**Noted and agreed** The information on the health of the workers and the local people will be updated periodically along with medical examination.
Agriculture & Agro-Biodiversity		
9	Impact on surrounding agricultural fields around the proposed mining Area.	As the proposed lease area is dominantly surrounded by mining land, barren land, and fallow land, the impact on the surrounding agricultural fields if present is considerably low. The Mining operation will be carried out to reduce the impact further to the level of negligence.
10	Impact on soil flora & vegetation around the project site.	The vegetation details have been provided in chapter III. There is no schedule I species of animals observed within study area as per Wildlife Protection Act, 1972 and no species falls in vulnerable, endangered or threatened category as

		per IUCN. There is no endangered red list species found in the study area.
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.	**Noted and agreed** There are no trees within the Fresh quarry site, and therefore, no proposal for tree felling or removal is anticipated during the quarrying operations.
12	The Environmental Impact Assessment should study the agro-biodiversity, agro-forestry, horticultural plantations, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem.	**Noted and agreed** The details of the soil analysis and the impacts are given in the Chapter No 3 & 4.
13	Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.	**Noted and agreed** The Eco System of the area will be retained during the mining operation by the way of planting trees in the boundary barrier and un utilized areas. After completion of mining operation, the quarried-out pit will be facilitated to collect the rainwater to pit act as temporary reservoir
14	The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock	**Noted and agreed** The project area is situated centre part of the quarry lands. The proposed Rough Stone quarrying operation will employ the wet drilling method, which is expected to have negligible impacts on nearby agricultural lands.
Forests		
15	The project proponent shall detailed study on impact of mining on Reserve forests and free ranging wildlife	**Noted and agreed.** There is no Reserve Forest within 1km radius from the project area. The mining operation will not cause any significant impact to the Reserve Forest and Wild life Sanctuaries
16	The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna.	There is no forest/wildlife within 10km radius, chapter 3 details of Ecology and Biodiversity, and 4 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	Details are discussed in the Chapter No.3
18	The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site	Anticipated Environment Impact and Mitigation measures are detailed in Chapter No.4
Water Environment		
19	Hydro-geological study considering the contour map of the water table detailing the number of ground water	There are 8 open wells and 6 bore wells within the radius of 1km from the project area,

	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	Hydrogeological study has been conducted by the resistivity method
20	Erosion Control measures	Details discussed in the chapter No.4
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.	Details in Chapter 3
22	The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir	Food webs describe who eats whom in an ecological community. Made of interconnected food chains, food webs help us understand how changes to ecosystems — say, removing a top predator or adding nutrients — affect many different species, both directly and indirectly. Whereas in this proposed project is for quarrying of Rough Stone and Gravel and is on a hard batholith formation where no diversion of any water bodies is proposed of there is no intersection of ground water table anticipated.
23	The project proponent shall study and furnish the details on potential fragmentation impact on natural environment, by the activities.	Details are given in the Chapter No 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.	Details in Chapter 4 impact of bio diversity.
25	The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components	Details of impact on soil environment is detailed in Chapter No.4
26	The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites	Vellikaradu RF – 12.6km – North East There is, National Parks, Eco sensitive areas, Wild life sanctuaries within the radius of 10km. An ecological survey of the study area was conducted particularly with reference to the listing of species and assessment of the existing baseline ecological (terrestrial) condition in the study area. Ecological Environment is discussed under Chapter 3
27	The EIA shall include the impact of mining activity on the following:	There are 8 open wells and 6 bore wells within the radius of 1km from the project area,

	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.	Hydrogeological study has been conducted by the resistivity method
Energy		
28	The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished.	Noted and agreed. Control measures of Noise, Air Water, Dust discussed in chapter 4
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	Noted and agreed. Details discussed in chapter 4.
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	Noted and agreed. Details are discussed in chapter 3.
31	Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood.	A greenhouse gas (GHG) is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3) Carbon dioxide (CO_2): Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and other biological materials. Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle. Methane (CH_4): Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices, land use and by the decay of organic waste in municipal solid waste landfills. Nitrous oxide (N_2O): Nitrous oxide is emitted during agricultural, land use, and industrial activities; combustion of fossil fuels and solid waste; as well as during treatment of wastewater
Mine Closure Plan		

32	Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.	Progressive Mine closure plan has been prepared considering the entire lease period in the mining plan and the same has been approved.
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	**Noted and agreed** Detailed EMP discussed in chapter 10.
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.	**Noted and agreed.** Detailed EMP discussed in chapter 10.
Risk Assessment		
35	To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.	Noted and agreed. Risk Assessment and management Plan explicated in chapter 7.
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.	Noted and agreed. Disaster management Plan details given in Chapter-7
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.	Letter obtained from the VAO regarding surface features within 300m radius
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.	Noted and agreed. It will be updated in final EIA/EMP report.
39	The project proponent shall study and furnish the possible pollution due to plastic and micro plastic on the environment. The ecological risks and impacts of plastic & micro plastics on aquatic environment and fresh water systems due to activities, contemplated during mining may be investigated and reported	Noted and agreed. Plastic waste management of the proposed project explicated in chapter 7.

M/s. VKP Engineering Ind Pvt., Ltd (2.90.0Ha)- P2

"ToR issued vide File No.11957 TOR Identification No. TO25B0108TN5253360N Dated: 03.06.2025"

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 a fresh 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.	**Noted and agreed.** Letter obtained from the VAO regarding surface features within 300m radius
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.	**Noted and agreed** The structure study has been carried out within the radius of 300m. There is no habitation within the radius of 300m from the project site the details of the structures is given in the EIA report, Chapter No.III
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.	**Noted and agreed.** The hydro-geological assessment was carried out to assess the potential effects on the groundwater table. It is expected that there will be no major impacts on the water bodies in the vicinity of the project site. Further information is given in Chapter 3.
5	The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.	**Noted and agreed** The Bio diversity study has been conducted by the Functional Area Expert approved by the NABET. The same has been detailed in the Chapter No. 3.
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.	Request to consider the secondary source data detailing the nearest reserve forest from Tamil Nadu Geographical Information System (TNGIS). The Nearest Reserve Forest Vellikaradu RF – 12.6km – North East
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	**Noted and agreed**. It is a fresh quarry. The slope stability report will be submitted together with the half-yearly compliance report once the depth reaches 30 meters.

	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.	**Noted and agreed**. It is a fresh quarry. The slope stability report will be submitted together with the half-yearly compliance report once the depth reaches 30 meters.
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.	**Noted and agreed** The Proponent given affidavit stating that the blasting operation will be carried out by the 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.	Noted and agreed The details of design for carrying out controlled blasting operation involving line drilling and muffle blasting to minimize blast-induced ground vibrations and controlled fly rock travel beyond 30 m from the blast site is detailed in Chapter 4.
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	**Noted and agreed.** The Existing Quarry is in name of V.K.P. Enginneering Ind Pvt Ltd. Extent: 4.94.95 ha.
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,	Noted and agreed
13	What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?	It is a Fresh Quarry
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 is a Fresh 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).	**Noted and agreed** The project site has been superimposed on the high resolution imagery. The Satellite imagery of the project site is enclosed in Chapter II Geomorphology map of the area is enclosed in Chapter II. Lithology and Geology Map of the area is enclosed in Chapter II.
16	The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,	**Noted and agreed** The Drone Video of the project site is taken covering the Greenbelt and Fencing around the Project site.
17	The proponent shall furnish photographs of adequate fencing, green belt along the periphery including	Noted and agreed

	replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.	As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 1500 Nos of trees were planted as a part of greenbelt development programme all along the periphery of the lease applied area and approach roads and village roads. As well the pp has provided wire fencing as recommended all along the boundary of the lease applied area.
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.	**Noted and agreed** Details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology justifications are provided in Chapter 2. The anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same are provided in Chapter 4.
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.	**Noted and agreed** The Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act, 1952 and the MMR, 196l 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.	**Noted and agreed** The hydro-geological study was conducted to evaluate the possible impact on the ground water table. No significant impacts are anticipated on the water bodies around the project area. Details are discussed under Chapter No. 3.
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	**Noted and agreed** Baseline Data were collected for Post monsoon season March to May 2025. The Details of the Baseline Monitoring is given in the Chapter No. 3.
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.	**Noted and agreed** Cumulative impact study has been carried out covering proposed and existing quarries in the cluster and results related to air pollution, water pollution, & health impacts have been given in chapter No. 7, Based on the results, environmental management plan has been prepared and given in Chapter No. 10.
23	Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.	**Noted and agreed** The lower part of the mine pit will be utilized as rain water harvesting structure (Temporary) and the water will be used for the water sprinkling on haul roads and Greenbelt development purpose. Rainwater harvesting structure will be constructed near the mine office.
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	Noted and Agreed Land use and land cover of the study area is discussed in Chapter No. 3.

	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.	Land use plan of the project area showing pre-operational, operational and post-operational phases are discussed in Chapter No. 3, Table No 3.3
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.
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.	Not Applicable. Project area / Study area is not declared in 'Critically Polluted' Area and does not come under 'Aravalli Range.
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.	**Noted and agreed** The lower part of the mine pit will be utilized as rain water harvesting structure (Temporary) and the water will be used for the water sprinkling on haul roads and Greenbelt development purpose. Rainwater harvesting structure will be constructed near the mine office.
28	Impact on local transport infrastructure due to the Project should be indicated.	**Noted and agreed** Traffic density survey was carried out to analyze the impact of transportation in the study area as per IRC guidelines 1961 and it is inferred that there is no significant impact due to the proposed transportation from the project area. Details have been provided in Chapter No. 2.
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.	**Noted and agreed**
30	A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific	**Noted & agreed.** Mine closure plan is detailed in Chapter No. 4.
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	**Noted and agreed**
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.	**Noted and agreed** As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 1500 Nos of trees were planted as a part of greenbelt development program all along the periphery of the lease applied area and approach roads and village roads.
33	Taller/one-year-old Saplings raised in appropriate size of bags, preferably eco-friendly 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	**Noted and agreed** As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 1500 Nos of trees were planted as a part of greenbelt development program all along the periphery of the lease applied area and approach roads and village roads.

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	Noted and agreed. Disaster management Plan is explicated in chapter 7.
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	Noted and agreed. Risk Assessment and management Plan is explicated in chapter 7.
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.	Noted and agreed Occupational Health impacts of the project elaborately discussed in chapter 10.
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.	Noted and agreed No Public Health Implications anticipated due to this project. The anticipated impact and effective mitigation measures are discussed in the Chapter No. 4
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.	**Noted and agreed** Socio-economic studies were conducted within a 5-kilometer radius of the quarry site. Details of report given in Chapter 3.
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.	No Litigation is pending against this project
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.	**Noted and agreed.** The details of the Project benefits are given in the Chapter No. 8.
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.	**Noted and agreed.**
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.	**Noted and agreed** The EMP has been prepared for the entire life of the mine i.e., up to the lease period.
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.	**Noted and agreed**

SEIAA STANDARD CONDITIONS

Cluster Management Committee		
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.	**Noted and agreed** The Cluster management committee has been formed covering the existing and proposed quarries in the cluster
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.,	**Noted and agreed** The information will be shared to the cluster management committee during the monthly meeting.
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.	**Noted and agreed** The list of members of the committee formed will be submitted to AD/Mines before resuming the mining operation.
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.	**Noted and agreed** It is an Fresh Rough Stone quarry the blasting will be used occasionally for the removal of overburden only the blasting frequency and usage of haul roads are discussed.
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.	**Noted and agreed** The risk management plan and disaster management plan has been prepared and enclosed in this EIA report, Chapter No. 7.
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.	**Noted and agreed** Environmental policy of the cluster management committee is detailed in the EIA Report Chapter No. 6
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.	**Noted and agreed** The Restoration strategy is discussed in the progressive mine closure plan and enclosed in the Scheme of Mining plan.
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.	**Noted and agreed** The information on the health of the workers and the local people will be updated periodically along with medical examination.
Agriculture & Agro-Biodiversity		
9	Impact on surrounding agricultural fields around the proposed mining Area.	As the proposed lease area is dominantly surrounded by mining land, barren land, and fallow

		land, the impact on the surrounding agricultural fields if present is considerably low. The Mining operation will be carried out to reduce the impact further to the level of negligence.
10	Impact on soil flora & vegetation around the project site.	The vegetation details have been provided in chapter III. There is no schedule I species of animals observed within study area as per Wildlife Protection Act, 1972 and no species falls in vulnerable, endangered or threatened category as per IUCN. There is no endangered red list species found in the study area.
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.	**Noted and agreed** There are no trees within the Fresh quarry site, and therefore, no proposal for tree felling or removal is anticipated during the quarrying operations.
12	The Environmental Impact Assessment should study the agro-biodiversity, agro-forestry, horticultural plantations, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem.	**Noted and agreed** The details of the soil analysis and the impacts are given in the Chapter No 3 & 4.
13	Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.	**Noted and agreed** The Eco System of the area will be retained during the mining operation by the way of planting trees in the boundary barrier and un utilized areas. After completion of mining operation, the quarried-out pit will be facilitated to collect the rainwater to pit act as temporary reservoir
14	The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock	**Noted and agreed** The project area is situated centre part of the quarry lands. The proposed Rough Stone quarrying operation will employ the wet drilling method, which is expected to have negligible impacts on nearby agricultural lands.
Forests		
15	The project proponent shall detail study on impact of mining on Reserve forests and free ranging wildlife	**Noted and agreed.** There is no Reserve Forest within 1km radius from the project area. The mining operation will not cause any significant impact to the Reserve Forest and Wild life Sanctuaries
16	The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna.	There is no forest/wildlife within 10km radius, chapter 3 details of Ecology and Biodiversity, and 4 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	Details are discussed in the Chapter No.3
18	The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site	Anticipated Environment Impact and Mitigation measures are detailed in Chapter No.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 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	There are 8 open wells and 6 bore wells within the radius of 1km from the project area, Hydrogeological study has been conducted by the resistivity method
20	Erosion Control measures	Details discussed in the chapter No.4
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.	Details in Chapter 3
22	The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir	Food webs describe who eats whom in an ecological community. Made of interconnected food chains, food webs help us understand how changes to ecosystems — say, removing a top predator or adding nutrients — affect many different species, both directly and indirectly. Whereas in this proposed project is for quarrying of Rough Stone and Gravel and is on a hard batholith formation where no diversion of any water bodies is proposed of there is no intersection of ground water table anticipated.
23	The project proponent shall study and furnish the details on potential fragmentation impact on natural environment, by the activities.	Details are given in the Chapter No 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.	Details in Chapter 4 impact of bio diversity.
25	The Terms of Reference should specifically study impact on soil health, soil erosion, the soil	Details of impact on soil environment is detailed in Chapter No.4

	physical, chemical components and microbial components	
26	The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites	Vellikaradu RF – 12.6km – North East There is, National Parks, Eco sensitive areas, Wild life sanctuaries within the radius of 10km. An ecological survey of the study area was conducted particularly with reference to the listing of species and assessment of the existing baseline ecological (terrestrial) condition in the study area. Ecological Environment is discussed under Chapter 3
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.	There are 8 open wells and 6 bore wells within the radius of 1km from the project area, Hydrogeological study has been conducted by the resistivity method
Energy		
28	The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished.	Noted and agreed. Control measures of Noise, Air Water, Dust discussed in chapter 4
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	Noted and agreed. Details discussed in chapter 4.
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	Noted and agreed. Details are discussed in chapter 3.
31	Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood.	A greenhouse gas (GHG) is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3) Carbon dioxide (CO_2): Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and other biological materials. Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

		Methane (CH_4): Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices, land use and by the decay of organic waste in municipal solid waste landfills. Nitrous oxide (N_2O): Nitrous oxide is emitted during agricultural, land use, and industrial activities; combustion of fossil fuels and solid waste; as well as during treatment of wastewater
Mine Closure Plan		
32	Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.	Progressive Mine closure plan has been prepared considering the entire lease period in the mining plan and the same has been approved.
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	**Noted and agreed** Detailed EMP discussed in chapter 10.
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.	**Noted and agreed.** Detailed EMP discussed in chapter 10.
Risk Assessment		
35	To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.	Noted and agreed. Risk Assessment and management Plan explicated in chapter 7.
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.	Noted and agreed. Disaster management Plan details given in Chapter-7
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.	Letter obtained from the VAO regarding surface features within 300m radius

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.	Noted and agreed. It will be updated in final EIA/EMP report.
39	The project proponent shall study and furnish the possible pollution due to plastic and micro plastic on the environment. The ecological risks and impacts of plastic & micro plastics on aquatic environment and fresh water systems due to activities, contemplated during mining may be investigated and reported	Noted and agreed. Plastic waste management of the proposed project explicated in chapter 7.

M/s. VKP Engineering Ind Pvt., Ltd (4.51.0Ha)- P3

"ToR issued vide File No.11961 TOR Identification No. TO25B0108TN5609691N Dated: 15.06.2025"

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 a fresh 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.	**Noted and agreed.** Letter obtained from the VAO regarding surface features within 300m radius
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.	**Noted and agreed** The structure study has been carried out within the radius of 300m. There is no habitation within the radius of 300m from the project site the details of the structures is given in the EIA report, Chapter No.III
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.	**Noted and agreed.** The hydro-geological assessment was carried out to assess the potential effects on the groundwater table. It is expected that there will be no major impacts on the water bodies in the vicinity of the project site. Further information is given in Chapter 3.
5	The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.	**Noted and agreed** The Bio diversity study has been conducted by the Functional Area Expert approved by the NABET. The same has been detailed in the Chapter No. 3.

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.	Request to consider the secondary source data detailing the nearest reserve forest from Tamil Nadu Geographical Information System (TNGIS). The Nearest Reserve Forest Vellikaradu RF – 12.2km – North East
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.	**Noted and agreed**. It is an Fresh quarry. The slope stability report will be submitted together with the half-yearly compliance report once the depth reaches 30 meters.
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.	**Noted and agreed**. It is an Fresh quarry. The slope stability report will be submitted together with the half-yearly compliance report once the depth reaches 30 meters.
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.	**Noted and agreed** The Proponent given affidavit stating that the blasting operation will be carried out by the 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.	Noted and agreed The details of design for carrying out controlled blasting operation involving line drilling and muffle blasting to minimize blast-induced ground vibrations and controlled fly rock travel beyond 30 m from the blast site is detailed in Chapter 4.
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	**Noted and agreed.** Existing quarry is in the name of V.K.P. Engineering Ind Pvt Ltd Extent: 4.51.0 ha
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,	Noted and agreed
13	What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?	It is a Fresh quarry
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	It is a Fresh quarry

	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).	**Noted and agreed** The project site has been superimposed on the high resolution imagery. The Satellite imagery of the project site is enclosed in Chapter II Geomorphology map of the area is enclosed in Chapter II. Lithology and Geology Map of the area is enclosed in Chapter II.
16	The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,	**Noted and agreed** The Drone Video of the project site is taken covering the Greenbelt and Fencing around the Project site.
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.	Noted and agreed As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 2250 Nos of trees were planted as a part of greenbelt development programme all along the periphery of the lease applied area and approach roads and village roads. As well the pp has provided wire fencing as recommended all along the boundary of the lease applied area.
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.	**Noted and agreed** Details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology justifications are provided in Chapter 2. The anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same are provided in Chapter 4.
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.	**Noted and agreed** The Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act, 1952 and the MMR, 196l 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.	**Noted and agreed** The hydro-geological study was conducted to evaluate the possible impact on the ground water table. No significant impacts are anticipated on the water bodies around the project area. Details are discussed under Chapter No. 3.
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	**Noted and agreed** Baseline Data were collected for Post monsoon season March – May 2025 The Details of the Baseline Monitoring is given in the Chapter No. 3.
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	**Noted and agreed** Cumulative impact study has been carried out covering proposed and existing quarries in the

	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.	cluster and results related to air pollution, water pollution, & health impacts have been given in chapter No. 7, Based on the results, environmental management plan has been prepared and given in Chapter No. 10.
23	Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.	**Noted and agreed** The lower part of the mine pit will be utilized as rain water harvesting structure (Temporary) and the water will be used for the water sprinkling on haul roads and Greenbelt development purpose. Rainwater harvesting structure will be constructed near the mine office.
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.	Noted and Agreed Land use and land cover of the study area is discussed in Chapter No. 3. Land use plan of the project area showing pre-operational, operational and post-operational phases are discussed in Chapter No. 3, Table No 3.3
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.
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.	Not Applicable. Project area / Study area is not declared in 'Critically Polluted' Area and does not come under 'Aravalli Range.
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.	**Noted and agreed** The lower part of the mine pit will be utilized as rain water harvesting structure (Temporary) and the water will be used for the water sprinkling on haul roads and Greenbelt development purpose. Rainwater harvesting structure will be constructed near the mine office.
28	Impact on local transport infrastructure due to the Project should be indicated.	**Noted and agreed** Traffic density survey was carried out to analyze the impact of transportation in the study area as per IRC guidelines 1961 and it is inferred that there is no significant impact due to the proposed transportation from the project area. Details have been provided in Chapter No. 2.
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.	**Noted and agreed**
30	A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific	**Noted & agreed.** Mine closure plan is detailed in Chapter No. 4.
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	**Noted and agreed**

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.	**Noted and agreed** As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 2250 Nos of trees were planted as a part of greenbelt development program all along the periphery of the lease applied area and approach roads and village roads.
33	Taller/one-year-old Saplings raised in appropriate size of bags, preferably eco-friendly 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	**Noted and agreed** As per the recommendations during SEAC ToR Presentation of the proposal and commitment of PP a count of 2250 Nos of trees were planted as a part of greenbelt development program all along the periphery of the lease applied area and approach roads and village roads.
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	Noted and agreed. Disaster management Plan is explicated in chapter 7.
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	Noted and agreed. Risk Assessment and management Plan is explicated in chapter 7.
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.	Noted and agreed Occupational Health impacts of the project elaborately discussed in chapter 10.
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.	Noted and agreed No Public Health Implications anticipated due to this project. The anticipated impact and effective mitigation measures are discussed in the Chapter No. 4
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.	**Noted and agreed** Socio-economic studies were conducted within a 5-kilometer radius of the quarry site. Details of report given in Chapter 3.
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.	No Litigation is pending against this project
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.	**Noted and agreed.** The details of the Project benefits are given in the Chapter No. 8.
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.	**Noted and agreed.**

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.	**Noted and agreed** The EMP has been prepared for the entire life of the mine i.e., up to the lease period.
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.	**Noted and agreed**

SEIAA STANDARD CONDITIONS		
Cluster Management Committee		
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.	**Noted and agreed** The Cluster management committee has been formed covering the existing and proposed quarries in the cluster
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.,	**Noted and agreed** The information will be shared to the cluster management committee during the monthly meeting.
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.	**Noted and agreed** The list of members of the committee formed will be submitted to AD/Mines before resuming the mining operation.
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.	**Noted and agreed** It is an Fresh Rough Stone Quarry the blasting will be used occasionally for the removal of overburden only the blasting frequency and usage of haul roads are discussed.
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.	**Noted and agreed** The risk management plan and disaster management plan has been prepared and enclosed in this EIA report, Chapter No. 7.
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.	**Noted and agreed** Environmental policy of the cluster management committee is detailed in the EIA Report Chapter No. 6
7	The committee shall furnish action plan regarding the restoration strategy with respect to the	**Noted and agreed**

	individual quarry falling under the cluster in a holistic manner.	The Restoration strategy is discussed in the progressive mine closure plan and enclosed in the Scheme of Mining plan.
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.	**Noted and agreed** The information on the health of the workers and the local people will be updated periodically along with medical examination.
Agriculture & Agro-Biodiversity		
9	Impact on surrounding agricultural fields around the proposed mining Area.	As the proposed lease area is dominantly surrounded by mining land, barren land, and fallow land, the impact on the surrounding agricultural fields if present is considerably low. The Mining operation will be carried out to reduce the impact further to the level of negligence.
10	Impact on soil flora & vegetation around the project site.	The vegetation details have been provided in chapter III. There is no schedule I species of animals observed within study area as per Wildlife Protection Act, 1972 and no species falls in vulnerable, endangered or threatened category as per IUCN. There is no endangered red list species found in the study area.
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.	**Noted and agreed** There are no trees within the Fresh quarryquarry site, and therefore, no proposal for tree felling or removal is anticipated during the quarrying operations.
12	The Environmental Impact Assessment should study the agro-biodiversity, agro-forestry, horticultural plantations, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem.	**Noted and agreed** The details of the soil analysis and the impacts are given in the Chapter No 3 & 4.
13	Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.	**Noted and agreed** The Eco System of the area will be retained during the mining operation by the way of planting trees in the boundary barrier and un utilized areas. After completion of mining operation, the quarried-out pit will be facilitated to collect the rainwater to pit act as temporary reservoir
14	The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock	**Noted and agreed** The project area is situated centre part of the quarry lands. The proposed Rough Stone quarrying operation will employ the wet drilling method, which is expected to have negligible impacts on nearby agricultural lands.
Forests		

15	The project proponent shall detailed study on impact of mining on Reserve forests and free ranging wildlife	**Noted and agreed.** There is no Reserve Forest within 1km radius from the project area. The mining operation will not cause any significant impact to the Reserve Forest and Wild life Sanctuaries
16	The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna.	There is no forest/wildlife within 10km radius, chapter 3 details of Ecology and Biodiversity, and 4 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	Details are discussed in the Chapter No.3
18	The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site	Anticipated Environment Impact and Mitigation measures are detailed in Chapter No.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 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	There are 8 open wells and 6 bore wells within the radius of 1km from the project area, Hydrogeological study has been conducted by the resistivity method
20	Erosion Control measures	Details discussed in the chapter No.4
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.	Details in Chapter 3
22	The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir	Food webs describe who eats whom in an ecological community. Made of interconnected food chains, food webs help us understand how changes to ecosystems — say, removing a top predator or adding nutrients — affect many different species, both directly and indirectly. Whereas in this proposed project is for quarrying of Rough Stone and Gravel and is on a hard batholith formation where no diversion of any water bodies is proposed of there is no intersection of ground water table anticipated.
23	The project proponent shall study and furnish the details on potential fragmentation impact on	Details are given in the Chapter No 4.

	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.	Details in Chapter 4 impact of bio diversity.
25	The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components	Details of impact on soil environment is detailed in Chapter No.4
26	The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites	Vellikaradu RF – 12.2km – North East There is, National Parks, Eco sensitive areas, Wild life sanctuaries within the radius of 10km. An ecological survey of the study area was conducted particularly with reference to the listing of species and assessment of the existing baseline ecological (terrestrial) condition in the study area. Ecological Environment is discussed under Chapter 3
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.	There are 8 open wells and 6 bore wells within the radius of 1km from the project area, Hydrogeological study has been conducted by the resistivity method
Energy		
28	The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished.	Noted and agreed. Control measures of Noise, Air Water, Dust discussed in chapter 4
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	Noted and agreed. Details discussed in chapter 4.
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	Noted and agreed. Details are discussed in chapter 3.
31	Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood.	A greenhouse gas (GHG) is a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are carbon

		dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3) Carbon dioxide (CO_2): Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and other biological materials. Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle. Methane (CH_4): Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices, land use and by the decay of organic waste in municipal solid waste landfills. Nitrous oxide (N_2O): Nitrous oxide is emitted during agricultural, land use, and industrial activities; combustion of fossil fuels and solid waste; as well as during treatment of wastewater
Mine Closure Plan		
32	Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.	Progressive Mine closure plan has been prepared considering the entire lease period in the mining plan and the same has been approved.
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	**Noted and agreed** Detailed EMP discussed in chapter 10.
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.	**Noted and agreed.** Detailed EMP discussed in chapter 10.
Risk Assessment		
35	To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.	Noted and agreed. Risk Assessment and management Plan explicated in chapter 7.
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	Noted and agreed. Disaster management Plan details given in Chapter-7

	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.	Letter obtained from the VAO regarding surface features within 300m radius
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.	Noted and agreed. It will be updated in final EIA/EMP report.
39	The project proponent shall study and furnish the possible pollution due to plastic and micro plastic on the environment. The ecological risks and impacts of plastic & micro plastics on aquatic environment and fresh water systems due to activities, contemplated during mining may be investigated and reported	Noted and agreed. Plastic waste management of the proposed project explicated in chapter 7.

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.	**Not applicable.** This is not a violation category project. This proposal falls under B1 Category
2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.	The applied land for quarrying is a Patta Land. Document is enclosed along with Approved Mining Plan as Annexure Volume 1.
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.	**Noted & agreed.**
4	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/ toposheet, 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).	Map showing – Project area is with adjacent quarries details is enclosed in Chapter - 1 Project area boundary coordinates superimposed on Toposheet – Chapter - 1 Toposheet of the project area covering 10km radius – Chapter - 1 Geology map of the project area covering 10km radius - Chapter - 2
5	Information should be provided in Survey of India Toposheet 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.	**Map showing –** Geology map of the project area covering 10km radius - Chapter - 2 Geomorphological features are incorporated in the Toposheet map covering 10km radius around the project area. Chapter - 2
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 applied area was inspected by the officers of Department of Geology along with revenue officials and found that the land is fit for quarrying under the policy of State Government.
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.	The proponent has framed their Environmental Policy and the same is discussed in the Chapter No 10.1.
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.	It is an opencast quarrying operation proposed to operate in Mechanized method. The rough stone formation is a hard, compact and homogeneous body. The height and width of the bench will be maintained as 5m with 90^0 bench angles. Quarrying activities will be carried out under the supervision of Competent Persons like Mines Manager, Mines Foreman and Mining Mate. Necessary permissions will be obtained from DGMS after obtaining Environmental Clearance.
9	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA	**Noted & agreed.**

	such as waste generation etc., should be for the life of the mine / lease period.	The study area considered for this study is 10 km radius and all data contained in the EIA report such as waste generation etc., is 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.	Land use and land cover of the study area is discussed in Chapter No. 3. Land use plan of the project area showing pre-operational, operational and post-operational phases are discussed in Chapter No. 2, Table No 2.3
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	**Not Applicable.** There is no waste anticipated during this quarry operation. The entire quarried out rough stone will be transported to the needy customers. No Dumps is proposed outside the lease area.
12	A 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.** There is no Forest Land involved in the proposed project area. The proposed project area is a Patta land. Approved Mining Plan is enclosed as Annexure Volume 1.
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 proposed project area does not involve any Forest Land.
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.** The project doesn't attract Recognition of Forest Rights Act, 2006.
15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.	No Reserve Forest within the Study Area.
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.	**Not Applicable.** There are No National Parks, Biosphere Reserves, Wildlife Corridors, and Tiger/Elephant Reserves within 10 km Radius from the periphery of the project area.
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	**Not Applicable.** There are no National Parks, Biosphere Reserves, Wildlife Corridors, and Tiger/Elephant Reserves within 10 km Radius from the periphery of the project area.
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	Detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] was carried out and discussed under Chapter No. 3. There is no schedule I species of animals observed within study area as per Wildlife Protection Act 1972 as well as no species is in vulnerable, endangered or threatened category as per IUCN. There is no endangered red list species found in the study area.

	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 'Aravalli 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.	**Not Applicable.** Project area / Study area is not declared in 'Critically Polluted' Area and does not come under 'Aravalli Range.
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 w.r.t 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.** The project doesn't attract The C. R. Z. Notification, 2018.
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.	**Not Applicable.** There are no approved habitations within a radius of 300 meters. Therefore, R&R Plan / Compensation details for the Project Affected People (PAP) is not anticipated and Not Applicable for this project.
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.	Baseline Data were collected for Post Monsoon Season (Oct to Dec 2024) as per CPCB Notification and MoEF & CC Guidelines. Details in Chapter No. 3.
23	Air quality modelling 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 modelling 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 Modelling for prediction of incremental GLC's of pollutant was carried out using AERMOD Model. Details in Chapter No. 4,
24	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should	Total Water Requirement for this project is given in the chapter No 2, Table No 2.13.

	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.	Water for dust suppression, greenbelt development and domestic use will be obtained from accumulated rainwater/seepage water in mine pits. Drinking water will be sourced from the approved water vendors, No 2, Table No 2.13.
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.	The rain water collected in the pits after spell of rain will be used for greenbelt development and dust suppression.
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.	Impact Studies and Mitigation Measures of Water Quality discussed in Chapter No. 4.
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 ground water table is at 93 - 96 m below ground level. The ultimate depth of this projects is **P1** Pit – I: 117m (L) X 102m (W) X 47m BGL (D)(9m Agl + 38m Bgl) **P2** XY-AB: 146m (L) X 93m (W) X 42m (9m AGL + 33m BGL) (D) X1Y1-CD: 179m (L) X 42m (W) X 17m (9m AGL + 8m BGL) (D) **P3** 250m (L) X 155m (W) X 72m (12m AGL + 60m BGL) (D)
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.	Details in Chapter 3 Water Environment
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.	Progressive greenbelt development plan has been prepared and discussed along with Recommended Species details are given in the Chapter 4
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.	Traffic density survey was carried out to analyse the impact of Transportation in the study area as per IRC guidelines 1961 and it is inferred that there is no much significant impact due to the proposed transportation from the project area. Details in Chapter 2.
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	Infrastructure & other facilities will be provided to the Mine Workers after the grant of quarry lease and the same has been discussed in the Chapter No.2. .

	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.	Discussed in chapter No 2.
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.	Details in Chapter 10.
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.	Details in Chapter 10.
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.	Details in Chapter 4,
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.	Environment Management Plan Chapter 10.
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.	The outcome of public hearing will be updated in the final EIA/AMP report
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.	No litigation is pending in any court against 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.	The proposed capital cost for Environmental Monitoring Programme is Rs 3,80,000/- and the recurring cost is Rs 76,000/- per annum for each project. Details in Chapter 6 .
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.	Details in Chapter 10.
42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report.	Details in Chapter 7.
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.	Details in Chapter.8.
44	**Besides the above, the below mentioned general points are also to be followed: -**	
A	Executive Summary of the EIA/EMP Report	Encloses as separate volume
B	All documents to be properly referenced with index and continuous page numbering.	All the documents are 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.	List of Tables and source of the data collected are given properly.
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	Baseline monitoring reports are enclosed with mining plan
E	Where the documents provided are in a language other than English, an English translation should be provided.	Not Applicable.

F	The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.	Will be enclosed along with Final EIA /EMP Report.
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.	Instructions issued by MoEF & CC O.M. No. J-11013/41/2006-IA. II (I) Dated: 4th August, 2009 are 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	Noted & agreed.
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.	Not 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.	Surface Plan – Chapter - 2 Geological Plan – Chapter - 2 Working Plan – Chapter - 2. Closure Plan – Chapter - 2

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CHAPTER – 1: INTRODUCTION

1.0 *Preamble*

Environmental Impact Assessment (EIA) is the management tool to ensure the sustainable development and it is a process, used to identify the environmental, social and economic impacts of a project prior to decision-making. It is a decision-making tool, which guides the decision makers in taking appropriate decisions for any project. EIA systematically examines both beneficial and adverse consequences of the project and ensures that these impacts are taken into account during the project designing. It also reduces conflicts by promoting community participation, information, decision makers, and helps in developing the base for environmentally sound project.

Rough Stone and Gravel are the major requirements for construction industry. This EIA report is prepared by considering Cumulative load of all proposed quarries of M/s. VKP Engineering Ind Pvt Ltd Rough Stone and Gravel Cluster Quarries consisting of Three proposed quarries and one existing quarry total extent of Cluster of **14.00.33Ha** in Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State, cluster area calculated as per MoEF & CC Notification S.O. 2269(E) Dated 1st July 2016.

This EIA Report is prepared in compliance with ToR obtained for the below proposals in Table 1.1 and the Baseline Monitoring study has been carried out during the period of **March to May 2025**

TABLE 1.1: ToR OBTAINED PROJECTS

Code.	Proponent Name	Extent (Ha)	Terms of Reference (ToR)
P1	M/s. VKP Engineering Ind Pvt., Ltd	1.64.38	File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated:03.06.2025
P2		2.90.0	File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated:03.06.2025
P3		4.51.0	File No. 11961 TOR Identification No. TO25B0108TN5609691N Dated:15.06.2025

Source: ToR Letter's of the respective project proponents

1.1 Purpose of the report

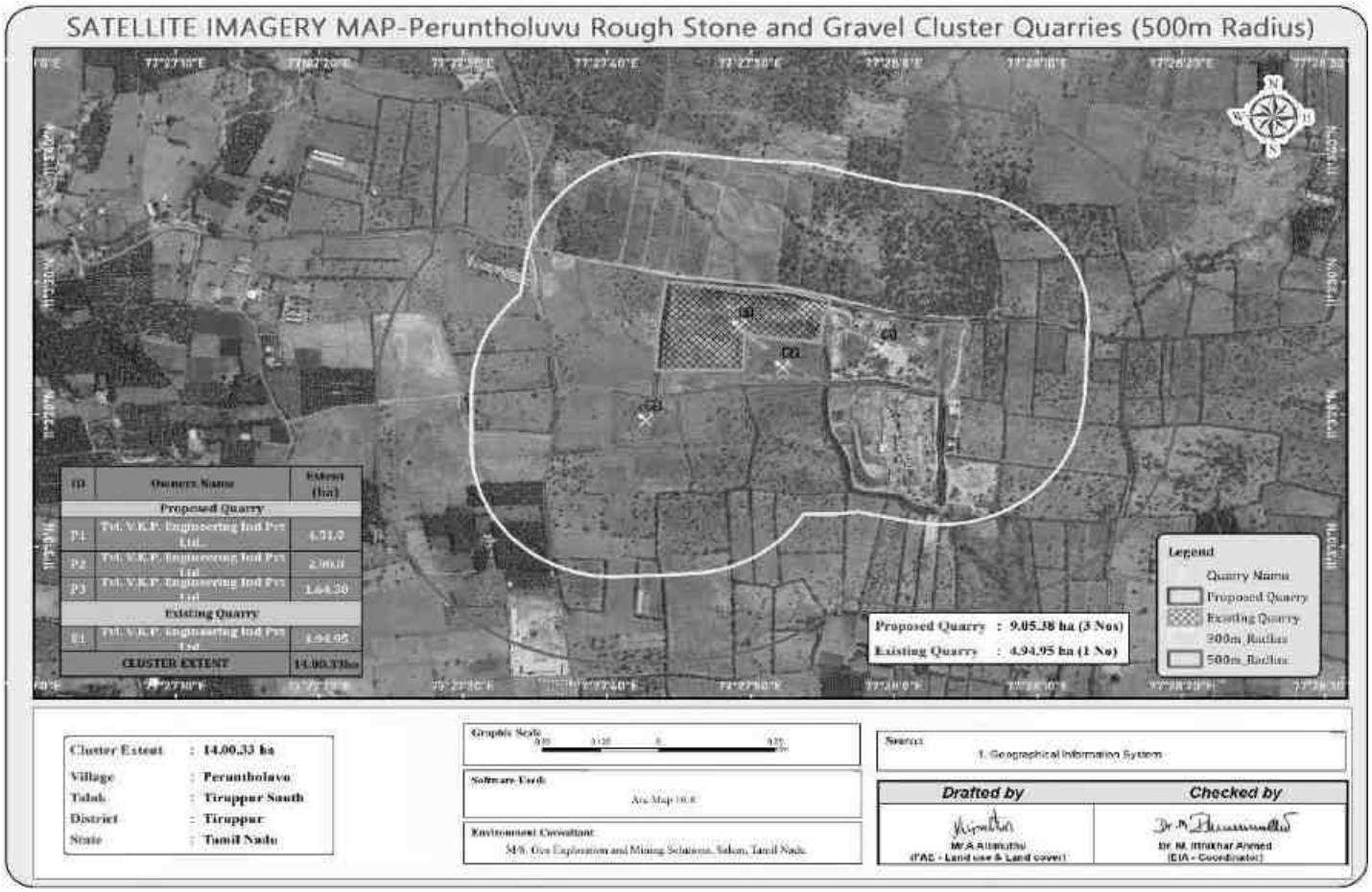
The Ministry of Environment and Forests, Govt. of India, through its EIA notification S.O. 1533(E) of 14th September 2006 and its subsequent amendments as per Gazette Notification S.O. 1889 of 20thApril 2022, Mining Projects are classified under two categories i.e. A (> 250 Ha) and B (≤ 250 Ha), and Schematic Presentation of Requirements on Environmental Clearance of Minor Minerals including cluster situation in Appendix – XI.

Now, as per Order Dated: 04.09.2018 & 13.09.2018 passed by Hon'ble National Green Tribunal, New Delhi in O.A. No. 173 of 2018 & O.A. No, 186 of 2016 and MoEF & CC Office Memorandum F. No. L-11011/175/2018-IA-II (M) Dated: 12.12.2018 clarified the requirement for EIA, EMP and therefore, Public Consultation for all areas from 5 to 25 ha falling in Category B - 1 and appraised by SEAC/ SEIAA as well as for cluster situation.

The proposed projects are categorized under category "B1" Activity 1(a) (mining lease area in cluster situation) and will be considered at SEIAA – TN after conducting Public Hearing and Submission of EIA/EMP Report for Grant of Environmental Clearance.

"Draft EIA report prepared on the basis of ToR Issued for carrying out public hearing for the grant of Environmental Clearance from SEIAA, Tamil Nadu"

FIGURE 1.1. SATELLITE IMAGERY OF CLUSTER QUARRIES



Cluster area is calculated as per MoEF & CC Notification – S.O. 2269 (E) Dated: 01.07.2016

Note: As per above notification S.O.2269(E) dated: 01.07.2016 in para (b) in Appendix XI, - (i)(6) A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area which shall be applicable to the mine lease or quarry licenses granted on and after 9th September, 2013

1.2 Identification of Project and Project Proponent

1.2.1 Identification of Project

The project areas in the cluster are Patta Land, no forest land is involved

TABLE 1.2: PROPOSED PROJECTS IN THE CLUSTER

Description	P1	P2	P3
Name of the Project	M/s. VKP Engineering Ind Pvt., Ltd Rough Stone & Gravel Quarry	M/s. VKP Engineering Ind Pvt., Ltd Rough Stone & Gravel Quarry	M/s. VKP Engineering Ind Pvt., Ltd Rough Stone & Gravel Quarry
S.F. No.	543/2	538/2A, 538/2B and 539/2 (P)	536, 537/1, 537/2 & 537/3
Extent	1.64.38 Ha	2.90.0 Ha	4.51.0 Ha
Village, Taluk	Peruntholuvu Village, Tiruppur South Taluk,		
District	Tiruppur District		

Source: Approved Mining Plan

1.2.2 Identification of Project Proponent

TABLE 1.3: DETAILS OF PROJECT PROPONENT

PROPOSAL – P1, P2 & P3	
Name of the Company	M/s. VKP Engineering Ind Pvt., Ltd
Address	Thiru. P. Jagadeesan, Director No. 11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District – 638 052
Mobile	+91 98428 30265
Status	Private Limited Company

Source: Approved Mining Plan of the respective projects

1.3 Brief description of the project

1.3.1 Nature and size of the Project

The quarrying operation is proposed to be carried out by Opencast Mechanized Mining method with 5.0m bench height and 5.0m bench width by deploying Jack Hammer Drilling & Slurry Explosive during blasting. Hydraulic Excavator and tippers are used for Loading and transportation. Rock Breakers are deployed to avoid secondary blasting.

TABLE 1.4: SALIENT FEATURES OF THE PROPOSED PROJECTS IN CLUSTER

SALIENT FEATURES OF PROPOSAL "P1"			
Name of the Mine	M/s. VKP Engineering Ind Pvt Ltd Rough Stone & Gravel Quarry		
Land type & details	**It is a Patta land** classified as punjai (Barren land) It is a Patta land, registered in the name of applicant Tmt. P. Sivakami & Tmt N.Sarojini vide patta no.2844		
S.F. Nos	543/2		
Extent	1.64.38 Ha		
Geological Reserves	Rough Stone	Weathered Rock	Gravel
	5,75,435m^3	**1,50,725m^3**	**32,882m^3**
Mineable Reserves	Rough Stone	Weathered Rock	Gravel
	1,23,550m^3	**99,800 m^3**	**23,868m^3**
Proposed Quantity of Reserves/Production for mining Period	**1,23,550m^3**	**99,800 m^3**	**23,868m^3**
Mining Plan Period / Lease Period	5 Years/10 years		
Ultimate Pit Dimension	117m (L) x 102m (W) x 47m (D) Max		

Proposed Depth of mining for first five years	37m	
Toposheet No	58 E/08	
Latitude	11°03'17.1620"N to 11°03'21.4317"N	
Longitude	77°27'40.3163"E to 77°27'45.1877"E	
Elevation	327-324m Amsl.	
Water table depth	The Ground water occurrence in this area is 93-96m depth below the ground level.	
Machinery proposed	Jack Hammer	4
	Compressor	1
	Excavator with Bucket and Rock Breaker	2
	Tipper	4
	Water Sprinkler Tanker	1
Blasting	Usage of Slurry Explosive with MSD detonators	
Water Bodies	Odai	2.7km SE
	Canal	5.3km SE
	Noyyal River	6.2km North
	Manikapuram Lake	7km NW
	Orathupalayam Reservoir	8.2km NE
Water requirement & source	Total water requirement for 1.5KLD from from existing, bore wells and drinking water will be sourced from Approved water vendors.	
Manpower Deployment	31 Nos	
Total Project Cost	Operational Cost	Rs. 1,21,77,000/-
	EMP Cost	Rs. 17,01,000/-
	Total	Rs. 1,38,78,000/-
CER cost	Rs.3,00,000/-	
Nearest Habitation	760m-SW	

Source: Approved Mining Plan of the respective proposals

SALIENT FEATURES OF PROPOSAL "P2"			
Name of the Mine	M/s. VKP Engineering Ind Pvt., Ltd Rough Stone & Gravel Quarry		
Land type & details	It is a Patta land. S.F. Nos 538/2A registered in the name of Tmt.Sarojini, vide patta No.2848, S.F.No.538/2B registered in the name of Tmt.Sivagami vide patta No.2849 & 539/2(P) registered in the name of Thiru P. Jagadeesan Director (M/s. VKP Engineering Ind Pvt., Ltd), Thiru Mahendran, Tmt.Bhuvaneshwari & Gnanasundari vide patta No.2136. The Company has obtained consent from the the pattadars.		
S.F. Nos	538/2A, 538/2B and 539/2 (P)		
Extent	2.90.0 Ha		
Geological Reserves	Rough Stone	Weathered Rock	Gravel
	20,44,880m^3	**2,75,320m^3**	**55,064m^3**
Mineable Reserves	Rough Stone	Weathered Rock	Gravel
	1,50,770m^3	**1,73,090 m^3**	**42,192m^3**
Proposed Quantity	**1,50,770m^3**	**1,73,090 m^3**	**42,192m^3**
Mining Plan Period / Lease Period	5 Years/ 10 years		
Ultimate Pit Dimension	XY-AB-146m (L) x 93m (W) x 42m (D) Max X1Y1-CD-179m (L) x 42m (W) x 17m (D) Max		
Proposed Depth of mining	42m		
Toposheet No	58 E/08		
Latitude	11°03'21.1292"N to 11°03'25.9847"N		
Longitude	77°27'43.0986"E to 77°27'55.1858"E		
Elevation	327 to 324m Amsl.		

Water table depth	The Ground water occurrence in this area is 93-96m depth below the ground level.		
Machinery proposed	Jack Hammer		4
	Compressor		1
	Wagon Drill Machine		1
	Excavator with Bucket and Rock Breaker		5
	Tipper		10
	Water Sprinkled Tanker		1
Blasting	Usage of Slurry Explosive with MSD detonators		
Water Bodies	Odai		2.9km SE
	Canal		5.4km SE
	Noyyal River		6.3km North
	Manikapuram Lake		7km NW
	Orathupalayam Reservoir		8.5km NE
Water requirement & source	Total water requirement for 1.6KLD from from existing, bore wells and drinking water will be sourced from Approved water vendors.		
Manpower Deployment	45 Nos		
Total Project Cost	Operational Cost		Rs. 1,60,85,000/-
	EMP Cost		Rs. 24,90,000/-
	Total		Rs. 1,85,75,000/-
CER cost	Rs.3,00,000/-		
Nearest Habitation	870m-SW		

Source: Approved Mining Plan of the respective proposals

SALIENT FEATURES OF PROPOSAL "P3"			
Name of the Mine	M/s. VKP Engineering Ind Pvt., Ltd Rough Stone & Gravel Quarry		
Land type & details	It is a Patta land, S.F.No.536 & 537/2 Jointly registered in the name of Thiru. Palanisamy Tmt. Bhuvaneshwari and Thiru. Gnanasundari vide patta no. 2138 and S.F.No. 537/1, 537/3 registered in the name of the applicant, Thiru.P. Jagadeesan, Thiru. Mahendran, Tmt. Bhuvaneswari. Thiru. Gnanasundari vide patta no. 2136		
S.F. Nos	536, 537/2, 537/1, 537/3		
Extent	4.51.0 Ha		
Geological Reserves	Rough Stone	Weathered Rock	Gravel
	27,37,500 m^3	4,22,845 m^3	91,250 m^3
Mineable Reserves	Rough Stone	Weathered Rock	Gravel
	8,33,355 m^3	3,05,978 m^3	75,408 m^3
Production for mining Period for first five year	4,17,670 m^3	3,05,978 m^3	75,408 m^3
Production for mining Period for Second five year	4,15,685 m^3	-	-
Mining Plan Period / Lease Period	10 Years		
Ultimate Pit Dimension	Pit1: 250m (L) x 155m (W) x 72m Bgl (D) (12m AGL + 60m BGL)		
Proposed Depth of mining	72m (12m AGL + 60m BGL) [2m Gravel+5m Weathered Rock+65m Rough Stone]		
Toposheet No	58 E/08		
Latitude	11°03'21.3662"N to 11°03'28.4846"N		
Longitude	77°27'54.6440"E to 77°28'03.4751"E		
Elevation	330m Amsl.		
Water table depth	The Ground water occurrence in this area is 93-96m depth below the ground level.		

Machinery proposed	Crawler mounted drill machine	2
	Jack Hammer	4
	Compressor	1
	Excavator with Bucket and Rock Breaker	1
	Tipper	3
	Water Sprinkling Tanker	1
Blasting	Usage of Slurry Explosive with MSD detonators	
Water Bodies	Odai	3.0km SE
	Canal	5.3km SE
	Noyyal River	6.4km North
	Manikapuram Lake	7.1km NW
	Orathupalayam Reservoir	8.8km NE
Water requirement & source	Total water requirement for 2.4 KLD from from existing, bore wells and drinking water will be sourced from Approved water vendors.	
Manpower Deployment	38 Nos	
Total Project Cost	Operational Cost	Rs.5,87,84,000/-
	EMP Cost	Rs.3,80,000/-
CER cost	Rs.5,00,000/-	
Nearest Habitation	790m-SE	

Source: Approved Mining Plan of the respective proposals

1.3.2 Location of the project-P1

- The area is located in **S.F.Nos. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State**
- The entire quarry lease area falls in the Patta land, the lease applied area is exhibits undulated topography.
- The Altitude of the area is 324 - 327m **(**Maximum) above MSL.
- The area is mentioned in GSI Topo Sheet No. **58 - E/08**
- The Latitude between of **11°03'17.1620" N to 11°03'21.4317" N**
- The Longitude between of **77°27'40.3163"E to 77°27'45.1877" E** on WGS 1984datum

1.3.3 Location of the project-P2

- The area is located in **S.F.No. 538/2A, 538/2B and 539/2 (P), of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State.**
- The entire quarry lease area falls in the Patta land, the lease applied area is exhibits undulated topography.
- The Altitude of the area is **324-327m (**Maximum) above MSL.
- The area is mentioned in GSI Topo Sheet No. **58 - E/08**
- The Latitude between of **11°03'21.1292"N to 11°03'25.9847"N**
- The Longitude between of **77°27'43.0986"E to 77°27'55.1858"E** on WGS 1984 datum.

1.3.4 Location of the project-P3

- The area is located in **S.F.No. 536, 537/1, 537/2 & 537/3 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State.**
- The entire quarry lease area falls in the Patta land, the lease applied area is exhibits undulated topography.
- The Altitude of the area is **324-327m (**Maximum) above MSL.
- The area is mentioned in GSI Topo Sheet No. **58 - E/08**
- The Latitude between of **11°03'21.3662"N to 11°03'28.4846"N**
- The Longitude between of **77°27'54.6440"E to 77°28'03.4751"E** on WGS 1984 datum.

FIGURE 1.2 KEY MAP SHOWING THE LOCATION OF THE PROJECT SITE

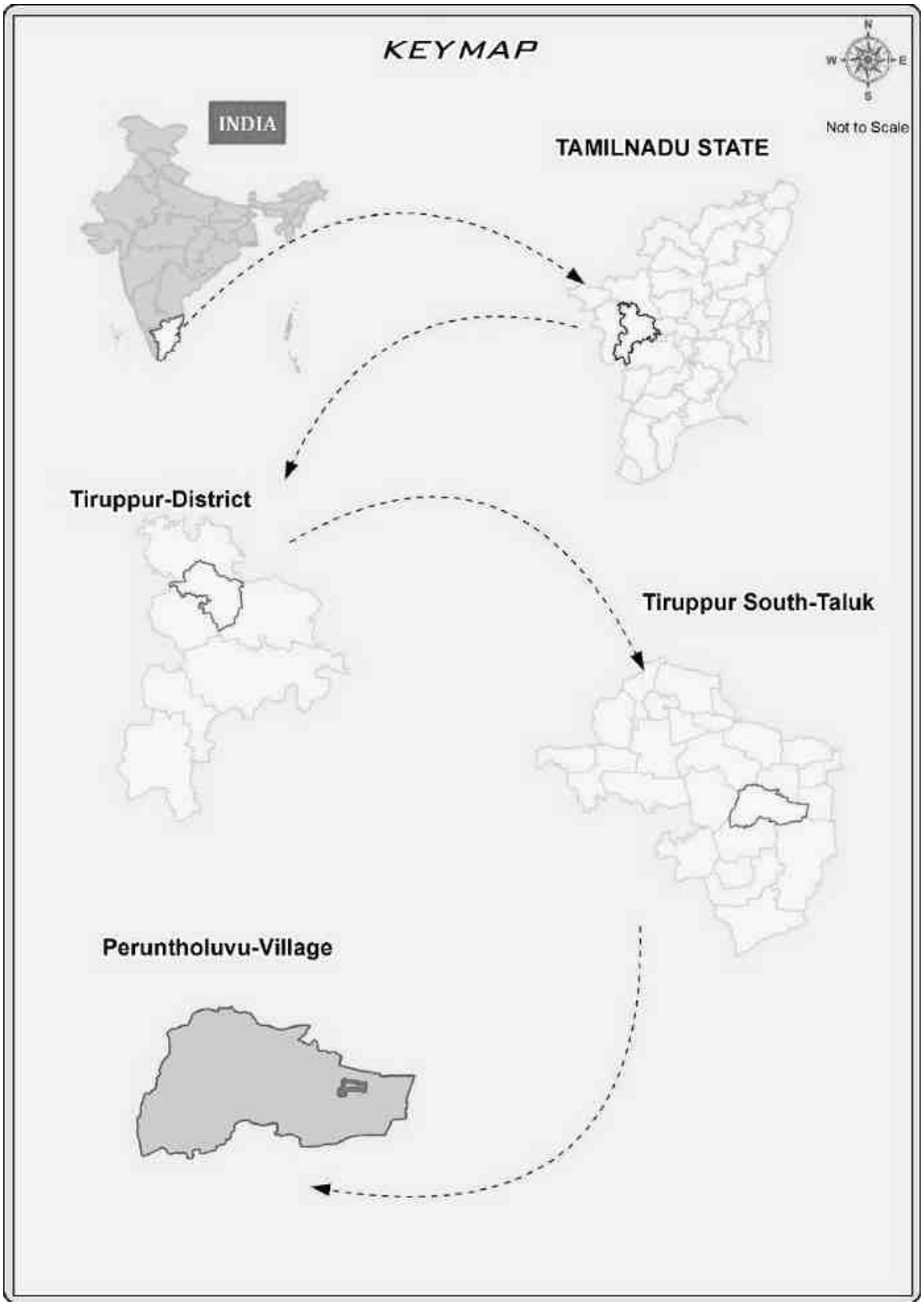


FIGURE 1.3: TOPOSHEET SHOWING LOCATION OF THE PROJECT SITE AROUND 10 KM RADIUS

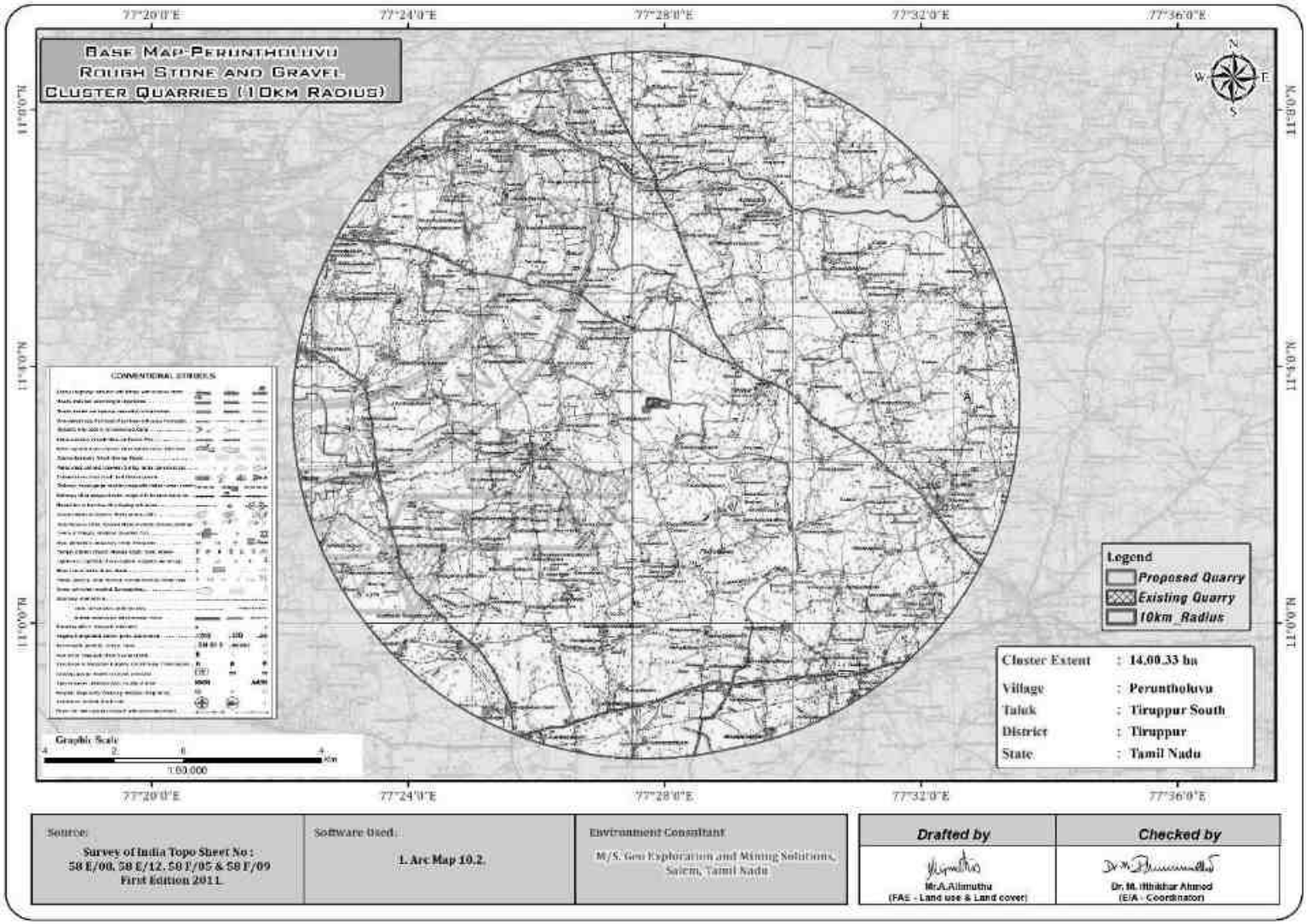
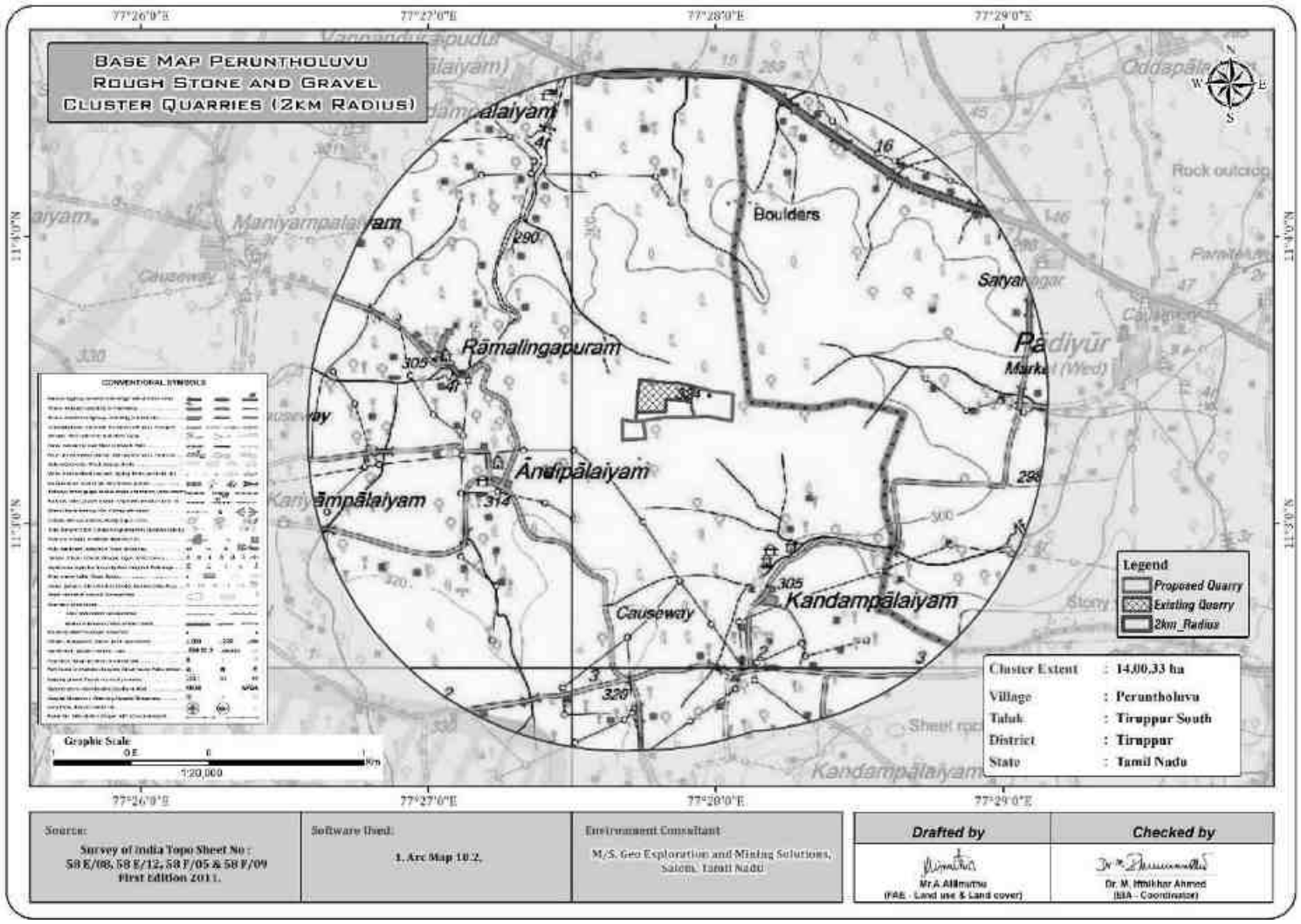


FIGURE 1.4: TOPOSHEET SHOWING LOCATION OF THE PROJECT SITE AROUND 2 KM RADIUS



1.4 Environmental Clearance

The Environmental Clearance process for the project will comprise of four stages. These stages in sequential order are given below: -

1. Screening
2. Scoping
3. Public consultation &
4. Appraisal

SCREENING –

Project – P1

- The proponent applied for Rough Stone and Gravel Quarry Lease Dated: 09.10.2023
- The precise area communication letter was received from the Assistant Director, Department of Geology and Mining, Tiruppur District vide Rc.No. 677/Mines/2023, Dated: 24.07.2024
- The Mining plan was approved by the Assistant Director, Department of Geology and Mining, Tiruppur District vide Rc.No. 677/Mines/2023, Dated: 29.07.2024
- Proponent applied for ToR for Environmental Clearance vides online Proposal No. SIA/TN/MIN/ 529346/2025 Dated 13/03/2025.

Project – P2

- The proponent applied for Rough Stone and Gravel Quarry Lease Date from 13.09.2023
- The precise area communication letter was received from the Deputy Director, Department of Geology and Mining, Tiruppur District and passed a Precise Area Communication letter vide Rc.No. 669/Mines/2023, Dated: 24.07.2024
- The Mining plan was approved by the Deputy Director, Department of Geology and Mining, Tiruppur District vide Rc.No. 669/Mines/2023, Dated: 29.07.2024
- Proponent applied for ToR for Environmental Clearance vide online Proposal No. SIA/TN/MIN/529466/2025, Dated: 14/03/2025.

Project – P3

- The proponent applied for Rough Stone and Gravel Quarry Lease Date from 13.09.2023
- The Precise area communication letter was received from the District collector Tiruppur Vide Rc.No. 668/Mines/2023, Dated: 24.07.2024
- The Mining Plan was got approval by the Deputy Director, Department of Geology and Mining, Tiruppur vide Rc. No.668/Mines/2023, Dated: 29.07.2024
- Proponent applied for ToR for Environmental Clearance vides online Proposal No. SIA/TN/MIN/529538/2025, Dated:15.03.2025

SCOPING –

Project – P1

- The proposal was placed in 562nd SEAC meeting held on 09.05.2025 and the committee recommended for issue of ToR.
- The proposal was considered in 830th SEIAA meeting held on 28.05.2025 and issued ToR vide File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated: 03.06.2025

Project – P2

- The proposal was placed in 562nd SEAC meeting held on 09.05.2025 and the committee recommended for issue of ToR.
- The proposal was considered in 830th SEIAA meeting held on 28.05.2025 and issued ToR vide File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated: 03.06.2025

Project – P3

- The proposal was placed in 565th SEAC meeting held on 15.05.2025 and the committee recommended for issue of ToR.
- The proposal was considered in 833rd SEIAA meeting held on 03.06.2025 and issued ToR vide Letter No File no.11961 TOR Identification No. TO25B0108TN5609691N Dated: 15.06.2025

Public Consultation –

Application to the Member Secretary of the Tamil Nadu Pollution Control Board (TNPCB) to conduct Public Hearing in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site or in its close proximity in the district is submitted along with this Draft EIA/ EMP Report and the outcome of public hearing proceedings will be detailed in the Final EIA/EMP Report.

Appraisal –

Appraisal is the detailed scrutiny by the State Expert Appraisal Committee (SEAC) of the application and other documents like the final EIA & EMP Report, outcome of the Public Consultations including Public Hearing Proceedings, submitted by the proponent to the regulatory authority concerned for grant of environmental clearance.

The report has been prepared using the following references:

- Guidance Manual of Environmental Impact Assessment for Mining of Minerals, Ministry of Environment and Forests, 2010
- EIA Notification, 14th September, 2006
    - ***File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated: 03.06.2025 -P1***
    - ***File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated: 03.06.2025 –P2***
    - ***File No. 11961 TOR Identification No. TO25B0108TN5609691N Dated: 15.06.2025 –P3***

    Approved Mining of P1 to P3 the Rough stone and Gravel quarry projects

1.5 Post Environment Clearance Monitoring

The Project Proponents in the Cluster will submit a half-yearly compliance report in respect of stipulated Environmental Clearance terms and conditions to MoEF & CC Regional Office & SEIAA after grant of EC on 1st June and 1st December of every year.

1.6 Generic Structure of EIA Document

The overall contents of the EIA report follow the list of contents prescribed in the EIA Notification 2006 and the "Environmental Impact Assessment Guidance Manual for Mining of Minerals" published by MoEF & CC. A brief description of each Chapter is presented in Table No. 1.5.

TABLE 1.5 – STRUCTURE OF THE EIA REPORT

S. No	Chapters	Title	Particulars
1	Chapter 1	Introduction	Presents, an Introduction along with Scope and Objective of this EIA/EMP Studies
2	Chapter 2	Project Description	Presents the Technical Details of the Project
3	Chapter 3	Description of Environment	Presents the Baseline Status for various Environmental Parameters in the Study Area for One Season (3 Months)
4	Chapter 4	Anticipated Environmental Impacts and Mitigation Measures	Presents the Identification, Prediction and Evaluation of overall Environmental Impacts due to the Proposed Projects Activities. Also presents Proposed Mitigation Measures.
5	Chapter 5	Analysis of Alternatives (Technology & Site)	Presents Analysis of alternatives with respect to site
6	Chapter 6	Environment Monitoring Programme	Present details of post project environment monitoring
7	Chapter 7	Additional Studies	Presents Public Consultation, Risk Assessment and Disaster Management Plan

8	Chapter 8	Project Benefits	Presents project benefits as: Improvements in the Physical Infrastructure, Social Infrastructure Employment Potential –Skilled; Semi-Skilled and Unskilled etc.,
9	Chapter 9	Cost Benefit Analysis	Environmental Cost Benefit Analysis has not been recommended at Scoping Stage – thus no analysis carried out separately in this EIA/EMP Report
10	Chapter 10	Environmental Management Plan	Description of the administrative aspects to ensure the Mitigation Measures are implemented and their effectiveness monitored, after approval of the project.
11	Chapter 11	Summary & Conclusion	Summary of the EIA Report
12	Chapter 12	Disclosure of Consultants Engaged	Disclosure of the Consultants

1.7 Scope of the Study

The main scope of the EIA study is to quantify the cumulative impact in the study area due to cluster quarries and formulate the effective mitigation measures for each individual leases. A detailed account of the emission sources, emissions control equipment, background Air quality levels, Meteorological measurements, Dispersion model and all other aspects of pollution like effluent discharge, Dust generation etc., have been discussed in this report. The baseline monitoring study has been carried out during the summer season Oct to Dec 2024 for various environmental components so as to assess the anticipated impacts of the cluster quarry projects on the environment and suggest suitable mitigation measures for likely adverse impacts due to the proposed project.

TABLE 1.6 – ENVIRONMENT ATTRIBUTES

Sl.No.	Attributes	Parameters	Source and Frequency
1	Ambient Air Quality	PM_{10}, $PM_{2.5}$, SO_2, NO_2	24 hourly samples twice a week for three months at 8 locations
2	Meteorology	Wind speed and direction, temperature, relative humidity and rainfall	Near project site continuous for three months with hourly recording and from secondary sources of IMD station, Tiruppur
3	Water quality	Physical, Chemical and Bacteriological parameters	Grab samples were collected at 5 ground water and 1 surface water locations once during study period.
4	Ecology	Existing terrestrial and aquatic flora and fauna within 10 km radius circle.	Limited primary survey and secondary data was collected from the Forest department.
5	Noise levels	Noise levels in dB(A)	At 7 locations data monitored once for 24 hours during EIA study.
6	Soil Characteristics	Physical and Chemical Parameters	Once at 6 locations during study period
7	Land use	Existing land use for different categories	Based on Survey of India topographical sheet and satellite imagery and primary survey.
8	Socio-Economic Aspects	Socio-economic and demographic characteristics, worker characteristics	Based on primary survey and secondary sources data like census of India 2011.
9	Hydrology	Drainage pattern of the area, nature of streams, aquifer characteristics, recharge and discharge areas	Based on data collected from secondary sources as well as hydro-geology study report prepared.
10	Risk assessment and Disaster Management Plan	Identify areas where disaster can occur by fires and explosions and release of toxic substances	Based on the findings of Risk assessment done for the mining associated activities

Source: Field Monitoring Data

The data has been collected as per the requirement of the ToR issued by SEIAA – TN and Standard ToR Published by MoEF & CC.

1.7.1 Regulatory Compliance & Applicable Laws/Regulations

- Application for Quarrying Lease as per Tamil Nadu Minor Mineral Concession Rules, 1959
- Obtained Precise Area Communication Letter as per Tamil Nadu Minor Mineral Concession Rules, 1959 for Preparation of Mining Plan and obtaining Environmental Clearance
- The Mining Plan of Rough Stone and Gravel quarry has been approved under Rule 41 & 42 as amended of Tamil Nadu Minor Mineral Concession Rules, 1959
- Environment Protection Act, 1986
- ToR from SEIAA –
- ***File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated: 03.06.2025 -P1***
- ***File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated: 03.06.2025 –P2***
- ***File No. 11961 TOR Identification No. TO25B0108TN5609691N Dated: 15.06.2025 –P3***
- Approved Mining of P1 to P3 the Rough stone and Gravel cluster quarry projects

CHAPTER – 2: PROJECT DESCRIPTION

2.0 General

The Proposed Rough Stone and Gravel cluster Quarries requires Environmental Clearance. There are three proposed quarries forming a cluster; calculated as per MoEF & CC Notification S.O. 2269(E) Dated 1st July 2016 and the total extent of cluster is 19.38.11Ha.

As the extent of cluster are more than 5 ha, the proposal falls under B1 Category as per the Order Dated: 04.09.2018 & 13.09.2018 passed by Hon'ble National Green Tribunal, New Delhi in O.A. No. 173 of 2018 & O.A. No, 186 of 2016 and MoEF & CC Office Memorandum F. No. L-11011/175/2018-IA-II (M) Dated: 12.12.2018, and requirement for EIA, EMP and Public Consultation for obtaining Environmental Clearance.

2.1 Description of the Project

The proposed projects are site specific and there is no additional area required for this project. There is no effluent generation/discharge from the proposed quarries.

Method is mining is common for all the proposed quarries in the cluster. Rough Stone and Gravel are proposed to be excavated by opencast mechanized method involving splitting of rock mass of considerable volume from the parent rock mass by jackhammer drilling and blasting, hydraulic excavators are used for loading the Rough Stone from pit head to the needy crushers and rock breakers to avoid secondary blasting.

2.2 Location of the Project

Location of the project-P1

- The area is located in **S.F.Nos. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State**
- The entire quarry lease area falls in the Patta land, the lease applied area is exhibits undulated topography.
- The Altitude of the area is 324 - 327m **(**Maximum) above MSL.
- The area is mentioned in GSI Topo Sheet No. **58 - E/08**
- The Latitude between of **11°03'17.1620" N to 11°03'21.4317" N**
- The Longitude between of **77°27'40.3163"E to 77°27'45.1877" E** on WGS 1984datum

Location of the project-P2

- The area is located in **S.F.No. 538/2A, 538/2B and 539/2 (P), of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State.**
- The entire quarry lease area falls in the Patta land, the lease applied area is exhibits undulated topography.
- The Altitude of the area is **324-327m (**Maximum) above MSL.
- The area is mentioned in GSI Topo Sheet No. **58 - E/08**
- The Latitude between of **11°03'21.1292" N to 11°03'25.9847" N**
- The Longitude between of **77°27'43.0986"E to 77°27'55.1858" E** on WGS 1984 datum.

Location of the project-P3

- The area is located in **S.F.No. 536, 537/1, 537/2 & 537/3 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State.**
- The entire quarry lease area falls in the Patta land, the lease applied area is exhibits undulated topography.
- The Altitude of the area is **324-327m (**Maximum) above MSL.
- The area is mentioned in GSI Topo Sheet No. **58 - E/08**
- The Latitude between of **11°03'21.3662" N to 11°03'28.4846" N**
- The Longitude between of **77°27'54.6440"E to 77°28'03.4751" E** on WGS 1984 datum.

- The projects under the cluster are classified as patta land (Non-Forest Land) & does not fall within 10 km radius of any Eco – sensitive zone, Wild life Sanctuary, National Park, Tiger Reserve, Elephant Corridor and Biosphere Reserves.

TABLE 2.1: SITE CONNECTIVITY TO THE CLUSTER QUARRIES

Nearest Roadway	NH 381-Tiruppur – Dharapuram – 7.75 km W SH-172 - Tiruppur – Kangeyam – 1.80 Km NE
Nearest Village	Peruntholuvu – 2.76 km- SW
Nearest Town	Tiruppur - 9.70 km- NW
Nearest Railway	Uthukuli Railway Station 11 km- N
Nearest Airport	Coimbatore Airport – 45 Km - W
Seaport	Kochi- 177 Km-SW

Source: Survey of India Toposheet.

The cluster quarries corners co-ordinates are given below.

TABLE 2.2 – BOUNDARY CO-ORDINATES OF PROPOSED PROJECTS

P1		
S.No	**Latitude**	**Longitude**
1	11°03'17.1620"N	77°27'40.4705"E
2	11°03'21.4317"N	77°27'40.3163"E
3	11°03'21.1292"N	77°27'43.0986"E
4	11°03'21.4135"N	77°27'44.6796"E
5	11°03'17.6408"N	77°27'45.1877"E
Datum: UTM-WGS84 Zone 43 N		

P2		
S.No.	Latitude	Longitude
1	11°03'21.1292"N	77°27'43.0986"E
2	11°03'23.2593"N	77°27'43.2536"E
3	11°03'23.3120"N	77°27'49.3692"E
4	11°03'25.9847"N	77°27'49.4489"E
5	11°03'25.3703"N	77°27'54.6563"E
6	11°03'23.9289"N	77°27'54.7474"E
7	11°03'23.0110"N	77°27'55.1858"E
8	11°03'22.1486"N	77°27'55.0559"E
9	11°03'22.1219"N	77°27'49.3337"E
10	11°03'21.4135"N	77°27'44.6796"E
P3		
S.No.	Latitude	Longitude
1	11°03'22.1486"N	77°27'55.0559"E
2	11°03'23.0110"N	77°27'55.1858"E
3	11°03'23.9289"N	77°27'54.7474"E
4	11°03'25.5651"N	77°27'54.6440"E
5	11°03'26.9770"N	77°27'54.8820"E
6	11°03'28.4846"N	77°27'55.4058"E
7	11°03'27.7013"N	77°27'58.5341"E
8	11°03'27.0828"N	77°27'03.4751"E
9	11°03'22.2084"N	77°27'03.2525"E

10	11°03'21.3662"N	77°27'58.0835"E
11	11°03'22.3632"N	77°27'58.0835"E
12	11°03'22.3733"N	77°27'57.5218"E

Source: Mine Lease Plan of the respective proposals

FIGURE 2.1: TOPOGRAPHICAL VIEW OF THE PROJECT SITE – P1



P1- M/s. VKP Engineering Ind Pvt Ltd – 1.64.38 Ha

FIGURE 2.2: TOPOGRAPHICAL VIEW OF THE PROJECT SITE – P2



P2- M/s. VKP Engineering Ind Pvt Ltd – 2.90.0 Ha

FIGURE 2.3: TOPOGRAPHICAL VIEW OF THE PROJECT SITE – P3



P3- M/s. VKP Engineering Ind Pvt Ltd – 4.51.00 Ha

FIGURE 2.4: PHOTOGRAPHS OF GREEN BELT AND FENCING – P1



P1- M/s. VKP Engineering Ind Pvt Ltd – 1.64.38 Ha

FIGURE 2.5: PHOTOGRAPHS OF GREEN BELT AND FENCING – P2





P2- M/s. VKP Engineering Ind Pvt Ltd – 2.90.0 Ha

FIGURE 2.6: PHOTOGRAPHS OF GREEN BELT AND FENCING – P3



P3- M/s. VKP Engineering Ind Pvt Ltd – 4.51.00 Ha

FIGURE 2.7: PHOTOGRAPHS OF WATER SPRINKLING – P1



FIGURE 2.8: PHOTOGRAPHS OF WATER SPRINKLING – P2



FIGURE 2.9: PHOTOGRAPHS OF WATER SPRINKLING – P3



FIGURE 2.10: SHOWING GOOGLE IMAGE ROUGH STONE AND GRAVEL QUARRY PROJECT AREAS P1-P3



SATELLITE IMAGERY OF P1

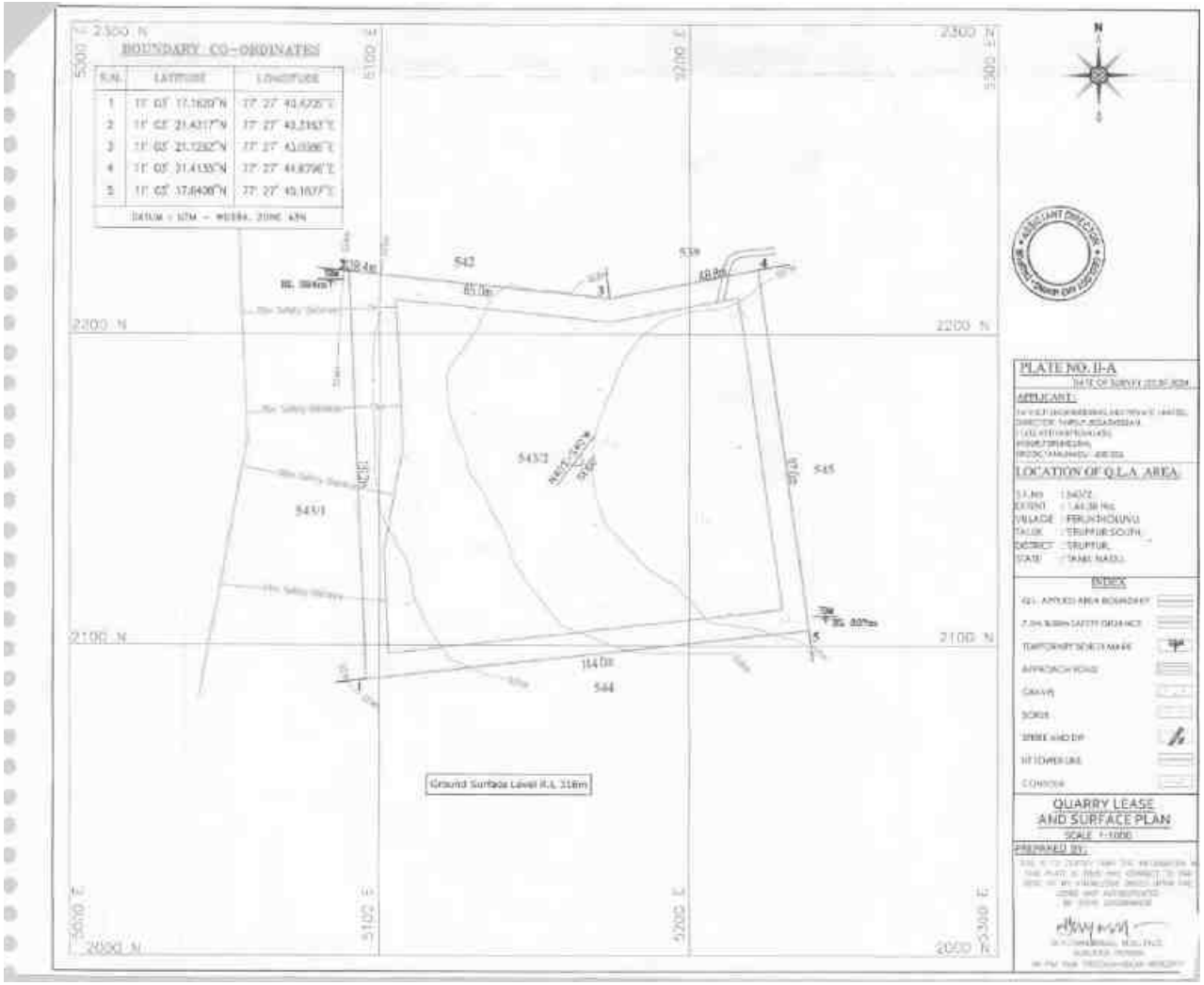


SATELLITE IMAGERY OF P2

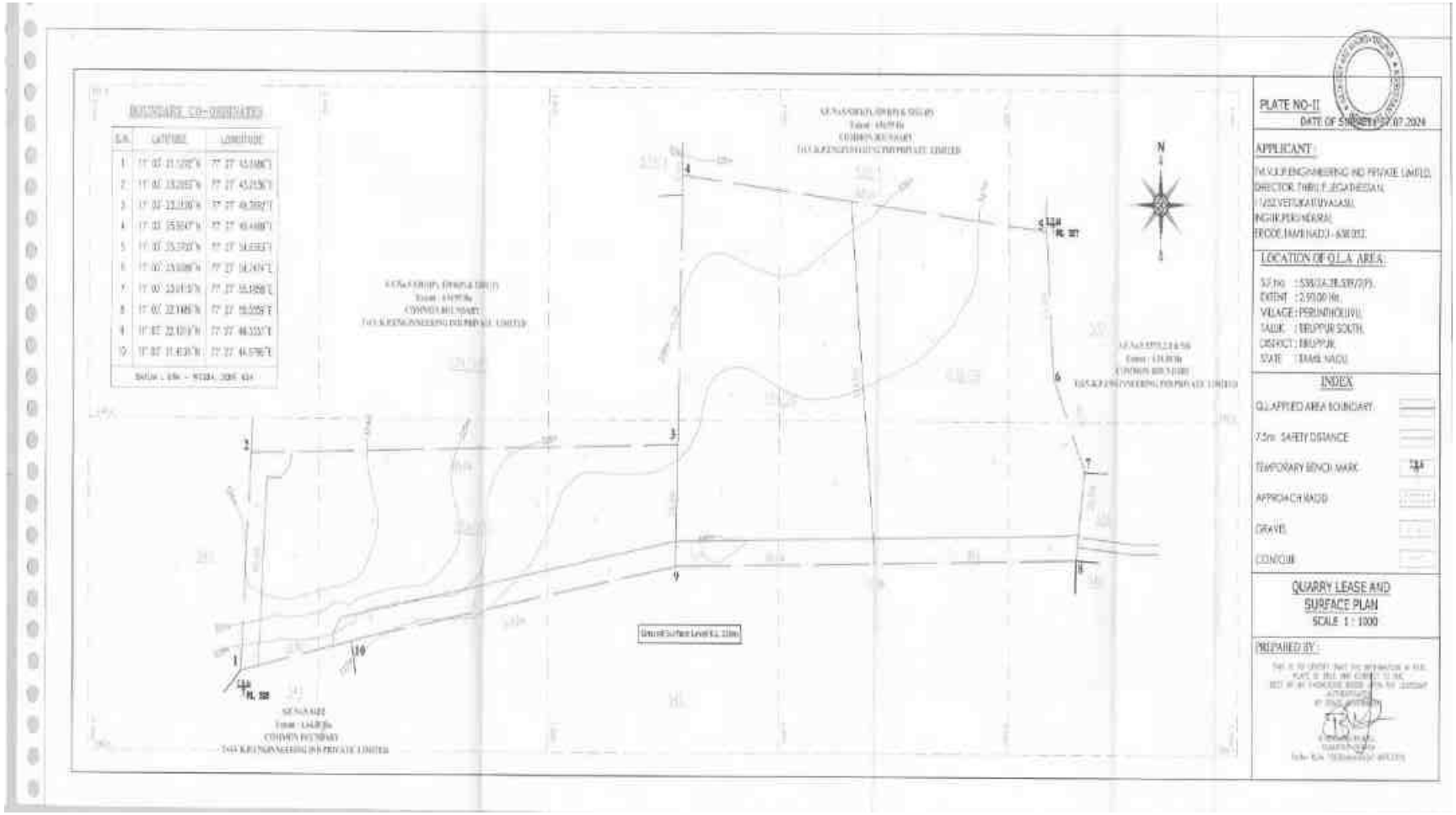


SATELLITE IMAGERY OF P3

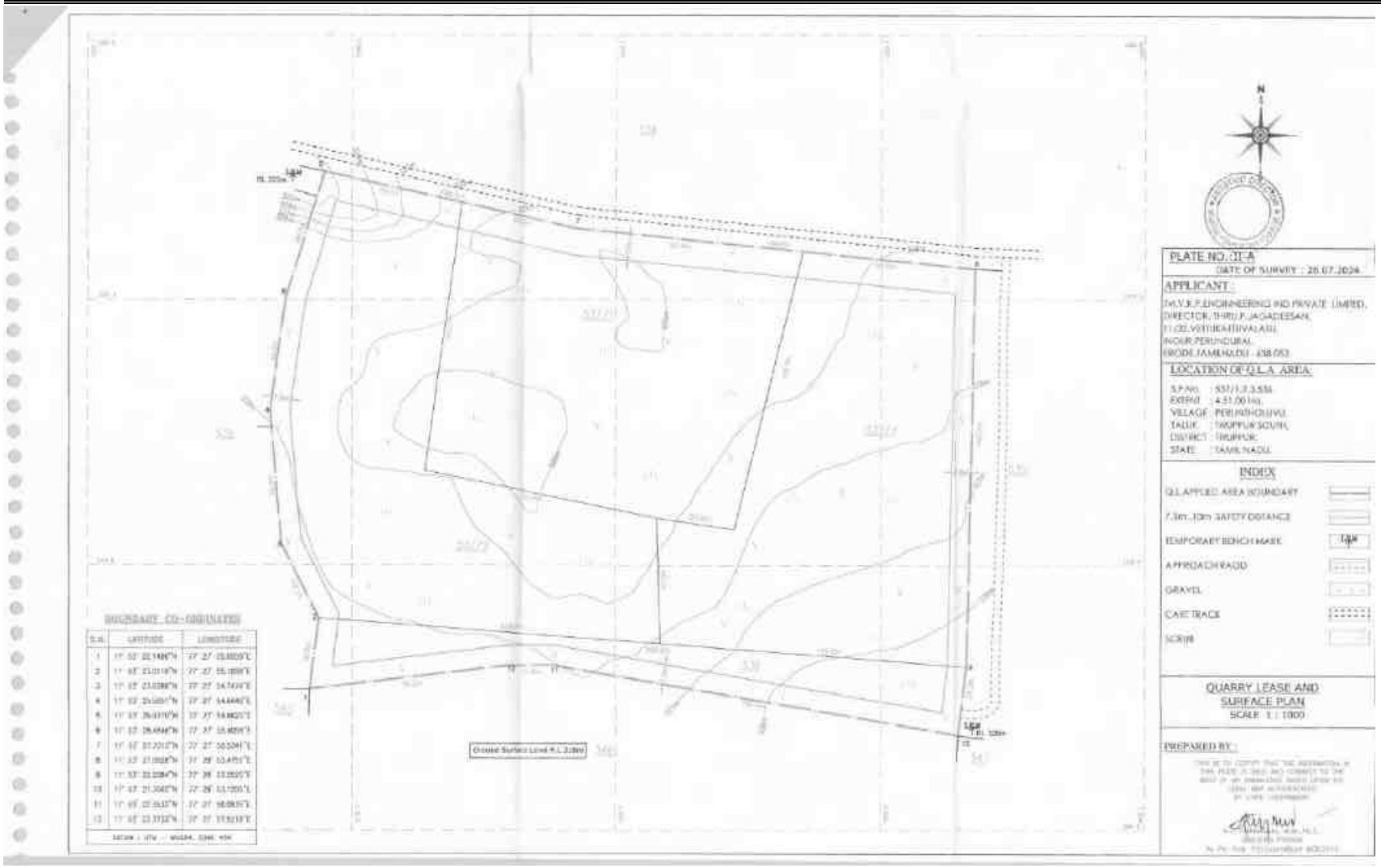
FIGURE 2.11: SHOWING QUARRY LEASE PLAN ROUGH STONE AND GRAVEL QUARRY PROJECT AREAS P1 to P3



P1 - M/s. VKP Engineering Ind Pvt Ltd – 1.64.38 Ha



P2- M/s. VKP Engineering Ind Pvt Ltd – 2.90.0 Ha



P3- M/s. VKP Engineering Ind Pvt Ltd – 4.51.00 Ha

FIGURE 2.12: SUPERIMPOSED VILLAGE MAP

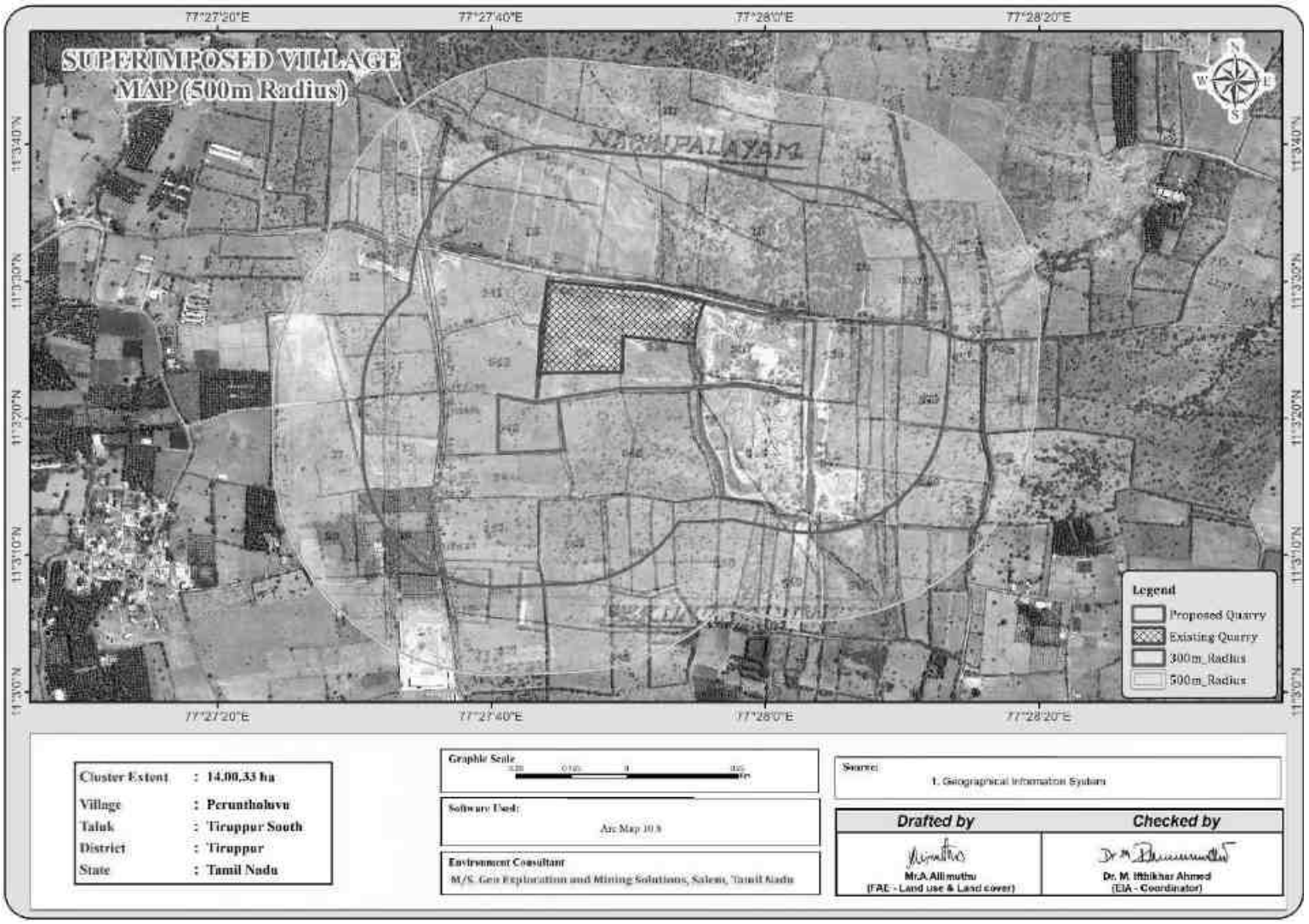


FIGURE 2.13: DIGITIZED MAP OF THE STUDY AREA (10 KM RADIUS FROM PROJECT SITE)

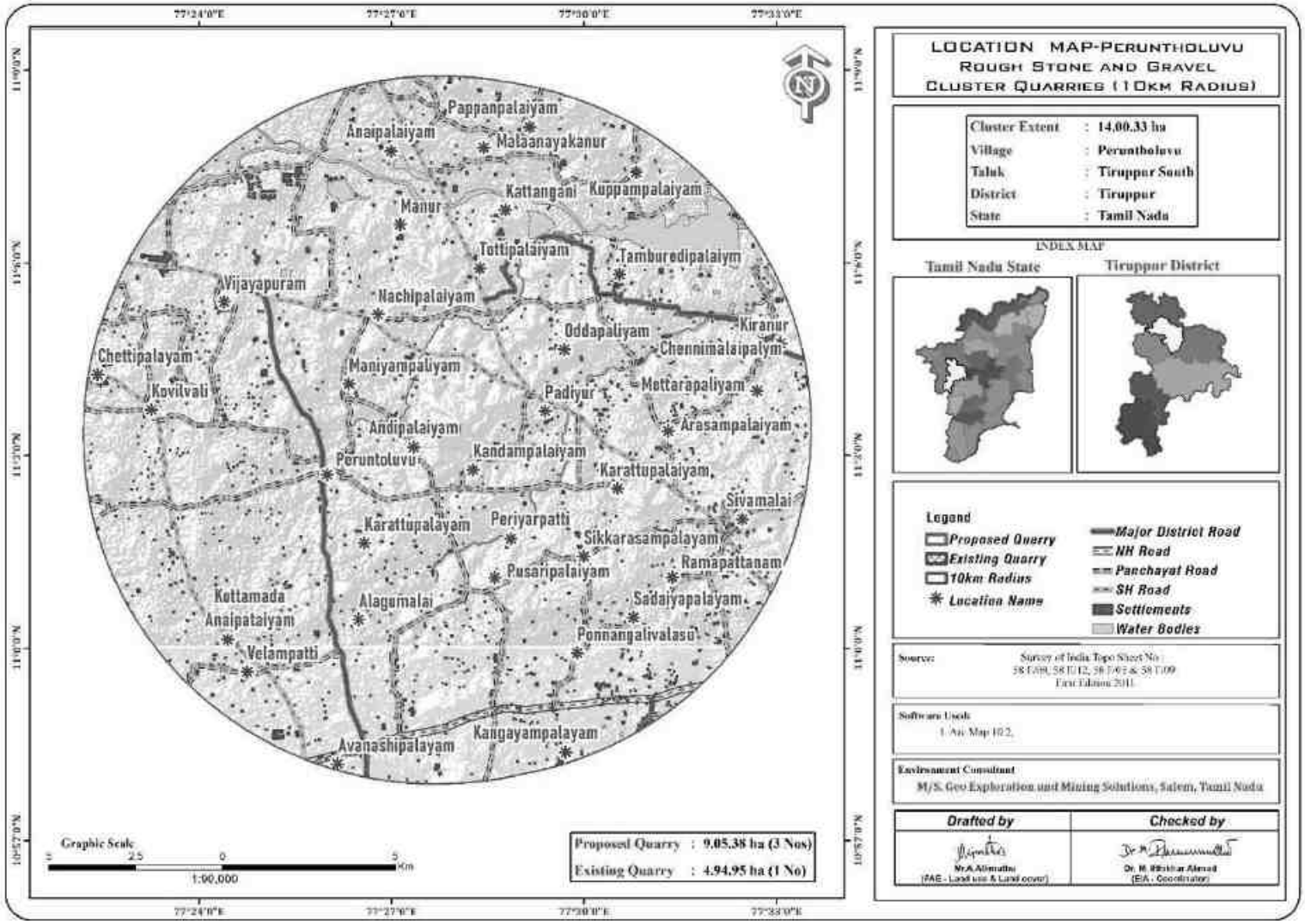


FIGURE 2.14: DIGITIZED MAP OF THE STUDY AREA (5 KM RADIUS FROM PROJECT SITE)

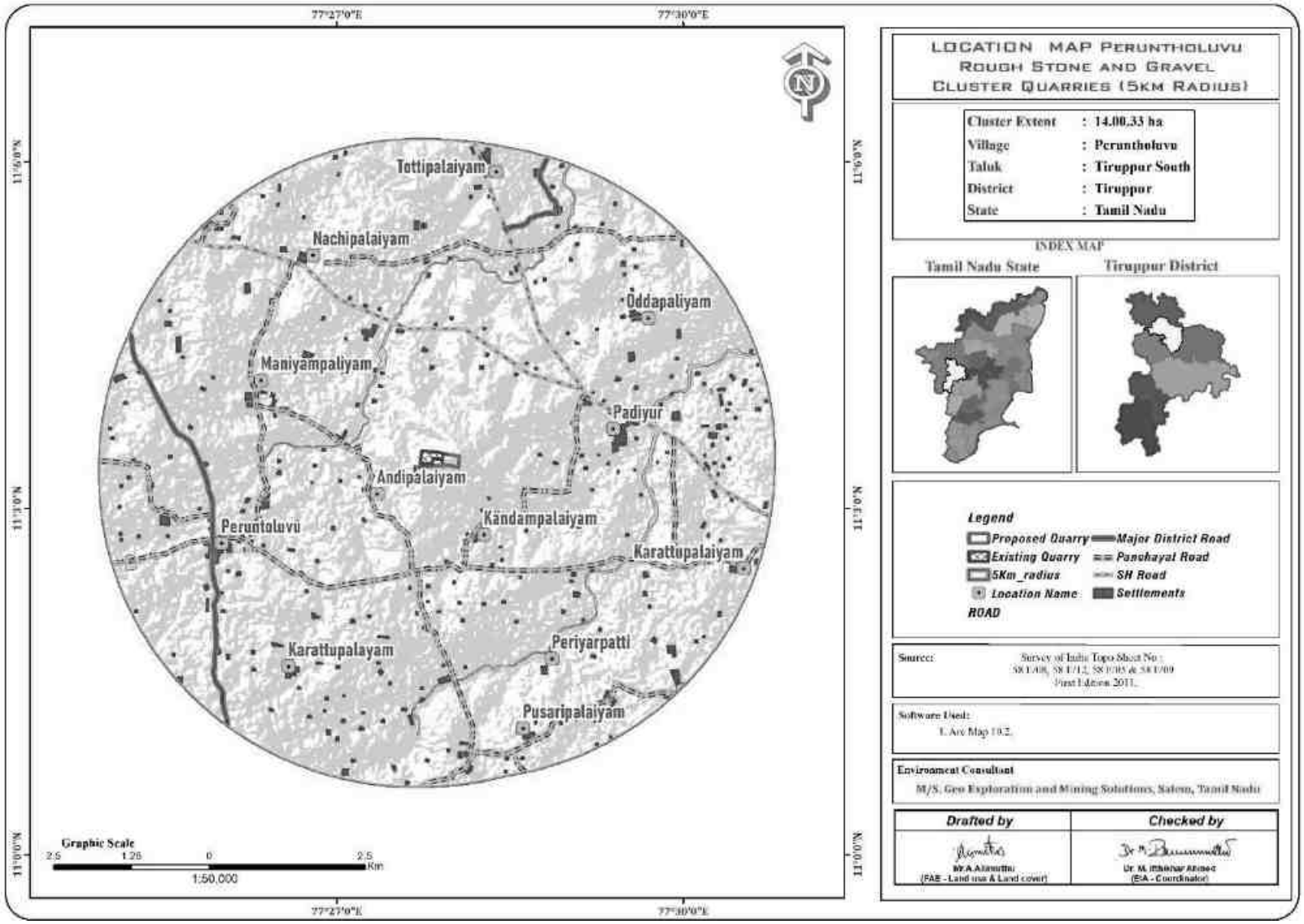
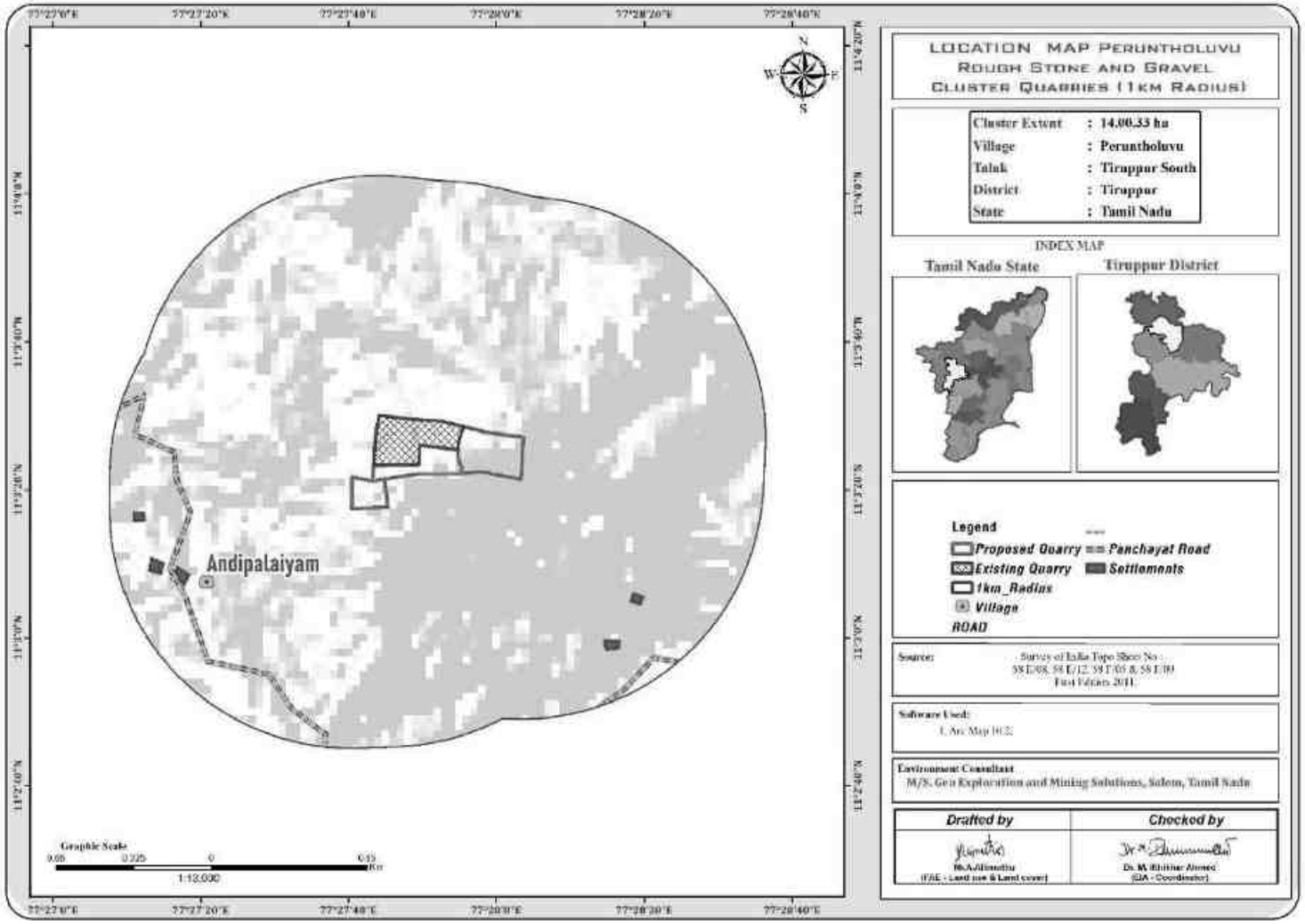


FIGURE 2.15: DIGITIZED MAP OF THE STUDY AREA (1 KM RADIUS FROM PROJECT SITE)



2.2.1 Project Area

(i) All the projects under cluster are site specific, there is No beneficiation or processing proposed inside the project area.

(ii) There is no forest land involved in the proposed project area and is devoid of major vegetation and trees.

TABLE 2.3 – LAND USE PATTERN OF THE PROPOSED PROJECTS P1-P3

LAND USE PATTERN OF PROJECT – P1		
Description	**Present area in (ha)**	**Area at the end of life of quarry (Ha)**
Area under quarrying	1.22.70	1.22.70
Sire Services	Nil	Nil
Roads	0.01.0	0.01.0
Green Belt	0.21.48	0.40.68
Un – utilized area	0.19.20	Nil
Grand Total	**1.64.38**	**1.64.38**
LAND USE PATTERN OF PROJECT – P2		
Description	**Present area in (ha)**	**Area at the end of life of quarry (Ha)**
Area under quarrying	2.05.10	2.05.10
Sire Services	Nil	Nil
Roads	0.01.0	0.01.0
Green Belt	0.34.80	0.83.90
Unutilized area	0.49.10	Nil
Grand Total	**2.90.00**	**2.90.0**
LAND USE PATTERN OF PROJECT – P3		
Description	**Present area in (ha)**	**Area at the end of life of quarry (Ha)**
Area Under Quarry	3.80.0	3.80.0
Site Services	0.01.0	0.01.0
Roads	0.02.0	0.02.0
Green Belt	0.68.0	0.68.0
Unutilized Area	Nil	Nil
Grand Total	**4.51.0**	**4.51.0**

Source: Approved Mining Plan

2.2.2 Size or Magnitude of Operation

TABLE 2.4: OPERATIONAL DETAILS FOR PROPOSED PROJECTS

OPERATIONAL DETAILS FOR PROJECT – P1			
PARTICULARS	**DETAILS**		
	Rough Stone (m^3) (10 Year Plan period)	**Weathered Rock (m^3) (5 Years Plan period)**	**Gravel (m^3) (3 Years Plan period)**
Geological Resources	5,75,435 m^3	1,50,725 m^3	32,882 m^3
Mineable Reserves	1,23,550 m^3	99,800 m^3	23,868 m^3
Production for First five-year plan period	64,300 m^3	67,500 m^3	23,868 m^3
Production for Second five-year plan period	59,250 m^3	32,300 m^3	-
Mining Plan Period / Lease Applied Period	10Years		
Number of Working Days	300 Days		
Production per day	41	66	26
No of Lorry loads (12m^3 per load)	3	5	2
Total Depth of Mining	47m (9m Agl + 38m Bgl)		
OPERATIONAL DETAILS FOR PROJECT – P2			
PARTICULARS	**DETAILS**		
	Rough Stone (m^3) (5Year Plan period)	**Weathered Rock (m^3) (3 Years Plan period)**	**Gravel (m^3) (3 Years Plan period)**
Geological Resources	20,44,880 m^3	2,75,320 m^3	55,064 m^3
Mineable Reserves	1,50,770 m^3	1,73,090 m^3	42,192 m^3

Production for First five years Plan	78,790 m^3	1,73,090 m^3	42,192 m^3
Production for Second five years Plan	71,980 m^3	-	-
Mining Plan Period / Lease Applied Period	10 Years		
Number of Working Days	300 Da		
Production per day	50	192	46
No of Lorry loads (12m^3 per load)	4	16	4
Total Depth of mining	42m (9m Agl + 33m Bgl)		
OPERATIONAL DETAILS FOR PROJECT – P3			
PARTICULARS	**DETAILS**		
	Rough Stone (m^3) (5Year Plan period)	**Weathered Rock (m^3) (3 Years Plan period)**	**Gravel (m^3) (1st Year)**
Geological Resources	27,37,500 m^3	4,22,845 m^3	91,250 m^3
Mineable Reserves	8,33,355 m^3	3,05,978 m^3	75,408 m^3
Production for first five years Plan	4,17,670 m^3	3,05,978 m^3	75,408 m^3
Production for Second five years Plan	4,15,685 m^3	-	-
Mining Plan Period / Lease Applied Period	10 Years		
Number of Working Days	300 Days		
Production per day	277	339	83
No of Lorry loads (12m^3 per load)	23	28	7
Total Depth of mining	72m (12m Agl + 60m Bgl)		

Source: Approved mining plan

* Gravel and weathered formation are proposed to excavate for first, second and third years only.

2.3 Geology

2.3.1 Regional Geology

Tiruppur district of Tamil Nadu forms a part of southern Granulitic terrain and is predominantly occupied by crystalline rocks of Archaean to late Proterozoic age. Regionally, the rocks can be grouped under five categories namely –

I. Charnockite Group represented by Charnockite, Pyroxene Granulite and Magnetite Quartzite,

II. Peninsular Gneissic Complex (II) comprising hornblende-biotite gneiss,

III. Basic intrusive include Pyroxinite/Dunite

IV. Younger intrusive comprising, Nepheline-Syenite, Pink Granite, Pegmatite and Quartz veins and

V. Quaternary sediments of Kankar and soil.

Stratigraphy of the area

Age	Group	Lithology
Holocene		Block cotton soil/clay±gypsum
Cenozoic		Kankar/calc-tufa
Neoproterozoic	Acid intrusives	Quartz veins Pegmatite Pink Granite
	Sivamalai syenite Complex	Nepheline-syenite
	Chalk Hills (Basic Intrusives)	Pyroxenite/Dunite
Archaean - Palaeoproterozoic	Peninsular Gneissic Complex (II)	Pink Granite Gneiss

	PGC (II)	Hornblende Biotite gneiss
Archaean	Charnockite Group	Charnockite (Unclassified) Pyroxene Granulite Banded Magnetite Quartzite

Tiruppur District is predominantly occupied by hornblende Biotite gneisses of PGC (II) with enclaves of Magnetite Quartzite, Pyroxene Granulite and Charnockite. The area exposes several bands of Pyroxene Granulite which is medium grained, medium to dark grey in colour and stand out prominently in the gneissic country generally parallel to regional foliation. Charnockite is coarse grained, massive, many places it is foliated, grey colored and greasy and exposed as boulder outcrops and small knolls. It is well exposed in Central, Western and Southern parts of the Tiruppur District. The general strike of foliation varies from ENE-WSW, E-W with dipping towards NW and N respectively.

Hornblende-Biotite gneiss is well foliated, medium to coarse grained, pale grey and exposed as sheets and small knolls. Pink Granite gneiss occurs as thin bands and lensoidal bodies. It is a medium grained rock composed of alternating bands of mafic (mainly of biotite and hornblende) and felsic (Feldspar and Quartz) minerals. It is well recognized in Avinasi area.

Basic intrusives such as pyroxinite/dunite occurs as Outcrop and lensoidal bodies in the country rock and mostly concordant to the regional foliation. Many basic intrusive are reported in south and south-east of Tiruppur town. The trend of these bodies is east-west.

Nepheline syenite is a leucocratic, coarse-grained rock and composed mainly of Feldspar with Nepheline and shows pitted appearance due to removal of Nepleline. This alkaline rock is available in and around Sivanmalai area only. Acid intrusives comprising pink granite, pegmatite and quartz veins are traversed country rocks in micro (cm wide-meter long) to meso-scale (few meters wide and several meter long) extend. Granite is exposed around 9 km SW of Avanashi. Small scale pegmatite and quartz veins are noticed almost in all the rock types. Acid intrusives are overlain by sediments of Quaternary age, represented by Kankar and black cotton soil with Gypsum. Most of the area is covered by brown and red brown soil. Some part of the area covered with black cotton soil contains Gypsum as lumps. Black cotton soil covers south-western part of the district.

Source: District Survey Report for Minor Minerals Tiruppur District – May 2019
https://cdn.s3waas.gov.in/s3d1f255a373a3cef72e03aa9d980c7eca/uploads/2019/05/2019052585.pdf

2.3.2 Local Geology: -

The study area follows the regional trend and mainly comprises of Hard Rock Formation as a homogeneous formation / Batholith formation of Charnockite. The project area is plain terrain, covered with gravel formation of 1m thickness; Massive Charnockite formation is found after 1m gravel formation which is inferred from the resistivity survey method.

Peninsular gneiss forms the oldest rock formation, in which the massive formation of Charnockite lies over with rich accumulation of recent quaternary formation. On regional scale the Charnockite body N30ºE – S30ºE with dipping towards SE60º (Source Approved Mining plan).

2.3.3 Hydrogeology

Tiruppur District is underlain by crystalline metamorphic complex in the western parts of district and sedimentary tract in eastern side. An area of 4551 Sq.km is covered by crystalline rocks (63%) and 2671 Sq.km is covered by sediments (37%). The general geological sequence of formation is given below:

Quaternary - Laterites, Sands and Clays
Tertiary - Sandstone, Gravels and Clays
Cretaceous - Limestone, Calcareous Sandstone and Clay unconformity.
Archaean - Charnockites, Gneisses, Granites, Dolerites and Pegmatite

- The major part of the area is covered by metamorphic crystalline rocks of charnockite, granitic gneiss of Archaean age intruded by dolerite dykes and pegmatite veins. These rocks are highly metamorphosed and have been subjected to very severe folding, crushing and faulting.

- Ground Water occurs under the phreatic condition and wherever there are deep seated fractures, it occurs under semi-confined to confined conditions.
- Occurrence of Ground Water in hard rock depends upon the intensity and depth of weathering, fractures and fissures present in the rocks.
- Granites and gneisses yield moderately compared to the yield in Charnockites.
- Depth of well in hard rock generally ranges between 8 and 15m below ground level.
- Generally, yield in open wells ranges from 30 to 250m^3 /day and in bore well between 260 and 430 m^3 /day. The weathered thickness varies from 2.5 m to 42m in general there are 3 to 5 fracture zones within 100 m and 1 to 4 fracture zones between 100 and 200 m.

The Cretaceous formation is represented by Arenaceous Lime stone, Calcareous sand - stone and marl. The Tertiary formation is argillaceous comprising of Silty clay stones, argillaceous Lime stone.

The Quaternary deposits represented by the river deposits of Ponnaiyar and Varahanadhi spread over as patches in Tiruppur District. The alluvium consists of unconsolidated sands, gravelly sands, clays and clayey sands. The thickness of the sands ranges between 15 and 25 m in the alluvial formation which also form potential aquifers. In some areas, sand stone of tertiary formation are the potential groundwater reservoirs.

Aquifer Systems:

Occurrence and storage of groundwater depend upon three factors viz., Geology, Topography and rainfall in the form of precipitation. Apart from Geology, wide variation in topographic profile and intensity of rainfall constitutes the prime factors of groundwater recharge. Aquifers are part of the more complex hydro geological system and the behaviour of the entire system cannot be interpreted easily. In hard rock terrain the occurrence of Ground Water is limited to top weathered, fissured and fractured zone which extends to maximum 30 m on an average it is about 10-15 m in Tiruppur District.

In Sedimentary formations, the presence of primary inter granular porosity enhances the transmitting capacity of groundwater where the yield will be appreciable. The sedimentary area which occupies the eastern part of the district along the coastal tract is more favourable for groundwater recharge. Ground Water occurs both in semi confined and confined conditions. A brief description of occurrence of groundwater in each formation is furnished below.

Alluvial Formations

In the river alluvium groundwater occurs under water table condition. The maximum thickness is 37 m and the average thickness of the aquifer is approximately 12 m. These formations are porous and permeable which have good water bearing zones.

Tertiary Cuddalore sandstone

Tertiary formations are represented by Cuddalore Sandstone and characterised as fluvial to brakish marine deposits. Predominantly this formation is divided into Lower and Upper Cuddalore formations. In the Upper Cuddalore formations the groundwater occurs in semi confined conditions, whereas in the Lower Cuddalore the groundwater occurs in confined condition with good groundwater potential.

Cretaceous Formations

Groundwater occurring in the lens shape in the sandy clay lenses and fine sand is underlain by white and black clay beds which constitute phreatic aquifer depth which ranges 10m to 15m below ground level. Phreatic aquifer in Limestone is potential due to the presence of Oolitic Limestone.

Hard Rock Formations

Groundwater occurs under water table conditions but the intensity of weathering, joint, fracture and its development are much less in other type of rocks when compared to gneissic formation. The groundwater potential is low, when compared with the gneissic formations.

Granitic Gneiss

Groundwater occurs under water table conditions in weathered, jointed and fractural formations. The pore space developed in the weathered mantle acts as shallow granular aquifers and forms the potential water bearing and yielding zones water table is shallow in canal and tank irrigation regions and it is somewhat deeper in other regions.

Charnockite

Groundwater occurs under water table conditions but the intensity of weathering, joint, fracture and its development are much less when compared to gneissic formations. The groundwater potential is low, when compared with the gneissic formations.

Aquifer Parameters

The thickness of aquifer in this district is highly erratic and varies between 15 m to 40 m below ground level. The inter granular Porosity is essentially dependent on the intensity and degree of weathering and fracture development in the bed rock. As discussed earlier deep weathering has developed in Gneissic formations and moderate weathering in charnockite formations. The range of aquifer parameters in hard rock and sedimentary formations are given below:

TABLE 2.5: RANGE OF AQUIFER PARAMETERS

Name	Sp. Capacity (lpm/d)	Specific Yield (%)	T (m^2/d)	K (m/day)	Yield of wells (lps)
Alluvium	2.08	7.2	98	19.7	2.5
Tertiary	78-173	1.4-3.5	46-134	16-33	2-3.3
Cretaceous	33-782	0.3-2.56	33-782	10-66	1.1-3.5
Crystalline	27-224	0.8-2.5	16-60	5-20	1-2

Source: http://nwm.gov.in/sites/default/files/Notes%20on%20Trippur%20District.pdf

The Ground Water levels from the 38 number of observation wells of TWAD have been analyzed for Post-Monsoon and Pre-Monsoon.

FIGURE 2.10: GROUND WATER LEVEL VARIATIONS OF TIRUPPUR DISTRICT

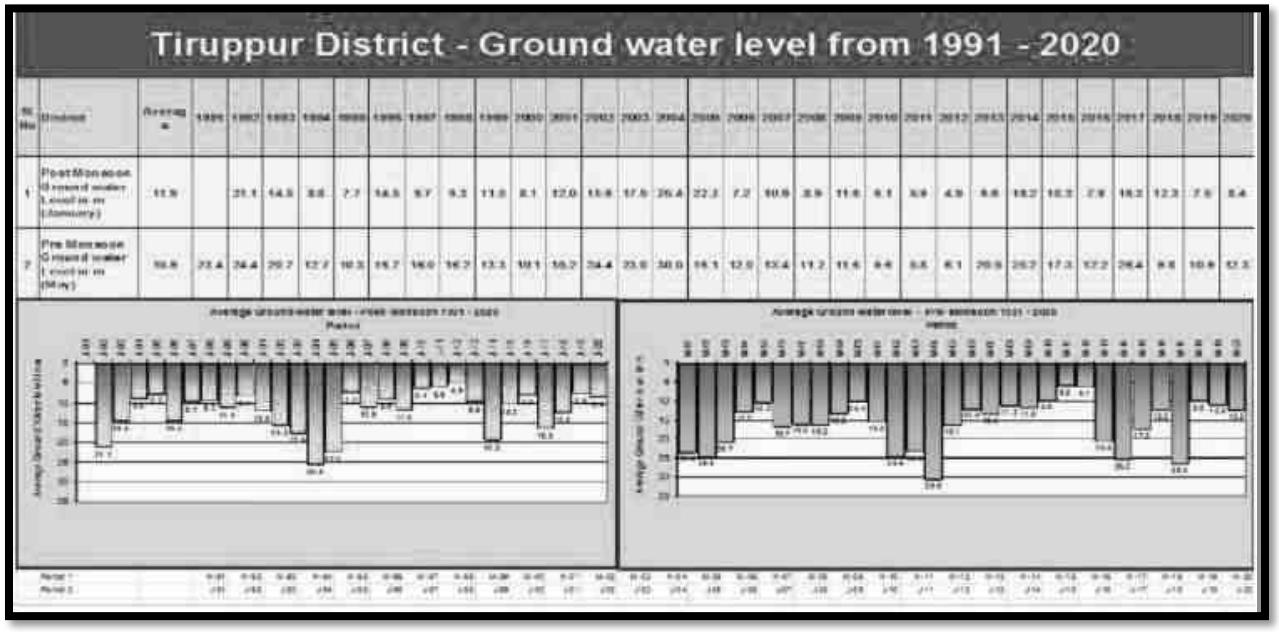


TABLE 2.6: GROUND WATER LEVEL VARIATIONS OF TIRUPPUR DISTRICT

Jan 2017	May 2017	Jan 2018	May 2018	Jan 2019	May 2019	Jan 2020	May 2020	Jan 2021	May 2021	5 Years Pre-Monsoon Average	5Years Post Monsoon Average

16.3	26.4	12.4	9.8	7.6	10.9	8.4	12.3	7.1	10.6	11.9	8.8

Source: https://www.twadboard.tn.gov.in/content/tiruppur

FIGURE 2.16: REGIONAL GEOLOGY MAP

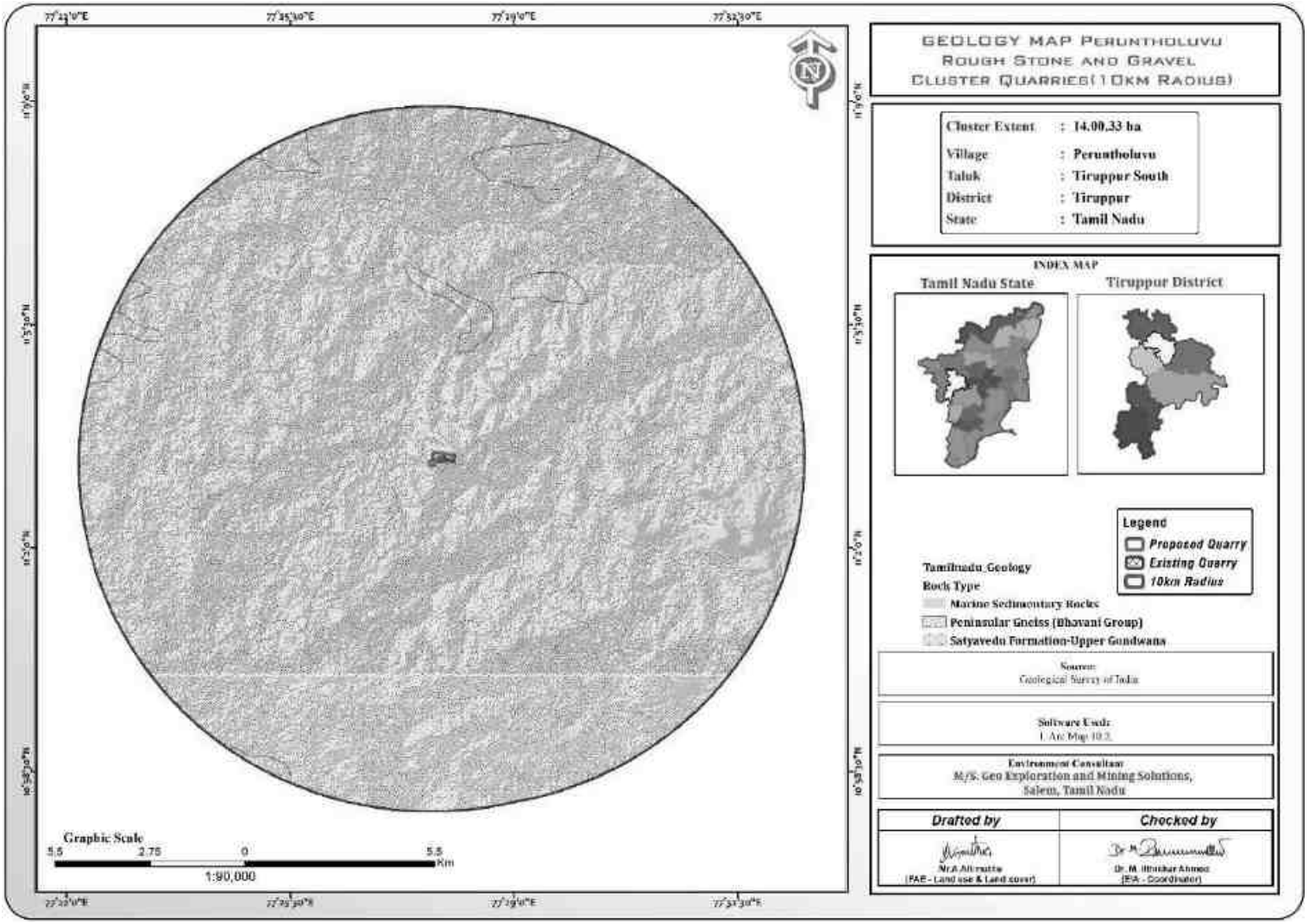


FIGURE 2.17: GEOMORPHOLOGY MAP

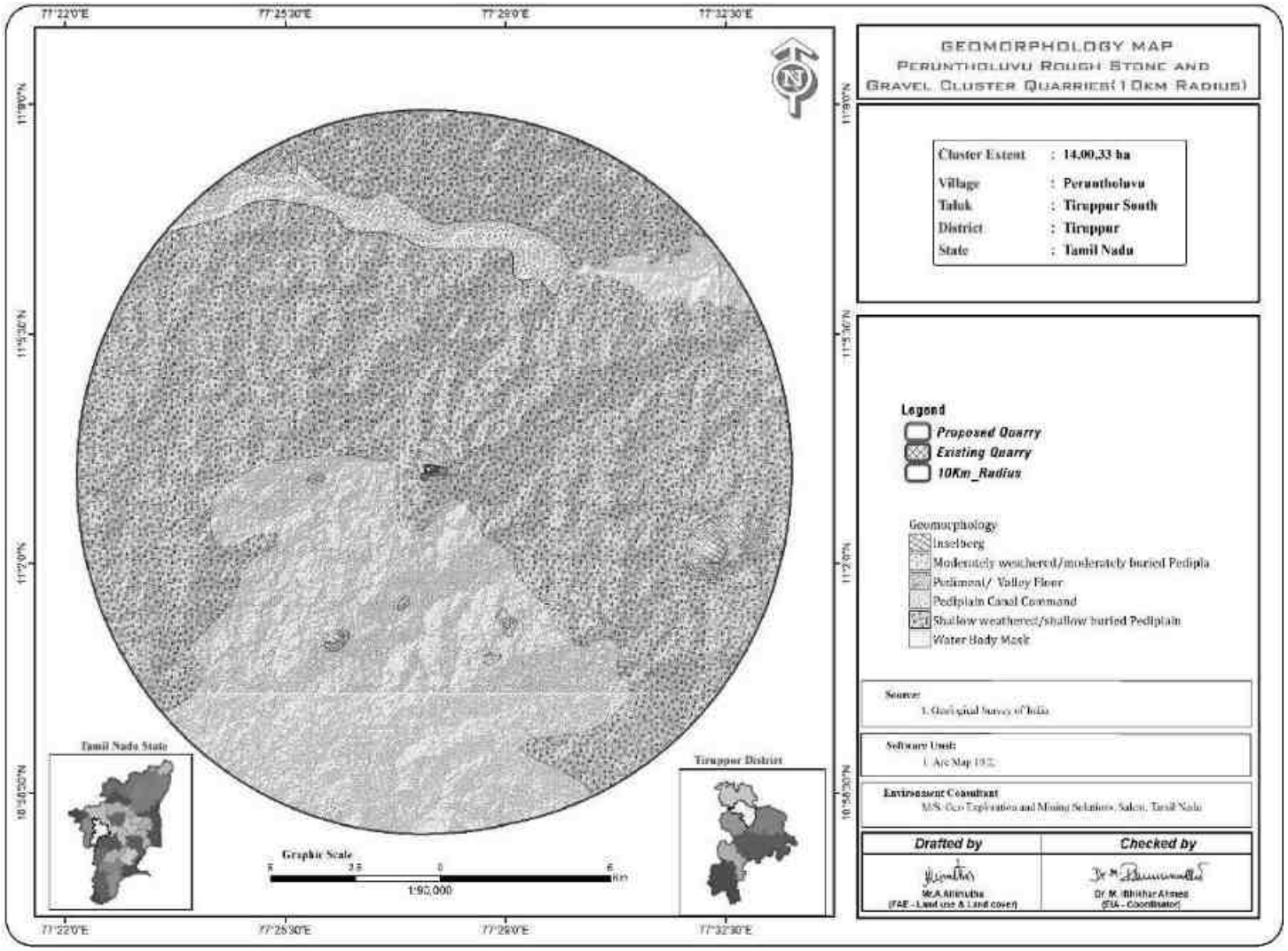


FIGURE 2.18: TOPOGRAPHY, GEOLOGICAL, YEARWISE DEVELOPMENT PRODUCTION PLAN AND SECTION-FOR FIRST FIVE YEAR

P1 - M/s. VKP Engineering Ind Pvt Ltd – 1.64.38 Ha

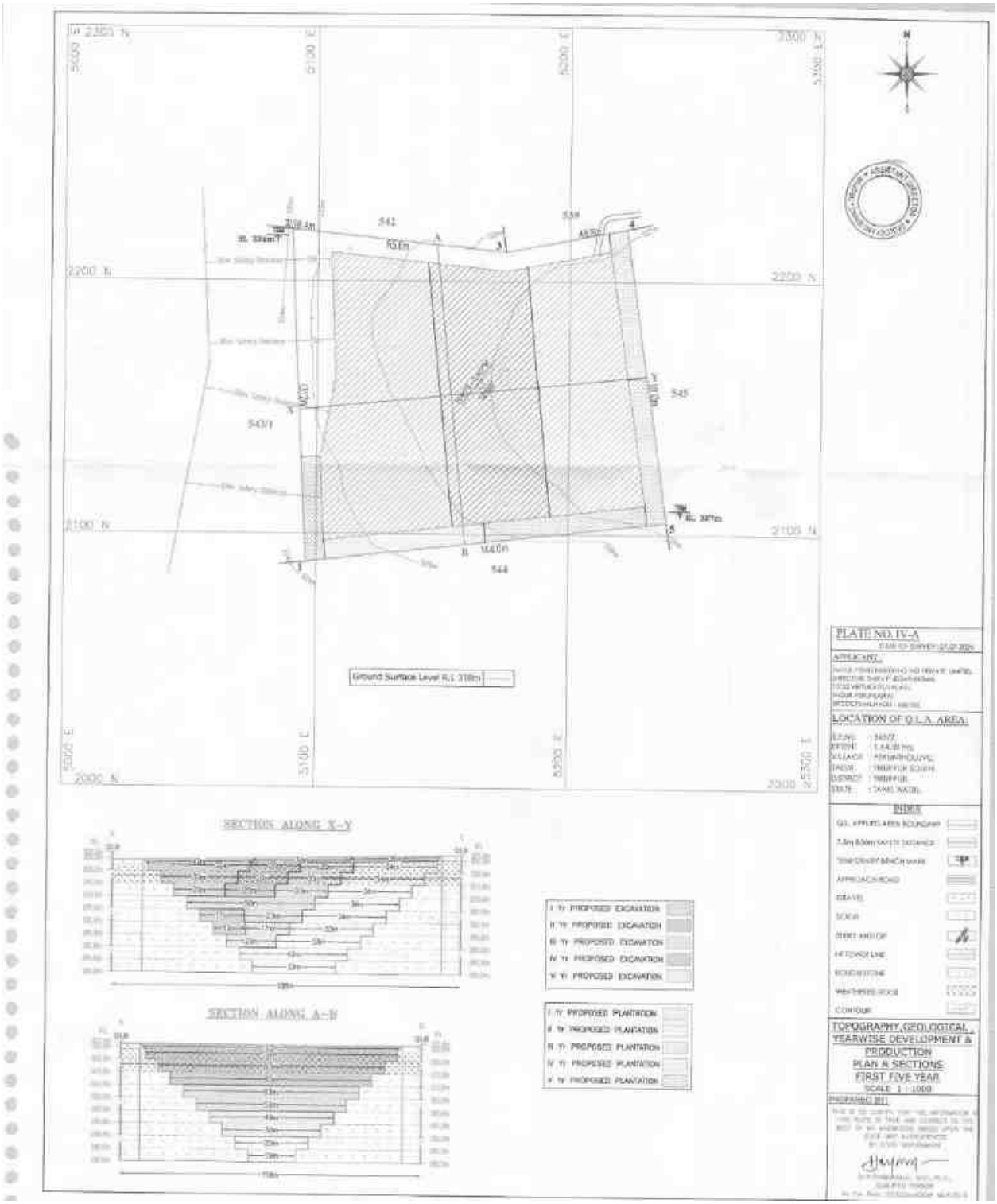


FIGURE 2.19: TOPOGRAPHY, GEOLOGICAL, YEARWISE DEVELOPMENT PRODUCTION PLAN AND SECTION-FOR SECOND FIVE YEAR

P1 - M/s. VKP Engineering Ind Pvt Ltd – 1.64.38 Ha

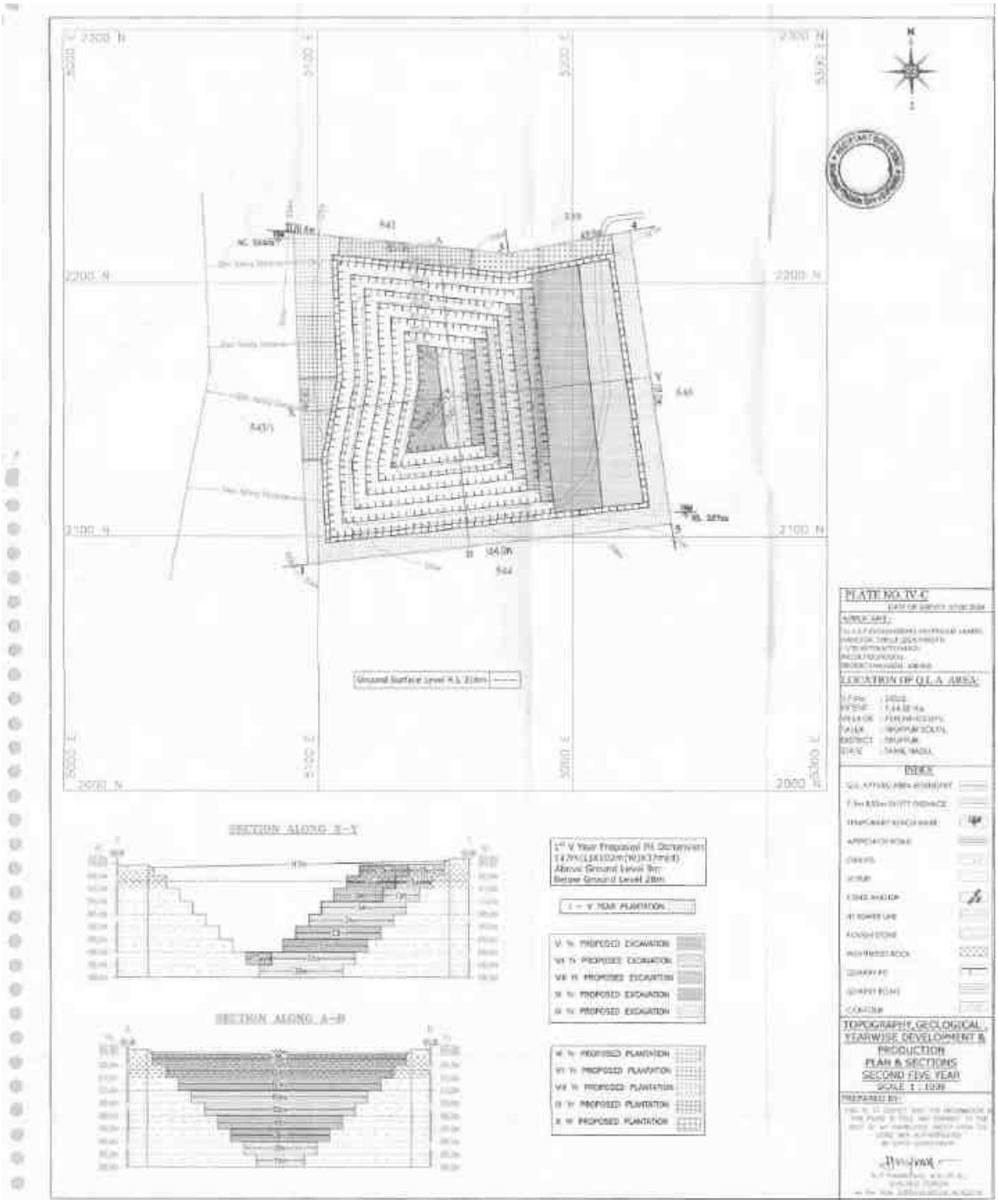


FIGURE 2.20: TOPOGRAPHY, GEOLOGICAL, YEARWISE DEVELOPMENT PRODUCTION PLAN AND SECTION-FOR FIRST FIVE YEAR

P2 - M/s. VKP Engineering Ind Pvt Ltd – 2.90.0 Ha

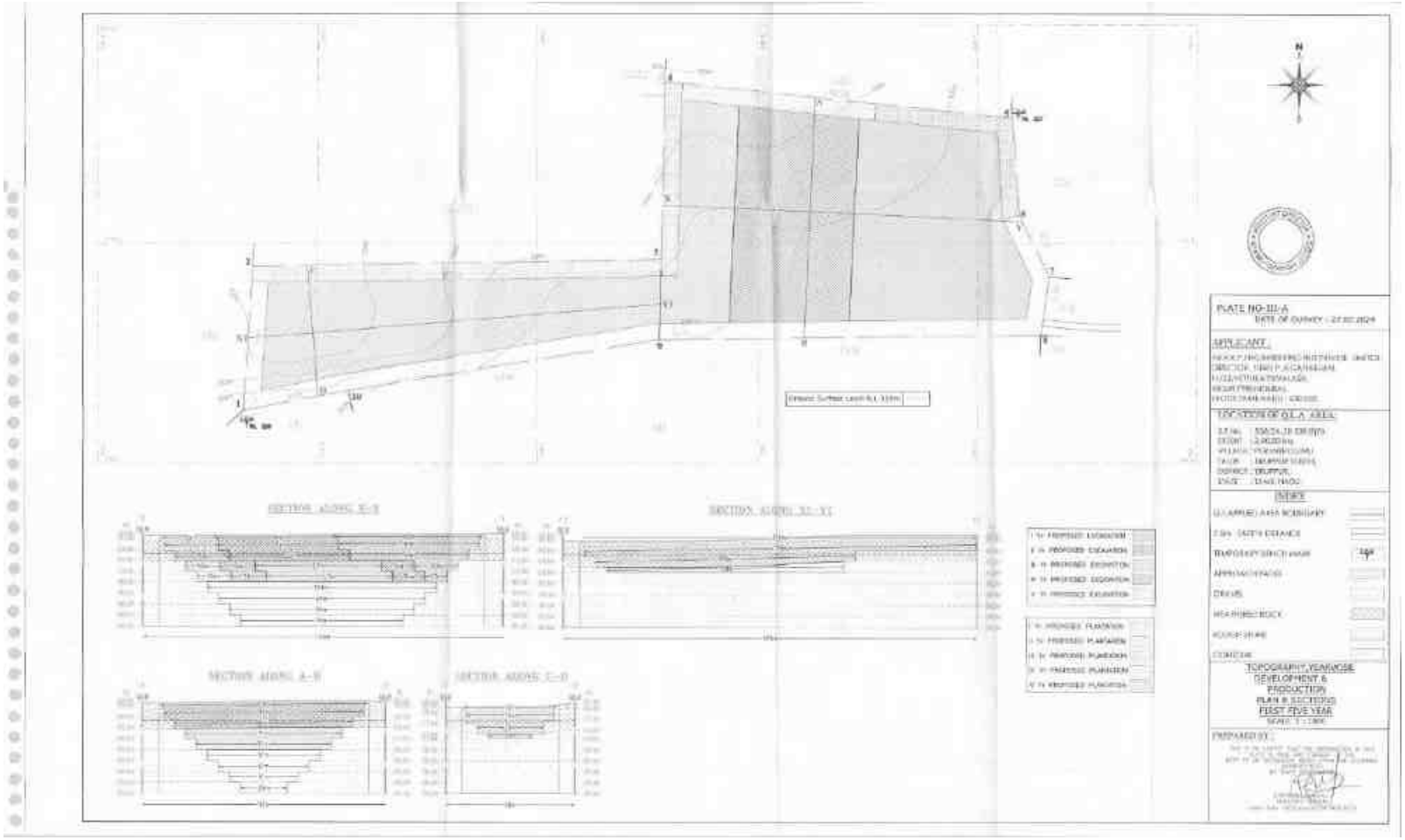


FIGURE 2.21: TOPOGRAPHY, GEOLOGICAL, YEARWISE DEVELOPMENT PRODUCTION PLAN AND SECTION-FOR SECOND FIVE YEAR

P2 - M/s. VKP Engineering Ind Pvt Ltd – 2.90.0 Ha

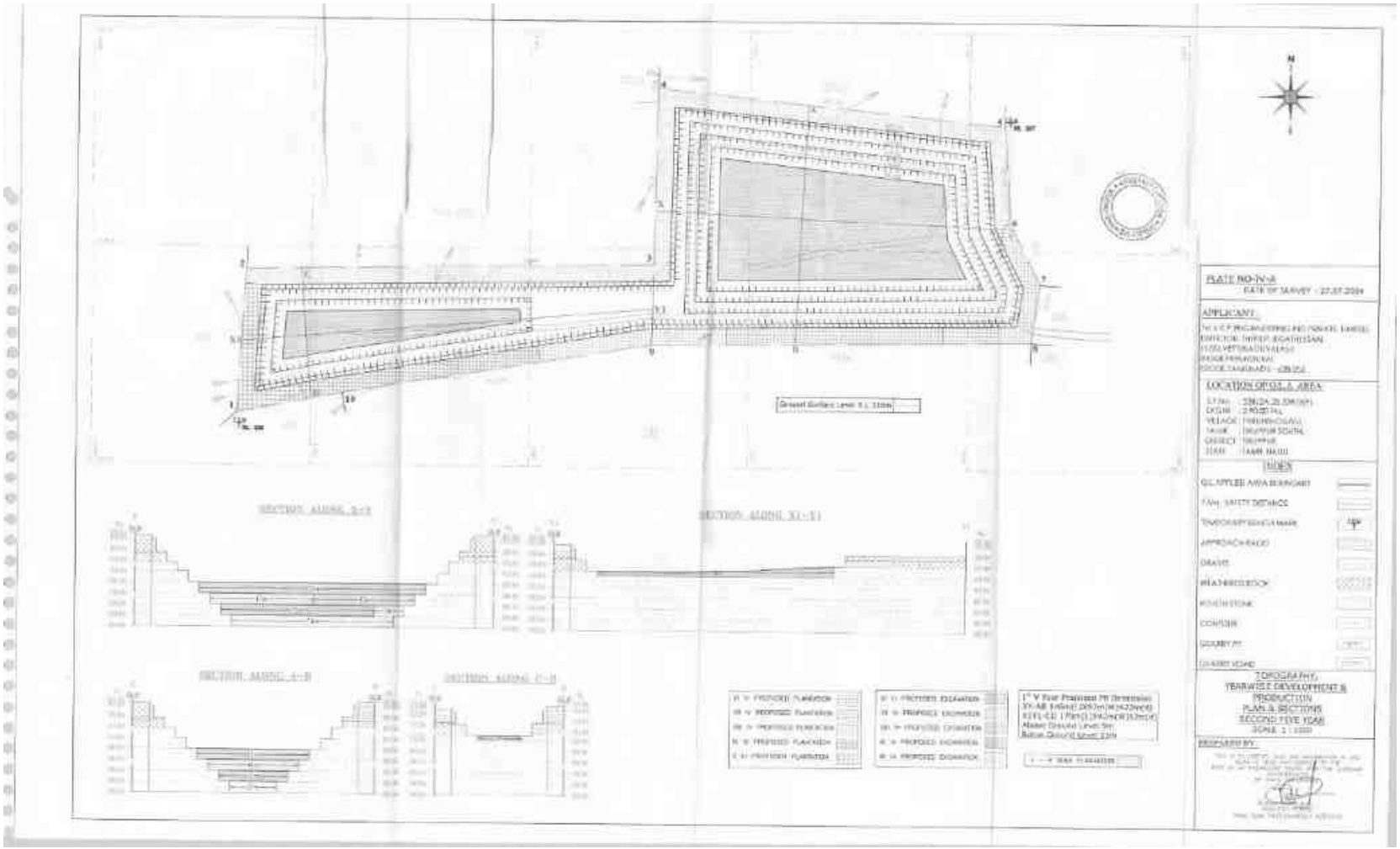


FIGURE 2.22: TOPOGRAPHY, GEOLOGICAL, YEARWISE DEVELOPMENT PRODUCTION PLAN AND SECTION-FOR FIRST FIVE YEAR

P3 - M/s. VKP Engineering Ind Pvt Ltd – 4.51.0 Ha

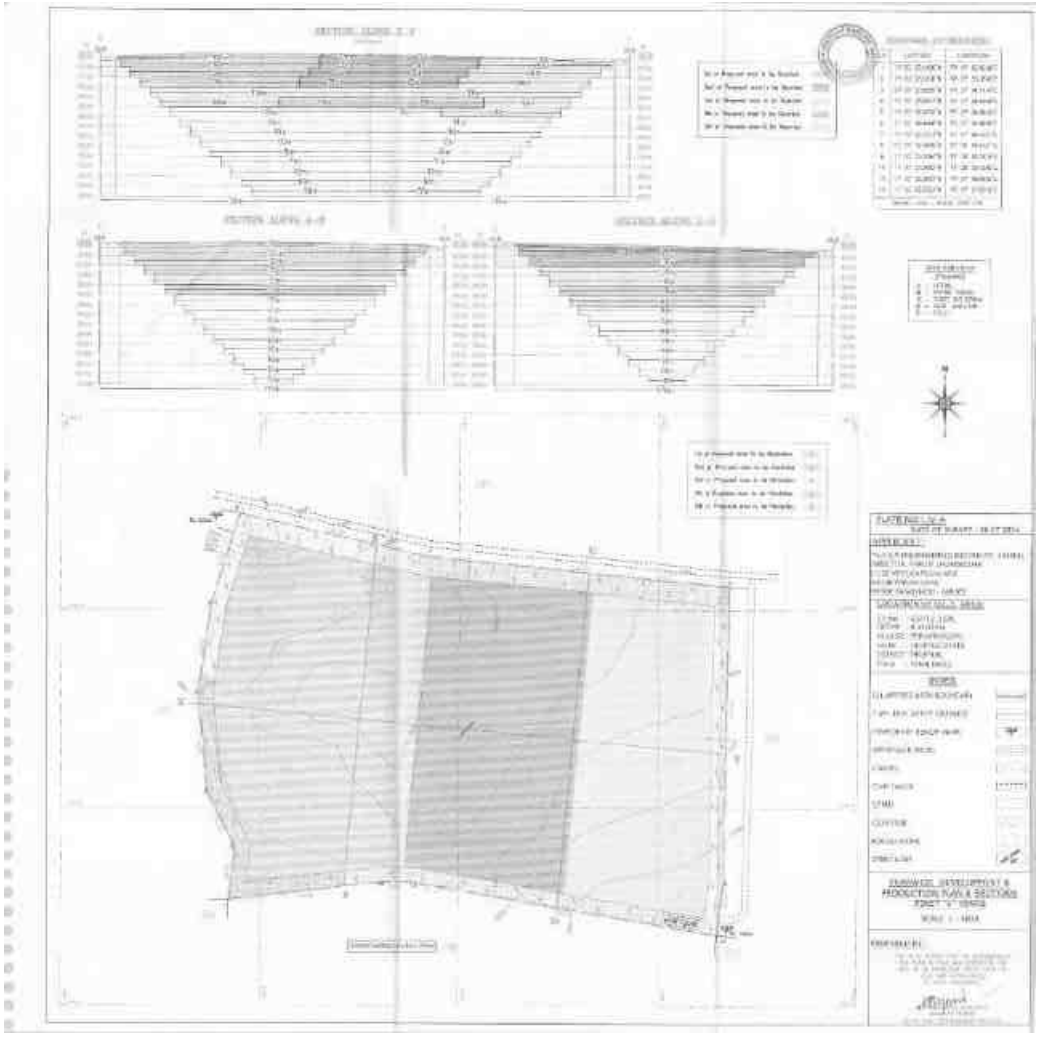
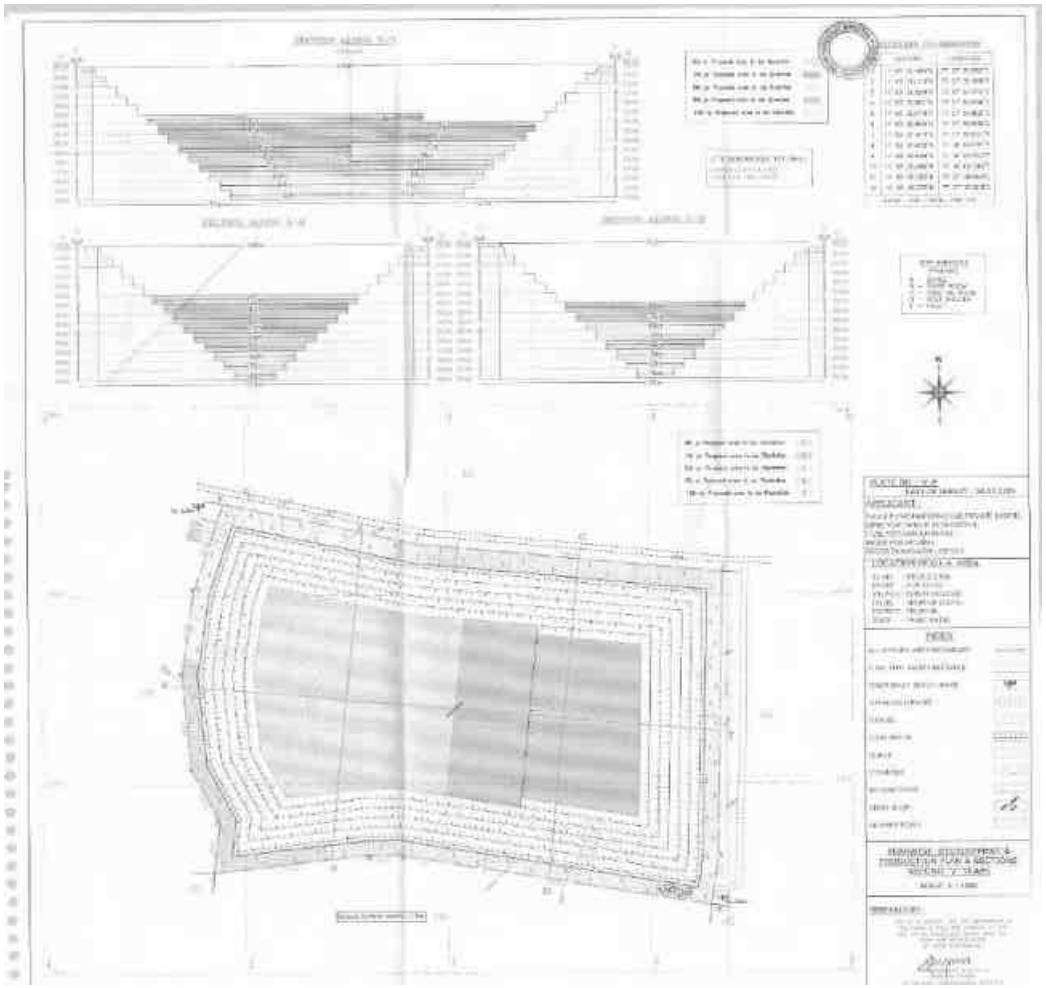


FIGURE 2.23: TOPOGRAPHY, GEOLOGICAL, YEARWISE DEVELOPMENT PRODUCTION PLAN AND SECTION-FOR SECOND FIVE YEAR

P3 - M/s. VKP Engineering Ind Pvt Ltd – 4.51.0 Ha



2.4 Resources and Reserves of the Cluster quarries

The available mineable reserves are calculated after leaving necessary safety distances prescribed in the Precise area communication letter.

TABLE 2.7: AVAILABLE GEOLOGICAL RESOURCES OF PROPOSED PROJECTS- P1- P2-P3

Description	P1		
	Rough Stone quarry	**Weathered Rock**	**Gravel**
Geological Resource	5,75,435 m^3	1,50,725 m^3	32,882 m^3
Mineable Reserves	1,23,550 m^3	99,800 m^3	23,868 m^3
Proposed production for first five years	64,300 m^3	67,500 m^3	23,868 m^3
Proposed production for Second five years	59,520 m^3	32,300 m^3	-

Description	P2		
	Rough Stone quarry	**Weathered Rock**	**Gravel**
Geological Resource	20,44,880 m^3	2,75,320 m^3	55,064 m^3
Mineable Reserves	1,50,770 m^3	1,73,090 m^3	42,192 m^3
Proposed production for first five years	78,790 m^3	1,73,090 m^3	42,192 m^3
Proposed production for Second five years	71,980 m^3	-	-

Description	P3		
	Rough Stone quarry	Weathered Rock	Gravel
Geological Resource	27,37,500 m^3	4,22,845 m^3	91,250 m^3
Mineable Reserves	8,33,355 m^3	3,05,978 m^3	75,408 m^3
Proposed production for first five years	4,17,670 m^3	3,05,978 m^3	75,408 m^3
Proposed production for Second five years	4,15,685 m^3	-	-

Source: Approved Mining Plan

TABLE 2.8: YEAR-WISE PROPOSAL FOR FIRST FIVE YEARS PRODUCTION PLAN-P1

YEAR	ROUGH STONE QUARRY (m^3)	WEATHERED ROCK (m^3)	GRAVEL (m^3)
I	8,000	29,500	8568
II	8,000	19,000	7956
III	32,035	19,000	7344
IV	8,200	-	-
V	8,065	-	-
VI	7,600	18,050	
VII	27,760	14,250	
VIII	8,085	-	
IX	7,885	-	
X	7,920	-	
TOTAL	**1,23,550**	**99,800**	**23868**

Source: Approved Mining Plan

TABLE 2.9: YEAR-WISE PROPOSAL FOR FIRST FIVE YEARS PRODUCTION PLAN-P2

YEAR	ROUGH STONE QUARRY (m^3)	WEATHERED ROCK (m^3)	GRAVEL (m^3)
I	10,150	50,990	12,276
II	9,900	47,300	10,230
III	37,620	74,800	19,686
IV	10,560	-	-
V	10,560	-	-
VI	31,920	-	
VII	9,635	-	
VIII	9,635	-	
IX	10,850	-	
X	9,940	-	
TOTAL	**1,50,770**	**99,800**	**23868**

Source: Approved Mining Plan

TABLE 2.10: YEAR-WISE PROPOSAL FOR FIRST FIVE YEARS PRODUCTION PLAN-P3

YEAR	ROUGH STONE QUARRY (m^3)	WEATHERED ROCK (m^3)	GRAVEL (m^3)
I	52,400	1,39,900	31,416
II	51,725	95,590	24,192
III	2,04,630	70,488	19,800
IV	56,295	-	-
V	52,620	-	-
VI	50,500	-	
VII	2,00,645	-	
VIII	49,580	-	
IX	59,540	-	
X	55,420	-	
TOTAL	**8,33,355**	**3,05,978**	**75,408**

Disposal of Waste

In the entire cluster quarries no waste is anticipated, quarried out materials (Rough stone and Gravel) will be utilized (100%).

Conceptual Mining Plan/ Final Mine Closure Plan

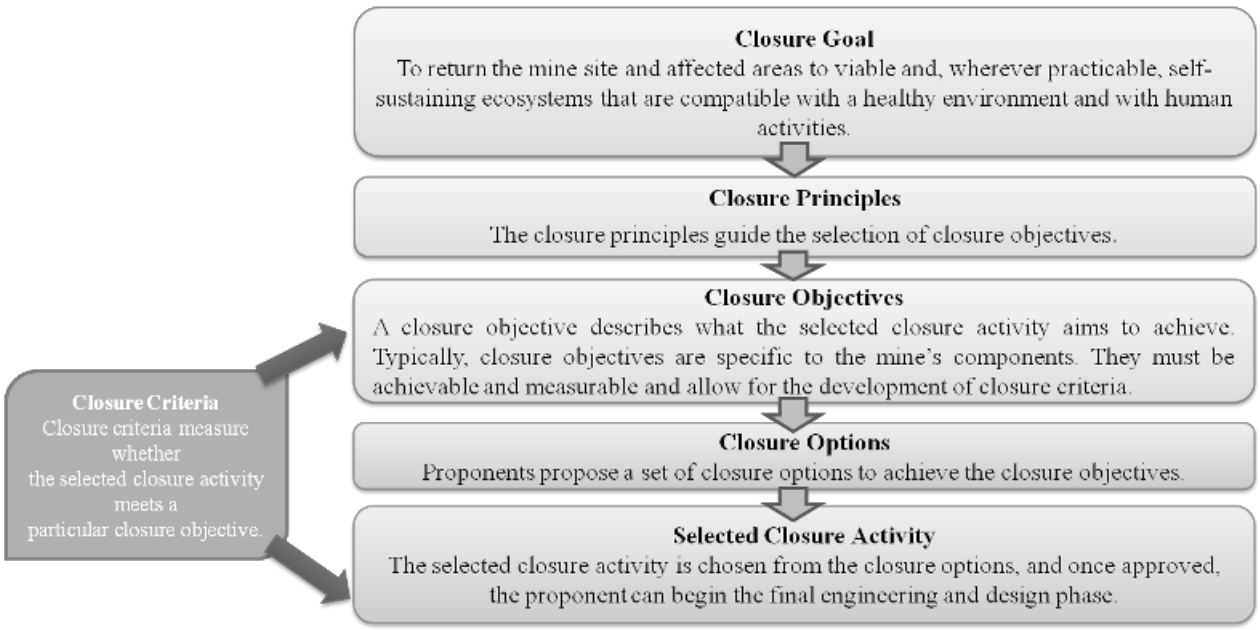
The ultimate pit size is designed based on certain practical parameters such as economical depth of mining, safety zones, permissible area, etc.

TABLE 2.11: ULTIMATE PIT DIMENSIONS- P1- P2-P3

Code	PIT	Length (Max) (m)	Width (Max) (m)	Depth (Max) (m)
PI	**I**	117	102	47m Bgl(9m AGL + 38m BGL)
P2	**XY-AB**	146	93	42m (9m AGL + 33m BGL)
	X1Y1-CD	179	42	17m (9m AGL + 8m BGL)
P3	**I**	250	135	72m (12m AGL + 60m BGL)

Source: Approved Mining Plan

- At the end of life of mine, the excavated mine pit / void will act as artificial reservoir for collecting rain water and helps to meet out the demand or crises during drought season.
- After mine closure the greenbelt developed along the safety barrier and top benches and temporary water reservoir will enhance the ecosystem
- Mine Closure is a process of returning a disturbed site to its natural state or which prepares it for other productive uses that prevents or minimizes any adverse effects on the environment or threats to human health and safety.
- The principal closure objectives are for rehabilitated mines to be physically safe to humans and animals, geo-technically stable, geo-chemically non-polluting/ non-contaminating, and capable of sustaining an agreed post-mining land use.
- land use.



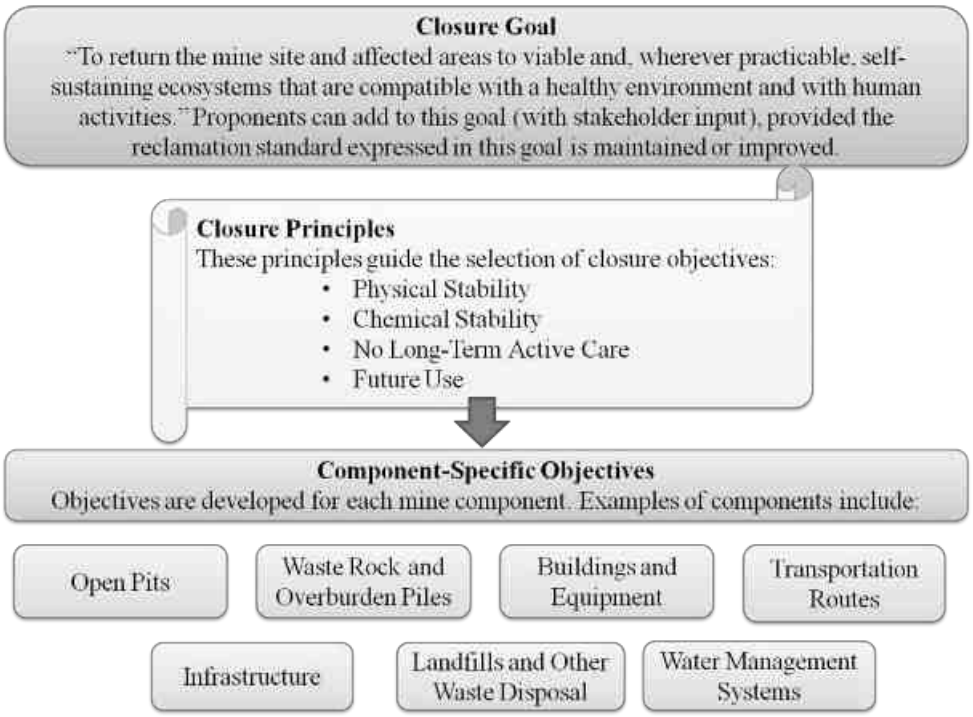
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Closure Objectives

- Access to be limited, for the safety of humans and wildlife.
- The open pit mine workings and pit boundary are physically and geo-technically stable.
- Water quality in flooded pits is safe for humans, aquatic life, and wildlife.
- Discharge of contaminated drainage has been minimized and controlled.
- Original or desired new surface drainage patterns have been established.
- For flooded pits, in-pit aquatic habitat has been established where practical and feasible.
- Emergency access and escape routes from flooded pits for humans and wildlife are in place.
- Dust levels are safe for people, vegetation, aquatic life, and wildlife.

Closure Planning & Options Considerations in Mine Design –

- The closure of mine is well planned at the initial stage of planning & design consideration by the internal and external stake holders
- Construction of 2m height bund all along the mine pit boundary and ensure its stability all time & construction of garland drain along the natural slope to avoid sliding and collection of soil to the pit & surface runoff during rainfall
- After complete exploitation of mineral, the lowest bench foot wall side will be maintained as plain surface without any sump pits to avoid any accidents
- All the sharp edges will be dressed to smoother face before the closure of mine and ensure no loose debris on hanging wall side
- There is a river on southern side of the project area. The river will not be hindered by any of mine closure activities
- The project proponent as a part of social responsibilities assures to supply the stored mine pit water to the nearby villages after effective treatment process as per the standards of TNPCB & TWAD
- Native species will be planted in 3 row patterns on the boundary barriers and 1st bench, a full-time sentry will be appointed at the gate to prevent inherent entry of public & cattle.
- The access road to the quarry will be cut-off immediately after the closure
- The layout design shall be prepared and get approved from Department of Geology and Mining.
- The proponent is instructed to construct as per the layout approved
- Physical and chemical stability of structures left in place at the site, the natural rehabilitation of a biologically diverse, stable environment, the ultimate land use is optimized and is compatible with the surrounding area and the requirements of the local community, and taking the needs of the local community into account and minimizing the socio-economic impact of closure
- There will be a positive change in the environmental and ecology due to the mine closure



Post-Closure Monitoring –

The purpose of post-closure monitoring with respect to open pit mine workings is to ensure the attainment of closure objectives.

- Monitor physical and geotechnical stability of remnant pit walls.
- Monitor the ground regime in pit walls to confirm achievement of design objectives.
- Monitor water level in pit to confirm closure objectives regarding fish, fish habitat, and wildlife safety are being achieved.
- Sample water quality and quantity at controlled pit discharge points.
- Identify and test unanticipated areas where water management is an issue.
- Inspect integrity of barriers such as berms & fences.
- Monitor wildlife interactions with barriers to determine effectiveness.
- Inspect aquatic habitat in flooded pits where applicable.
- Monitor dust levels.

TABLE 2.12: MINE CLOSURE BUDGET-P1

ACTIVITY		YEAR										RATE	COST (Rs.)
		I	II	III	IV	V	VI	VII	VIII	IX	X		
Plantation under safety zone	No. of sapling	90	90	90	90	90	80	80	80	80	80	Rs.200 Per sapling	1,70,000
	Cost	18000	18000	18000	18000	18000	16000	16000	16000	16000	16000		
Plantation in quarried out top benches and approach road		Approach Road		Quarried out top Benches									
	No. of sapling	250	250	50	50	50	50	50	50	50	50	Rs.200 Per sapling	1,80,000
	Cost	50000	50000	10000	10000	10000	10000	10000	10000	10000	10000		
Wire Fencing for 520 Mtrs length		156000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	1,56,000
Garland Drain with settling tanks for 470 Mtrs length		141000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	1,41,000
Total													6,47,000

TABLE 2.13: MINE CLOSURE BUDGET-P2

ACTIVITY		YEAR										RATE	COST (Rs.)
		I	II	III	IV	V	VI	VII	VIII	IX	X		
Plantation under safety zone	No. of sapling	100	100	100	100	100	80	80	80	80	80	Rs.200 Per sapling	1,80,000
	Cost	20000	20000	20000	20000	20000	16000	16000	16000	16000	16000		
Plantation in quarried out top benches and approach road		Approach Road		Quarried out top Benches									
	No. of sapling	250	250	50	50	50	50	50	50	50	50	Rs.200 Per sapling	1,80,000
	Cost	50000	50000	10000	10000	10000	10000	10000	10000	10000	10000		
Wire Fencing for 950 Mtrs length		285000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	2,85,000
Garland Drain with settling tanks for 900 Mtrs length		270000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	2,70,000
Total													9,15,000

Source: Proposed by FAE's and EC

TABLE 2.14: MINE CLOSURE BUDGET-P3

ACTIVITY		YEAR										RATE	COST (Rs.)
		I	II	III	IV	V	VI	VII	VIII	IX	X		
Plantation under safety zone	No. of sapling	150	150	150	150	150	150	150	150	150	150		3,00,000
	Cost	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000		
Plantation in quarried out top benches and approach road		Approach Road		Quarried out top Benches									
	No. of sapling	150	150	100	100	100	100	100	100	100	100	Rs.200 Per sapling Rs.200 Per sapling	2,20,000
	Cost	30000	30000	20000	20000	20000	20000	20000	20000	20000	20000		
Wire Fencing for 850 Mtrs length		255000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	2,55,000
Garland Drain with settling tanks for 800 Mtrs length		240000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	2,40,000
Total													10,15,000

2.5 Method of Mining

The method of mining is common for all the proposed projects – The method of mining is Opencast Mechanized Mining Method is being proposed by formation of 5.0-meter height bench with a bench width not less than the bench height. However, as far as the quarrying of Rough Stone is concerned, observance of the provisions of Regulation 106 (2) (b) as above is seldom possible due to various inherent petro genetic factors coupled with mining difficulties. Hence it is proposed to obtain relaxation to the provisions of the above regulation from the Director of Mines Safety for which necessary provision is available with the Regulation 106 (2) (b) of MMR-1961, under Mine Act – 1952.

The top layer of overburden (Gravel) will be Excavate directly by Hydraulic Excavators and loaded into tippers directly and sold to needy customers. The Rough Stone is a batholith formation and the splitting of rock mass of considerable volume from the parent rock mass will be carried out by deploying jackhammer drilling and Slurry Explosives will be used for blasting. Hydraulic Excavators attached with Rock Breakers unit will be deployed for breaking large boulders to required fragmented sizes to avoid secondary blasting and hydraulic excavators attached with bucket unit will be deployed for loading the Rough Stone into the tippers and then the stone is transported from pithead to the nearby crushers.

2.5.1 Drilling

Drilling will be carried out as per parameters given below: -

Spacing – 1.2m, Burden –1.0, Depth of hole - 1.5m

2.5.2 Blasting

Blasting will be done as per details below: -

- Controlled blasting parameter: -
  - Spacing – 1.2m
  - Burden – 1.0 m
  - Depth of hole – 1.5 m
  - Charge per hole – 0.5Kg
  - Powder factor – 6.0 tonnes/kg
  - Dia of hole – 32 mm
  - Details of blasting design and parameters are discussed in approved mining plan.

No of Holes to be drilled per day: -

P1 – M/s.V.K.P.Engineering Ind Pvt.Ltd - 1.64.38 Ha

Volume of Rough Stone will be excavated from one hole	=	3 Tonnes
Total Volume from three proposed quarries	=	**1,23,550** m^3
	=	**1,23,550/10**
	=	**12,355**/300
	=	41* 2.6
	=	106 Tonnes per day
Therefore, Number of Holes per day	=	106/3
	=	**35 Holes per day**

P2 – M/s.V.K.P.Engineering Ind Pvt.Ltd – 2.90.0 Ha

Volume of Rough Stone will be excavated from one hole	=	3 Tonnes
Total Volume from three proposed quarries	=	**1,50,770** m^3
	=	**1,50,770/10**
	=	**15,077**/300
	=	50* 2.6
	=	130 Tonnes per day
Therefore, Number of Holes per day	=	130/3
	=	**43 Holes per day**

P3 – M/s.V.K.P.Engineering Ind Pvt.Ltd – 4.51.0 Ha

Volume of Rough Stone will be excavated from one hole	=	3 Tonnes
Total Volume from three proposed quarries	=	**8,33,355** m^3
	=	**8,33,355/10**
	=	**83,335**/300
	=	277* 2.6
	=	720 Tonnes per day
Therefore, Number of Holes per day	=	720/3
	=	**240 Holes per day**

Type of Explosives to be used –

Slurry explosives (An explosive material containing substantial portions of a liquid, oxidizers, and fuel, plus a thickener), NONEL / Electronic Detonator & Detonating Fuse

2.5.3 Extent of Mechanization

TABLE 2.15 PROPOSED MACHINERY DEPLOYMENT P1-P3

PROPOSAL – P1				
S.NO.	**TYPE**	**NOS**	**SIZE/CAPACITY**	**MOTIVE POWER**
1	Jack hammers	4	1.2m to 2.0m	Compressed air
2	Compressor	1	400psi	Diesel Drive
3	Excavator with Bucket / Rock Breaker	2	300 HP	Diesel Drive
4	Tippers	4	20 Tonnes	Diesel Drive
5	Water Sprinkling Tanker	1	6,000 Litres	Diesel Drive
PROPOSAL – P2				
S.NO.	**TYPE**	**NOS**	**SIZE/CAPACITY**	**MOTIVE POWER**
1	Jack hammers	4	1.2m to 2.0m	Compressed air
2	Compressor	1	400psi	Diesel Drive
3	Wagon Drill Machine	1	3m to 9m	Diesel Drive
4	Excavator with Bucket / Rock Breaker	5	300 HP	Diesel Drive
5	Tippers	10	20 Tonnes	Diesel Drive
6	Waer Sprinkling Tanker	1	10,000 Litres	Diesel Drive
PROPOSAL – P3				
S.NO.	**TYPE**	**NOS**	**SIZE/CAPACITY**	**MOTIVE POWER**
1	Crawler mounted drill Machine	2	3m to 9m	Diesel Drive
2	Jack hammers	3	1.2m to 2.0m	Compressed air
3	Compressor	1	400psi	Diesel Drive
4	Excavator with Bucket / Rock Breaker	1	300 HP	Diesel Drive
5	Tippers	2	20 Tonnes	Diesel Drive
6	Water Sprinkling Tanker	1	10,000 litres	Diesel Drive

Source: Approved Mining Plan of the respective projects.

2.6 General Features

2.6.1 Existing Infrastructures

Infrastructures like Mine office, Temporary Rest shelters for workers, Latrine and Urinal Facilities are available in the Existing quarries and the same infrastructure as per the Mine Rule will be arranged after the grant of quarry lease in the proposed quarries.

2.6.1 Drainage Pattern

The general drainage pattern of the area is dendritic. There are no streams, canals or water bodies crossing within the project area, hence there is no requirement of stream or canals diversion in the near future.

2.6.2 Traffic Density

Traffic density measurements were performed as per IRC 1960 Guidelines at three locations based on the transportation route. Traffic density measurement were made continuously for 24 hours by visual observation and counting of vehicles under three categories, viz., heavy motor vehicles, light motor vehicles and two/three wheelers. As traffic densities on the roads are high, two skilled persons were deployed simultaneously at each station during each shift- one person on either direction for counting the traffic. At the end of each hour, fresh counting and recording was undertaken.

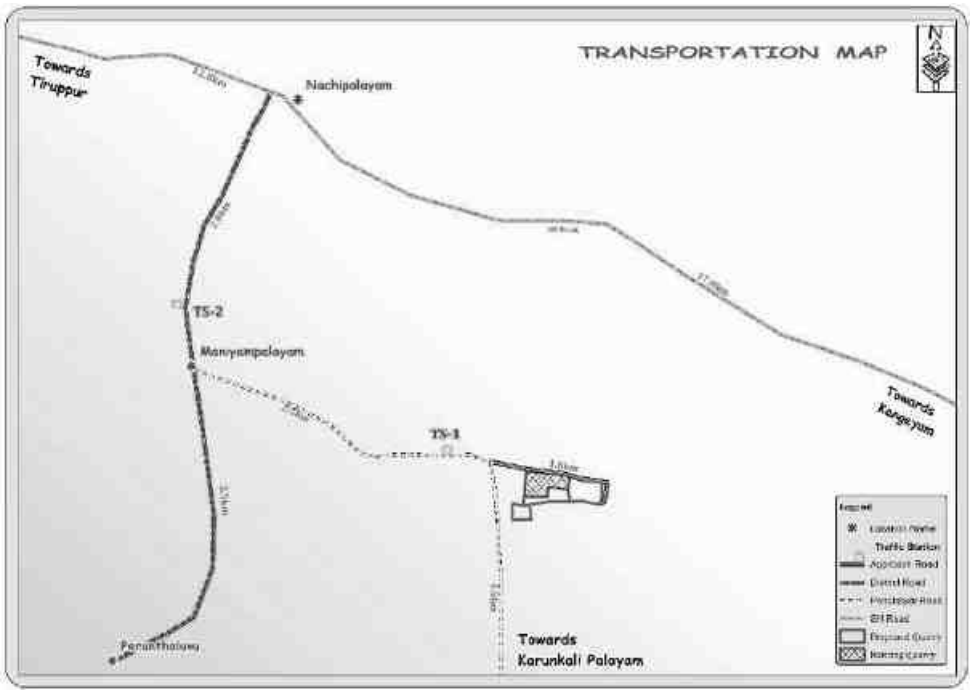
TABLE 2.16 – TRAFFIC SURVEY LOCATION'S

Station code	Station location	Distance and Direction	Type of Road
TS1	Maniyampalayam-Karunkalli Palayam Panchayat Road	850m NW	Panchayat Road

TS2	Peruntholvu District Road	3km NW	District Road

Source: On-site monitoring by GEMS FAE & TM

FIGURE 2.24: TRAFFIC SURVEY LOCATIONS & TRANSPORTATION ROUTE MAP



(Source: Survey of India Toposheet)

TABLE 2.17 – EXISTING TRAFFIC VOLUME

Station code	HMV (Hourly Average)		LMV hourly average		2/3 Hourly average		Total PCU per hour
	No	PCU	No	PCU	No	PCU	
TS1	55	165	50	50	75	75	290
TS2	150	300	100	100	150	75	475

Source: On-site monitoring by GEMS FAE & TM

- PCU conversion factor for HMV (Trucks and Bus) = 3, LMV (Car, Jeep and Auto) = 1 and 0.5 for Motor Vehicles (2/3 Wheelers)

TABLE 2.18 – ANTICIPATED TRAFFIC DUE TO THIS PROPOSED PROJECT

Transportation of Rough stone per day		
Capacity of trucks	Cumulative Trips	Volume in PCU
10/20 tonnes	30	90

Source: Anticipated based on Approved Mining Plan Production

TABLE 2.19 – SUMMARY OF TRAFFIC VOLUME

Route	Existing traffic value in PCU	Incremental traffic from the quarry in PCU	Total traffic volume	Hourly Capacity in PCU as per IRC guidelines
TS1	290	90	380	1200
TS2	475	90	565	1500

Source: On-site monitoring analysis summary by GEMS FAE & TM

As per the IRC 1960 this existing road can handle 1,200 PCU in hour and Major district road can handle 1500 PCU in hour hence there will not be any conjunction due to this transportation.

2.6.3 Mineral Beneficiation and Processing

There is no proposal for the mineral processing or ore beneficiation in this project

2.6.4 Existing Infrastructure

It is a Existing quarry, no infrastructural facility available within the project area. The infrastructural facilities to be made after the start of the quarrying operations will be prepared outside limit as per the rules and safe distance to be adopted.

2.6.2 Drainage Pattern

The drainage pattern of the area is dendritic – sub dendritic.

2.7 Project Requirement

2.7.1 Water Source & Requirement

Detail of Total water requirements in KLD as given below:

TABLE 2.20 – WATER REQUIREMENT FOR THE CLUSTER PROJECT -P1-P2-P3

PROPOSAL – P1		
***Purpose**	**Quantity**	**Source**
Dust Suppression	0.6KLD	From Nearby Existing bore well
Green Belt	1.0 KLD	From Nearby Existing bore well
Domestic & Drinking purpose	0.4 KLD	Approved water vendors
Total	**2.2 KLD**	
PROPOSAL – P2		
***Purpose**	**Quantity**	**Source**
Dust Suppression	1.5 KLD	From Nearby Existing bore well
Green Belt	1.0 KLD	From Nearby Existing bore well
Domestic & Drinking purpose	0.5 KLD	Approved water vendors
Total	**3.0 KLD**	
PROPOSAL – P3		
***Purpose**	**Quantity**	**Source**
Dust Suppression	0.7KLD	From Nearby Existing bore well
Green Belt	1.0KLD	From Nearby Existing bore well
Sanitation & Drinking	0.7KLD	Approved water vendors
Total	**2.4 KLD**	

Source: Prefeasibility Report

About 50% water will be required for the suspension of the dust, Water shall be obtained from accumulated rainwater/seepage water in quarry pits. Packaged Drinking Water is available from the nearby approved water vendors.

2.7.2 Power and Other Infrastructure Requirement

The project's does not require power supply for the quarry operation. The quarrying activity is proposed during day time only (General Shift 8 AM – 5 PM, Lunch Break 1 PM – 2 PM). Electricity for use in office and other internal infrastructure will be obtained from TNEB. For the quarrying operation like compressor for drilling Diesel will be utilized.

The temporary infrastructures such as Mine Office, First Aid Room, Rest Shelter etc., will be constructed within the project area before commencing the quarry operation. No workshops are proposed inside the project area hence there will not be any process effluent generation from the project area. Domestic effluent from the mine office will be discharged to septic tank and soak pit. There is no toxic effluent expected to generate in the form of solid, liquid or gaseous form hence there is no requirement of waste treatment.

2.7.3 Fuel Requirement

High speed Diesel (HSD) will be used for mining machineries. Diesel will be brought from nearby Fuel Stations.

For Rough stone and gravel: P1

Per hour Excavator will consume = 16 liters / hour

Per hour Excavator will excavate = 20$m^3$of Rough stone

Rough stone = 1,23,550/20 = 6177.5 hours

Diesel consume = 6177 hours' x 16 liters

Total diesel consumption = **98,832** Liters of HSD will be utilized for rough stone

Total diesel consumption is around **98,832 Liters** of HSD for the entire period of life.

Weathered Rock: P1

Per hour Excavator will consume = 10liters / hour

Per hour Excavator will excavate = 60m^3 of Gravel

Gravel quantity = 99,800/60 = 1663hours

Diesel consume = 1663hours x 10liters

Total diesel consumption = 16,630 Liters of HSD will be utilized for Gravel

Gravel: P1

Per hour Excavator will consume = 10liters / hour

Per hour Excavator will excavate = 60m^3 of Gravel

Gravel quantity = 23,868/60 = 397hours

Diesel consume = 397hours x 10liters

Total diesel consumption = 3,970 Liters of HSD will be utilized for Gravel

For Rough stone and gravel: P2

Per hour Excavator will consume = 16 liters / hour

Per hour Excavator will excavate = 20$m^3$of Rough stone

Rough stone = 1,50,770/20 = 7,538 hours

Diesel consume = 7,538 hours x 16 liters

Total diesel consumption = **1,20,616** Liters of HSD will be utilized for rough stone

Total diesel consumption is around **1,20,616 Liters** of HSD for the entire period of life.

Weathered Rock: P2

Per hour Excavator will consume = 10liters / hour

Per hour Excavator will excavate = 60m^3 of Gravel

Gravel quantity = 1,73,090/60 = 2,884hours

Diesel consume = 2884hours x 10liters

Total diesel consumption = 28,840 Liters of HSD will be utilized for Gravel

Gravel: P2

Per hour Excavator will consume = 10liters / hour

Per hour Excavator will excavate = 60m^3 of Gravel

Gravel quantity = 42,192/60 = 703 hours

Diesel consume = 703hours x 10liters

Total diesel consumption = 7030Liters of HSD will be utilized for Gravel

For Rough stone and gravel: P3

Per hour Excavator will consume = 16 liters / hour

Per hour Excavator will excavate = 20$m^3$of Rough stone

Rough stone = 8,33,355/20 = 41,667 hours

Diesel consume = 41,667 hours' x 16 liters

Total diesel consumption = **6,66,684** Liters of HSD will be utilized for rough stone

Total diesel consumption is around **6,66,684 Liters** of HSD for the entire period of life.

Weathered Rock: P3

Per hour Excavator will consume = 10liters / hour

Per hour Excavator will excavate = 60m^3 of Gravel

Gravel quantity = 3,05,978/60 = 5,099 hours

Diesel consume = 5,099 hours x 10liters

Total diesel consumption = 50,990 Liters of HSD will be utilized for Grave

Gravel: P3

Per hour Excavator will consume = 10liters / hour

Per hour Excavator will excavate = 60m^3 of Gravel

Gravel quantity = 75,408/60 = 1,256 hours

Diesel consume = 1,256 hours' x 10liters

Total diesel consumption = 12,568 Liters of HSD will be utilized for Gravel

2.7.4 Employment Requirement:

The skilled, competent qualified statutory persons will be engaged for quarrying operation, preference will be given to the local community.

TABLE 2.21: EMPLOYMENT POTENTIAL FOR PROPOSED QUARRIES -P1-P2-P3

Identification code	Employment in Nos
P1	31
P2	45
P3	38
Total	**114**

A total of 114 people will get employment due to these 3quarries in the cluster quarries.

2.7.5 Project Cost

TABLE 2.22 – PROJECT COST OF PROPOSED PROJECTS P1-P2-P3

Identification code	Project Cost
P1	Rs. 1,21,77,000/-
P2	Rs. 1,60,85,000/-
P3	Rs. 5,87,84,000/-
Total	**Rs. 8,70,46,000/-**

Source: Approved Mining Plan &Prefeasibility Report of the respective projects

2.8 Project Implementation Schedule

The commercial operation will commence after the grant of Environmental Clearance. CTO will be obtained from the Tamil Nadu State Pollution Control Board. The conditions imposed during the Environmental Clearance will be compiled before the start of mining operation.

TABLE 2.23 – EXPECTED TIME SCHEDULE FOR THE PROPOSED QUARRIES

S. No	Particulars lease execution	Time schedule (in month)					Remarks if any
		1st	2nd	3rd	4th	5th	
1	Environmental Clearance						
2	Consent to operate						Production start period

Source: Anticipated based on Timelines framed in EIA Notification & CPCB Guidelines

CHAPTER – 3: DESCRIPTION OF ENVIRONMENT

3.0 General

This chapter presents a regional background to the baseline data at the very onset, which will help in better appreciation of micro-level field data, generated on several environmental and ecological attributes of the study area. The baseline status of the project environment is described section wise for better understanding of the broad-spectrum conditions. The baseline environment quality represents the background environmental scenario of various environmental components such as Land, Water, Air, Noise, Biological and Socio-economic status of the study area. Field monitoring studies to evaluate the base line status of the project site were carried out covering March 2025 – May 2025 with CPCB guidelines. Environmental data has been collected with reference to cluster quarries by Global Lab and Consultancy Services, approved by NABL Accredited Testing Laboratory ISO/IEC 17025:2017 for the below attributes-

- Land
- Water
- Air
- Noise
- Biological
- Socio-economic status

Study Area

An area of 10 km radius (aerial distance) from the periphery of the cluster is considered for EIA study. The data collection has been used to understand the existing environment scenario around the cluster quarries against which the potential impacts of the project can be assessed. The study area has been divided into two zones viz **core zone** and **buffer zone** where core zone is considered as cluster and buffer zone taken as 10km radius from the periphery of the Cluster. Both Core zone and Buffer zone is taken as the study area.

Study Period

The baseline study was conducted during the **Pre-Monsoon** season i.e., **Mar – May 2025**

Study Methodology

Baseline data was generated for various environmental parameters including Land, Soil, Water (surface and groundwater), Air, Noise, Ecology & Biodiversity and Socio-economic status to determine the quality of the prevailing environmental settings. A MoEF accredited Laboratory was used for generating the baseline data.

1. The project area (Core zone) was surveyed in detail with the help of Total Station survey instrument and the boundary pillars were picked up with the help of handheld GPS. The boundary coordinates were superimposed on the satellite imagery to understand the relief of the area, besides Land use pattern of the area was studied through the Bhuvan (ISRO).
2. Soil samples were collected and analysed for relevant physico-chemical characteristics, exchangeable cations, nutrients & micro nutrients etc., in order to assess the impact of mining activities and proposed greenbelt development.
3. Ground water samples were collected during the study period from the open wells and bore wells, while surface water was collected from river and lake in the buffer zone. The samples were analysed for parameters necessary to determine water quality (based on IS: 10500:2012 criteria) and those which are relevant from the point of view of environmental impact of the proposed quarries.
4. A meteorological station was setup in Vadapudur village. Wind speed, Wind direction, Dry and wet bulb temperature, Relative humidity, Rainfall with cloud cover and general weather conditions were recorded throughout the study period.

5. In order to assess the Ambient Air Quality (AAQ), samples of Ambient Air were collected by installation of Respiratory Dust Samplers (RDS) for Fugitive dust, PM_{10} and SO_2, NO_X with gaseous attachments & Fine Dust Samplers (FDS) for $PM_{2.5}$ and other parameters as per NAAQ norms and analysed for primary air pollutants to work out the existing status of air quality
6. The noise level measurements were also made at various locations in different intervals of time with the help of sound level meter to establish the baseline noise levels in the impact zone
7. Baseline biological studies were carried out to assess the ecology of the study area to study the existing flora and fauna pattern of the area
8. Socio-Economic survey was conducted at village and household level in the study area to understand the present socio-economic conditions and assess the extent of impact due to the proposed mining project

The sampling methodologies for the various environmental parameters required for the study, frequency of sampling, method of samples analysis, etc., are given below Table 3.1.

TABLE 3.1 – ENVIRONMENTAL MONITORING ATTRIBUTES AND FREQUENCY OF MONITORING

Attribute	Parameters	Frequency of Monitoring	No. of Locations	Protocol
Land-use Land cover	Land-use Pattern within 10 km radius of the study area	Data's from census handbook 2011 and from the satellite imagery	Study Area	Satellite Imagery Primary Survey
*Soil	Physio-Chemical Characteristics	Once during the study period	6 (2 core & 4 buffer zone)	IS 2720 Agriculture Handbook - Indian Council of Agriculture Research, New Delhi
*Water Quality	Physical, Chemical and Bacteriological Parameters	Once during the study period	6 (2 surface water & 4 ground water)	IS 10500& CPCB Standards
Meteorology	Wind Speed Wind Direction Temperature Cloud cover Dry bulb temperature Rainfall	1 Hourly Continuous Mechanical/Automatic Weather Station	1	Site specific primary data& Secondary Data from IMD Station
*Ambient Air Quality	PM_{10} $PM_{2.5}$ SO_2 NO_X Fugitive Dust	24 hourly twice a week (Mar – May 2025)	7 (2 core & 5buffer)	IS 5182 Part 1-23 National Ambient Air Quality Standards, CPCB
*Noise Levels	Ambient Noise	Hourly observation for 24 Hours per location	7 (2 core & 5 buffer zone)	IS 9989 As per CPCB Guidelines
Ecology	Existing Flora and Fauna	Through field visit during the study period	Study Area	Primary Survey by Quadrate & Transect Study Secondary Data – Forest Working Plan
Socio Economic Aspects	Socio–Economic Characteristics, Population Statistics and Existing Infrastructure in the study area	Site Visit & Census Handbook, 2011	Study Area	Primary Survey, census handbook & need based assessments.

Source: On-site monitoring/sampling by Global Lab and Consultancy Services in association with GEMS

* All monitoring and testing are been carried out as per the Guidelines of CPCB and MoEF & CC.

3.1 LAND ENVIRONMENT

The main objective of this section is to provide a baseline status of the study area covering 10km radius around the proposed mine site so that temporal changes due to the mining activities on the surroundings can be assessed in future.

3.1.1 LAND USE/ LAND COVER

To study the land use pattern of the core as well as a buffer zone, land use/land cover details have been identified/ maps have been prepared in accordance with the **Standard ToR point no. 4 & 10 Stating**:

Point No. 4 All comer 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 ofthe study area (core and buffer zone).

Point No. 10. Lard 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.

Current vintage data of Indian Remote Sensing Satellite Resourcesat1 LIII (False Color Composite) has been used for Land Use / Land Cover study. Satellite image has been procured from National Remote Sensing Centre, Hyderabad.

3.1.2 OBJECTIVE

The objectives of the LULC study are as follow:

- To develop the Land use & Land cover map using land coordinates of the quarry area (Core Zone) and 10 km radius from the quarry site (Buffer area).
- To Identify and mark the important Land use and Land cover features using the primary and secondary data collected.
- To evaluate the impacts on existing land use/cover features of the buffer area by the Proposed Project activities.
- To identify the mitigative measures for the sustainable use of land and to protect the buffer zone from the adverse impacts.

Technical specification of Satellite imagery Data Used:

Current vintage data of Indian Remote Sensing Satellite RESOURCESAT1 (LISS-III) digital FCC (False Color Composite) has been used for preparation of Land use/ Land cover thematic map of study area. Satellite image has been procured from National Remote Sensing Centre, Hyderabad. Survey of India Toposheet as a reference map on 1:50,000 scale has been used for preparation of base layer data like road, rail network; village for geo-referencing of satellite image.

- Satellite Image - Resourcesat1-LISSIII, 23.5m Resolution
- Satellite Data Source - NRSC, Hyderabad
- Satellite Vintage - 14st July 2020, Swath 141km wide.
- SOI Toposheet No - 58 -E/08
- Software Used - ArcGIS 10.8

The satellite image (FCC color 3,2,1) of the buffer zone is given in 3.1

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. Resourcesat1-LISSIII, 23m Resolution of 23.5m and a 141 km wide swath of the earth in 23.5m resolution covering wide areas the data is collected in 4 visible bands namely band number and Resolution.

TABLE 3.2: Resourcesat1-LISSIII SENSOR characteristics

Band Number	Description	Wavelength	Resolution
Band 1	Green	0.52-0.59 µm	23.5 meters
Band 2	Red	0.62-0.68 µm	23.5meters
Band 3	NIR	0.77-0.86 µm	23.5meters
Band 4	SWIR	1.55-1.70 µm	70meters

Source: NRSC, Hyderabad

3.1.3 METHODOLOGY

The land use / land cover map is prepared by adopting the interpretation techniques of the Satellite image in combination with collateral data such as Survey of India topographical maps. Image classification is done by using visual interpretation techniques and digital classification using any of the image processing software. The various activities for preparation of LULC include preprocessing, rectification, image enhancements and classifying the satellite data for assessing the change in land use land cover due to proposed developmental activities.

- Preliminary/primary data collection of the study area
- Satellite data procurement from NRSC
- Secondary data collection from authorized bodies
- Survey of India Toposheet (SOI)
- Mine Layout
- Cadastral / Khasra map
- GPS Coordinates of Lease Boundary
- Processing of satellite data using ArcGIS 10.8 and preparing the Land Use & Land cover maps (e.g. Plant/Mine area, Existing Quarry, Settlements, Agriculture land, Non agriculture land, water bodies, etc.) by Digital Image Processing (DIP) technique.
- Geo-Referencing of the Survey of India Toposheet
- Geo-Referencing of satellite Imagery with the help of Geo-Referenced Toposheets
- Enhancement of the Satellite Imagery
- Base Map layer creation (Roads, Railway, Village Names, and other Secondary data, etc.)
- Data analysis and Classification using Digital interpretation techniques.
- Ground truth studies or field Verification.
- Error fixing / Reclassification
- Final Map Generation.

The land use/Land cover Map of the buffer zone is given in 3.3. Land Use Pattern of the Buffer Zone (Study area) Details of the same are given in Table - 3.3 and the map is shown in Figure - 3.3.

TABLE: 3.3 LAND USE / LAND COVER DETAILS OF STUDY AREA

S.No	CLASSIFICATION	AREA_HA	AREA_%
	BUILTUP		
1	Builtup Urban	852.27	2.56
2	Builtup Rural	1180.08	3.54
3	Builtup Mining	187.39	0.56
	AGRICULTURAL LAND		
4	Crop Land	21027.49	63.04
5	Follow Land	6972.80	20.90
6	Plantation	1840.19	5.52
	BARREN/WASTE LANDS		
7	Scrub Land	647.90	1.94
	WETLANDS/ WATER BODIES		
8	Waterbodies	648.54	1.94
TOTAL		33356.66	100.00

Source: Bhuvan, NRSC.

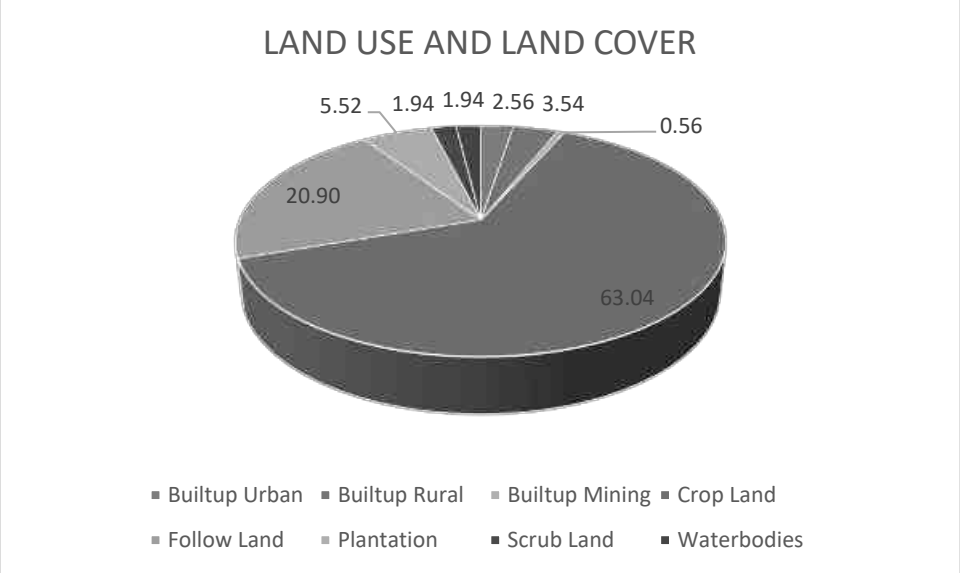


FIGURE 3.1: CHART SHOWING LANDUSE/LANDCOVER ANALYSIS USING LISS III Data

FIGURE 3.2: MAP SHOWING FALSE COLOR COMPOSITE (3,2,1) SATELLITE IMAGERY OF THE STUDY AREA

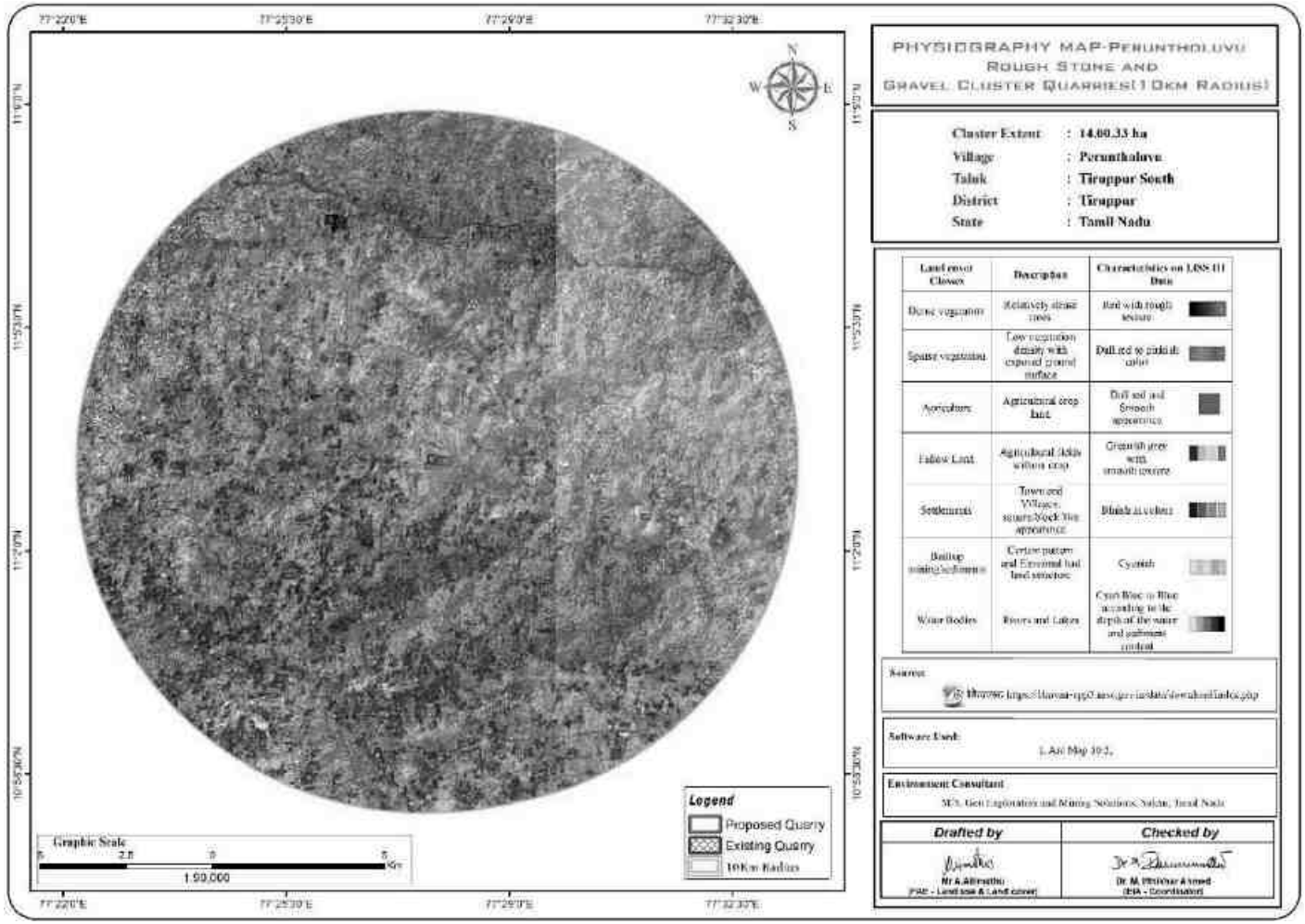
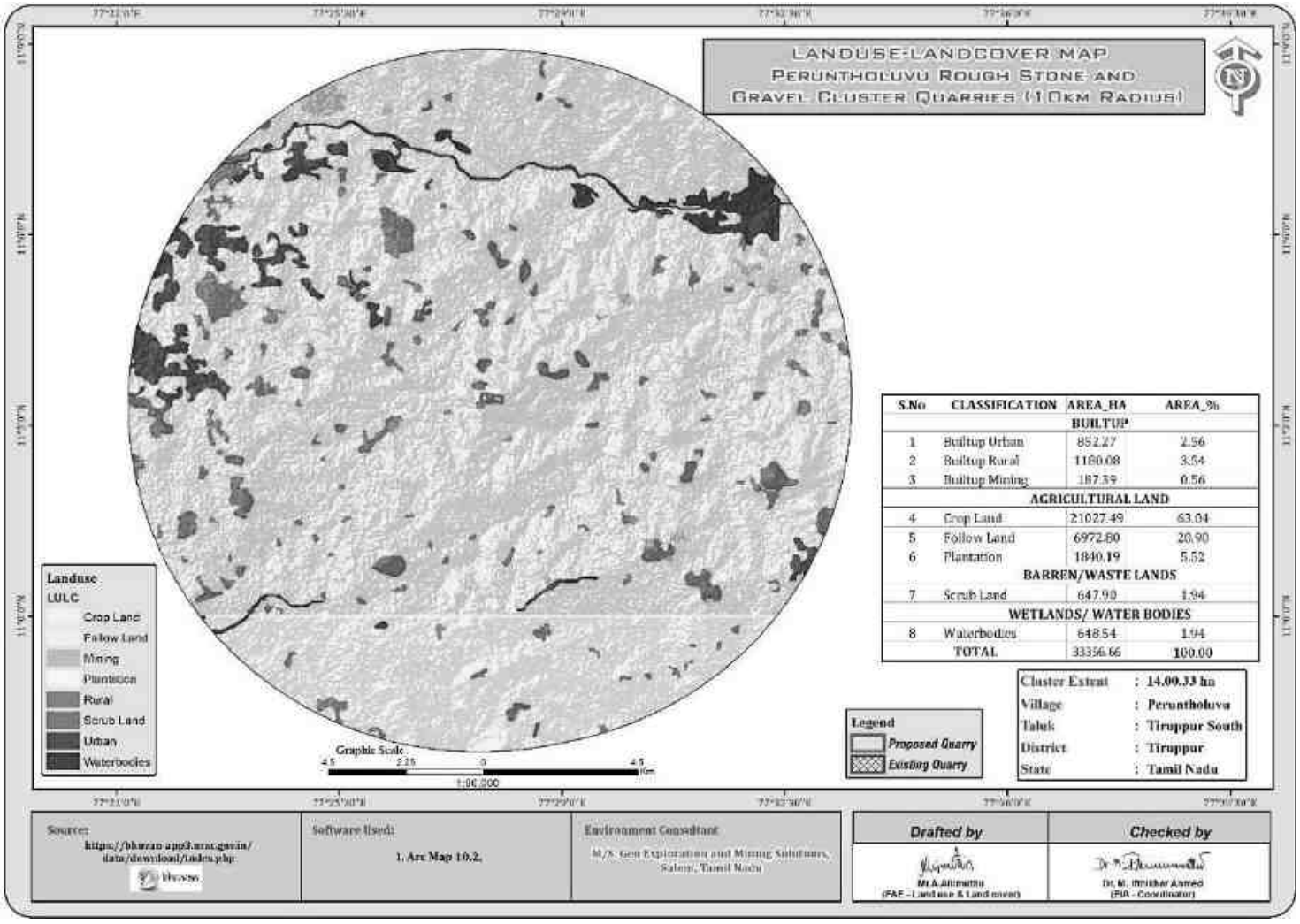


FIGURE 3.3: LAND USE LAND COVER MAP 10KM RADIUS



S.No	CLASSIFICATION	AREA_HA	AREA_%
	BUILTUP		
1	Builtup Urban	852.27	2.56
2	Builtup Rural	1180.08	3.54
3	Builtup Mining	187.39	0.56
	AGRICULTURAL LAND		
4	Crop Land	21027.49	63.04
5	Follow Land	6972.80	20.90
6	Plantation	1840.19	5.52
	BARREN/WASTE LANDS		
7	Scrub Land	647.90	1.94
	WETLANDS/ WATER BODIES		
8	Waterbodies	648.54	1.94
	TOTAL	33356.66	100.00

3.1.4 Interpretation

- The 10 km radius study area mainly comprises of Crop land & Agriculture Plantation land accounting of 55% & 6.18% of the total study area. The study area also consists of fallow land of 18.04%.
- The buffer zone studied has no ecological sensitive area (National Park, Wildlife Sanctuary, Biosphere Reserve/ etc.).
- Water Bodies such as Odai, ponds/ lakes comprise of 1.52% of the total buffer area. There are some River found in the study area like Noyyal River (5.8km-NW), of the total study area.
- The Scrub land accounts of 3.09%. As per the primary survey, it was observed the scrub land is mainly occupied by the stony waste and left-over domestic waste generated by the nearby areas.
- 1.57% of the total study area is occupied by the mine industries. The area occupied by Mainly Roughstone and gravel of the total buffer area. As also observed within the primary survey, the 10 km buffer area is also occupied by the medium scaled roughstone industries located in the study area.
- 14.61% of the area is covered under the Builtup Land including rural area. The project site falls under the Roughstone and gravel region. Therefore, the area is appropriate for developing Road development and building etc., it shows that the region has good prospects in the future. Due to proposed Roughstone and gravel quarry in this region, economic condition of locals is expected to be improved directly & indirectly. Hence project will prove to be the best economic proposal for the coming times.

3.1.5 Topography

The project area is almost plain terrain with gentle gradient towards Southeast – Southwestern side, maximum elevation of the area is 391-402 m above Mean Sea Level There are no hilly regions in and around the area.

3.1.6 Drainage Pattern of the Area

There are no developed surface drainage channels in the study area. Noyyal, a non-perennial pass 480m-South from the project site. The area is studded with few tanks that serve as the source of drinking water and also their surplus feeds adjoining tanks. The area is mostly dry in all seasons except rainy seasons.

The general drainage pattern of the area is of sub dendritic and dendritic pattern. No prominent water course or nallah is inferred. During rainy season the surface runoff flows in W to E direction. The drainage pattern of the study area is given in Fig. 3.5. The quarrying activity will not hinder the natural flow of rainwater.

3.1.7 Environmental Features in the Study Area

There is no Wildlife Sanctuaries, National Park and Archaeological monuments within the study area. No Protected and Reserved Forest area is involved in the project area. Therefore, there will be no need to acquisition/diversion of forest land. The details related to the environment sensitivity around the mine lease area i.e. 10 km radius of the mine lease area, are given in the below Table 3.3.

3.1.8 Seismic Sensitivity

The proposed project site falls in the seismic Zone II, low damage risk zone as per BMTPC, Vulnerability Atlas of Seismic zone of India IS: 1893 – 2002. The project area falls in the hard rock terrain on the peninsular shield of south India which is highly stable.

TABLE 3.3 – DETAILS OF ENVIRONMENT SENSITIVITY AROUND THE PROJECT AREA

Sl. No	Sensitive Ecological Features	Name	Arial Distance in km from Mine Lease Boundary
1	National Park / Wild life Sanctuaries	None	Nanjarayan Bird Sanctuary – 11.0km – North West Vellode Bird Sanctuary – 29.0km – North East
2	Reserve Forest	None	Vellikaradu RF – 12.6km – North East
3	Tiger Reserve/ Elephant Reserve/ Biosphere Reserve	None	Nil within 10Km Radius

4	Critically Polluted Areas	None	Nil within 10Km Radius
5	Mangroves	None	Nil within 10Km Radius
6	Mountains/Hills	None	Nil within 10Km Radius
7	Notified Archaeological Sites	None	Noyyal River –6.5km – North Kodumanal Archeological Excavation Site – 9.0km – North East Orathuppalayam Dam – 10.2km – North East
8	Defence Installation	None	Nil within 10Km Radius

Source: Survey of India Toposheet, Village Cadastral Map& Google Earth/Maps

TABLE 3.4 – WATER BODIES WITHIN THE CLUSTER FROM PROPOSED QUARRIES

P1

S.No	NAME	DISTANCE & DIRECTION
1	Odai	600m East
	Odai	1km SW
2	Odai	3km East
3	Samalapuram Lake	5.4km North
4	Noyyal River	5.8km NW
5	Sendevipalayam Check Dam	5.8km NW
6	Odai	600m East

P2

S.No	NAME	DISTANCE & DIRECTION
1	Odai	350m East
	Odai	1.3km SW
2	Odai	2.7km East
3	Samalapuram Lake	5.5km North
4	Noyyal River	6.0km NW
5	Sendevipalayam Check Dam	6.2km NW
6	Odai	350m East

Source: Village Cadastral Map and Field Survey and Toposheet

P3

S.No	NAME	DISTANCE & DIRECTION
1	Odai	700m East
	Odai	920m SW
2	Odai	3.1km East
3	Samalapuram Lake	5.6km North
4	Noyyal River	6km NW

5	Sendevipalayam Check Dam	6km NW
6	Odai	700m East

Source: Village Cadastral Map and Field

3.1.9 Soil Environment

Soil quality of the study area is one of the important components of the land environment. The composite soil samples were collected from the study area and analysed for different parameters. The locations of the monitoring sites are detailed in Table 3.4 and Figure 3.3.

TABLE 3.5 – SOIL SAMPLING LOCATIONS

S. No	Location Code	Monitoring Locations	Distance & Direction	Coordinates
1	S-1	Core Zone	Project Area	11° 3'18.09"N 77°27'44.46"E
2	S-2	Core Zone	Project Area	11° 3'26.93"N 77°28'0.29"E
3	S-3	Perumtholuvu	3km SW	11° 2'48.73"N 77°26'4.58"E
4	S-4	Saavadipalayam	6.3km NE	11° 5'18.44"N 77°31'1.74"E
5	S-5	Sanarpatti	4.3km SE	11° 1'20.63"N 77°29'16.53"E
6	S-6	Mudalipalayam	5.2km NW	11° 6'0.42"N 77°26'23.57"E

Source: On-site monitoring/sampling by Global Lab and Consultancy Services in association with GEMS

The objective of the soil sampling is -

1. To determine the baseline soil characteristics of the study area;
2. To determine the impact of proposed activity on soil characteristics and;

To determine the impact on soil more importantly agriculture production point of view.

Methodology –

For studying soil quality, sampling locations were selected to assess the existing soil conditions in and around the proposed quarry site representing various land use conditions. The samples were collected by auger boring into the soil up to 90-cm depth. Six (6) locations were selected for soil sampling on the basis of soil types, vegetative cover, industrial & residential activities including infrastructure facilities, which would accord an overall idea of the soil characteristics. The samples were analysed for physical and chemical characteristics. The sealed samples were sent to laboratory for analysis. The samples were filled in Polythene bags, coded and sent to laboratory for analysis and the details of methodology in respect are given in below Table 3.5.

TABLE 3.6 – METHODOLOGY OF SAMPLING COLLECTION

Particulars	Details
Frequency	One grab sample from each station-once during the study period
Methodology	Composite grab samples of the topsoil were collected from 3 depths, and mixed to provide a representative sample for analysis. They were stored in airtight Polythene bags and analysed at the laboratory.

Source: On-site monitoring/sampling by Global Lab and Consultancy Services

Soil Testing Result –

The samples were analysed as per the standard methods prescribed in "Soil Chemical Analysis (M.L. Jackson, 1967) & Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India". The important properties analysed for soil are bulk density, porosity, infiltration rate, pH and Organic matter, kjeldahi Nitrogen, Phosphorous and Potassium. The standard classification of soil and physico-chemical characteristics of the soils are presented below in Table 3.6 & Test Results in Table 3.7.

FIGURE 3.4: SOIL SAMPLING LOCATIONS AROUND 10 KM RADIUS

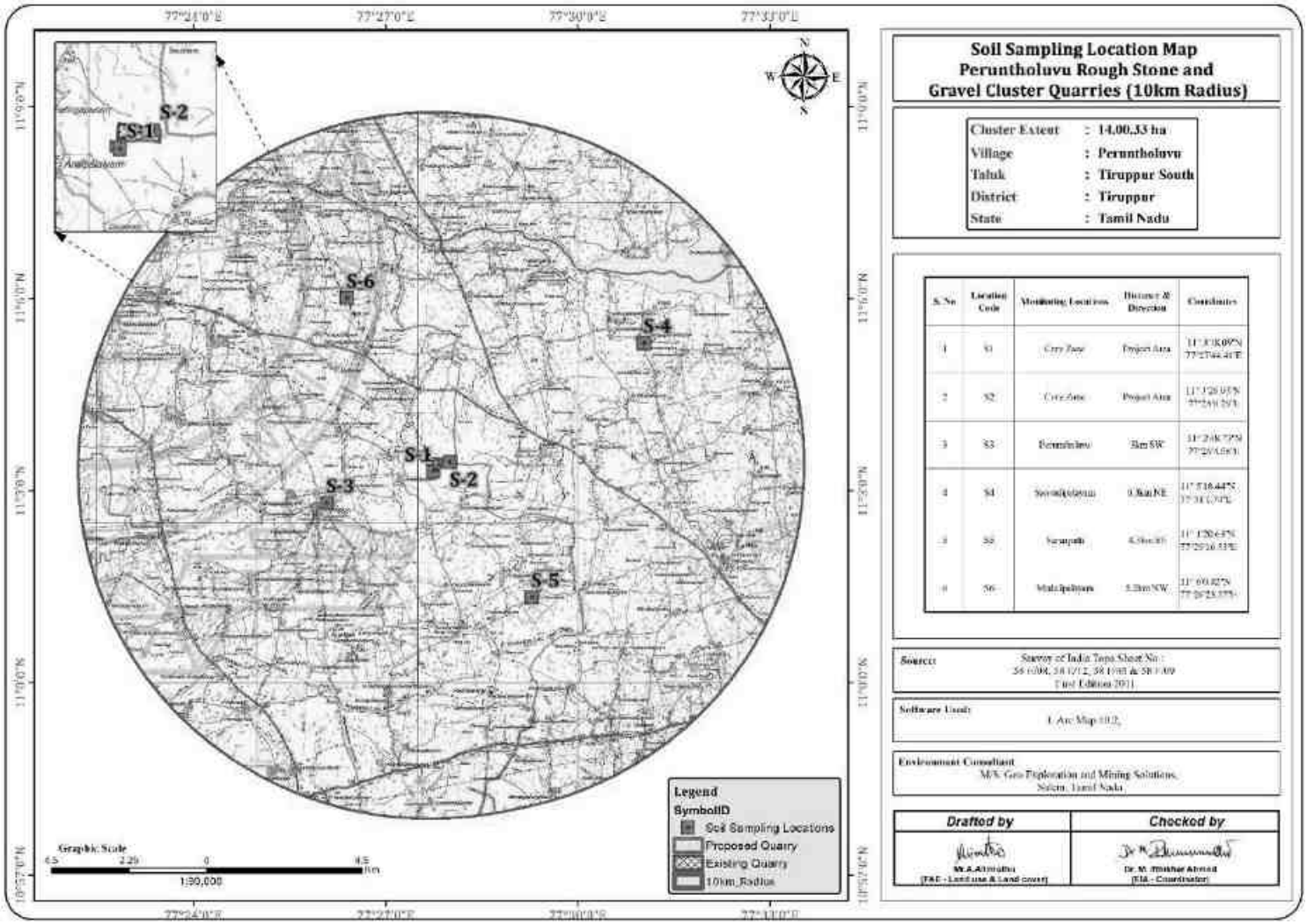


FIGURE 3.5: SOIL MAP

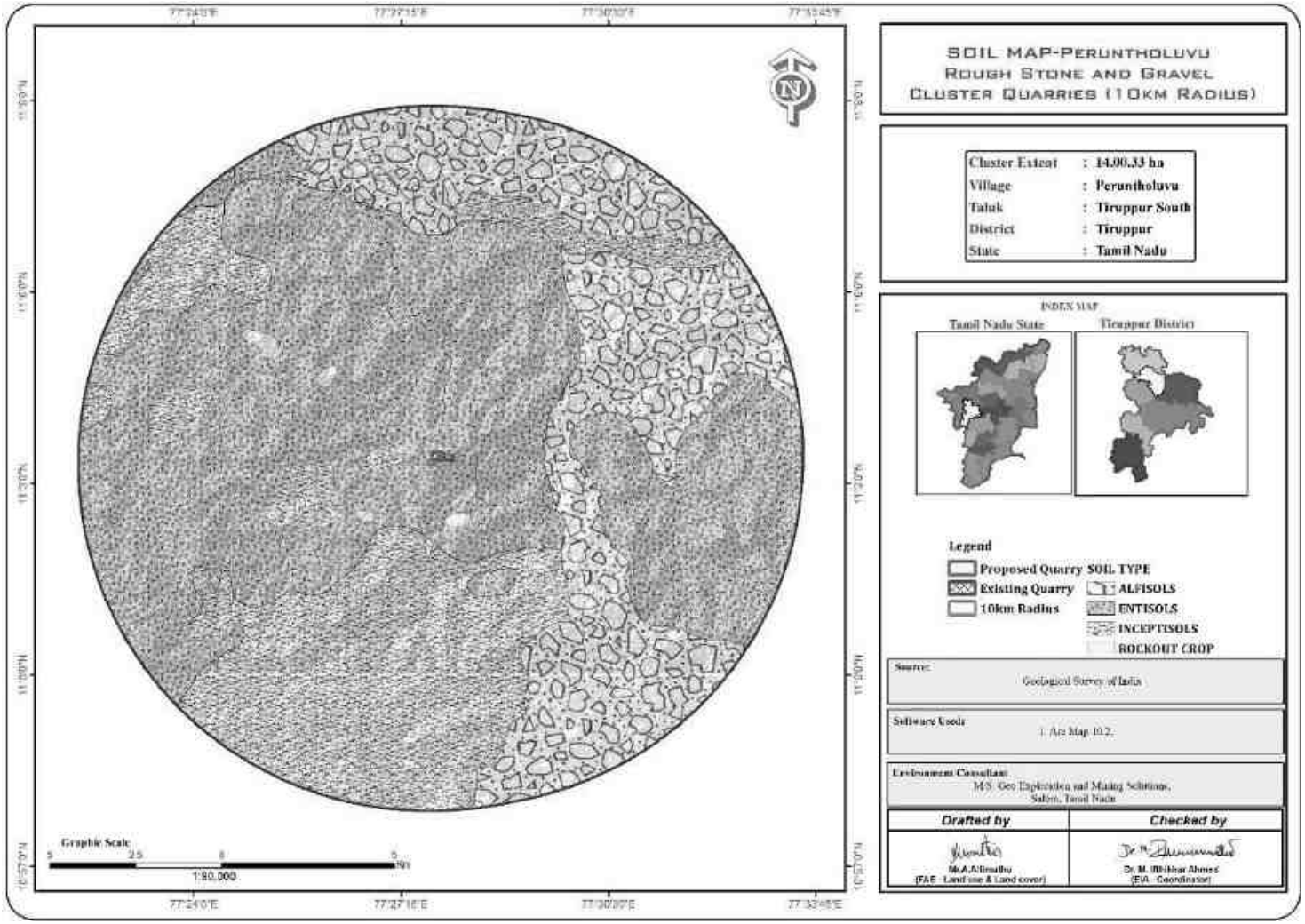


TABLE 3.7 – SOIL QUALITY MONITORING DATA

Sl. No	TEST PARAMETERS	TEST METHOD	UNIT	S-1	S-2	S-3	S-4	S-5	S-6
1	Available Nitrogen as N	GLCS/SOP/S/029 ;Issue no.02: 2024	kg/ha	445.8	362.3	332.5	347.6	313.1	299.9
2	Available Phosphorous(as P)	GLCS/SOP/S/005 ; Issue no:02: 2024	mg/kg	16.51	17.05	15.8	16.5	15.7	14.85
3	Boron	USEPA-6010D:2014	mg/kg	3.86	3.10	5.26	9.83	6.46	2.76
4	Bulk Density	GLCS/SOP/S/017; Issue no:02: 2024	g/cc	1.008	0.99	1.001	1.003	1.003	1.002
5	Cadmium	USEPA-6010 D-2014	mg/kg	2.53	2.83	3.85	1.80	1.66	2.30
6	Cation Exchange Capacity	GLCS/SOP/S/024; Issue no:02: 2024	meq/100g	37.7	36.4	31.3	29.5	29.4	26.2
7	Chlorides (as Cl-) in saturation extract	GLCS/SOP/S/004; Issue no:02: 2024	meq/l	10.2	9.5	8.9	7.9	11.5	11.6
8	Chromium	USEPA-6010D-2014	mg/kg	9.45	10.12	19.64	14.42	4.99	11.21
9	Copper	USEPA-6010D :2014	mg/kg	BDL (DL;0.5)	BDL(DL;0.5)	4.25	BDL(DL;0.5)	3.14	2.76
10	Exchangeable Calcium (as Ca)	GLCS/SOP/S/020; Issue no:02: 2024	meq/100g	1.6	1.7	2.2	2.3	2.7	1.6
11	Exchangeable Magnesium (as Mg)	GLCS/SOP/S/021; Issue no:02: 2024	meq/100g	1.2	1.0	1.5	1.1	1.4	0.9
12	Iron	USEPA-6010 D-2014	mg/kg	38.19	31.44	29.97	33.09	31.57	21.81
13	Lead	USEPA-6010D-2014	mg/kg	1.46	0.54	0.81	BDL(DL;0.5)	0.74	BDL(DL;0.5)
14	Manganese	USEPA-6010 D-2014	mg/kg	5.06	0.67	40.50	9.01	4.4.3	BDL(DL;0.5)
15	Organic Carbon	GLCS/SOP/S/003; Issue no: 02: 2024	%	0.3825	0.460	0.533	0.3396	0.6143	0.484
16	Organic Matter	GLCS/SOP/S/003; Issue no:02: 2024	%	0.659	0.794	0.920	0.585	1.059	0.835
17	pH Value	IS 2720 (Part 26): 1987(Reaffirmed 2021)	-	7.89	6.79	7.53	7.72	8.01	7.40
18	Soluble Potassium (as K) in saturation extract	GLCS/SOP/S/006; Issue no:02 : 2024	mg/100g	0.65	1.23	0.88	0.70	0.63	0.50
19	Specific Electrical Conductivity	IS 14767: 2000(Reaffirmed 2021)	µS/cm	438	358	368	428	475	328

20	Sulphate (as SO4)	GLCS/SOP/S/009; Issue no:02: 2024	mg/100g	3.65	5.80	6.2	5.2	4.8	4.40
21	Texture : Clay	GLCS/SOP/S/015 ;Issue no:02: 2024	%	37.14	39.99	36.42	27.16	35.88	37.80
22	Texture : Sand	GLCS/SOP/S/015; Issue no:02: 2024	%	19.45	19.91	21.59	26.45	17.09	18.33
23	Texture : Silt	GLCS/SOP/S/015 ; Issue no:02: 2024	%	43.44	40.11	41.99	46.39	47.04	43.87
24	Water Holding Capacity	GLCS/SOP/S/016; Issue no:02: 2024	%	49.0	45.7	48.9	42.94	41.0	41.2
25	Zinc	USEPA-6010D-2014	mg/kg	6.39	6.21	13.16	6.88	7.94	7.68

Source: Sampling Results by Global Lab and Consultancy Services

Interpretation & Conclusion

Physical Characteristics –

The physical properties of the soil samples were examined for texture, bulk density, porosity and water holding capacity. The soil texture found in the study area is Clay to Sandy Soil and Bulk Density of Soils in the study area varied between 0.99 – 1.008 g/cc. The Water Holding Capacity 41.0 to 49.0%

Chemical Characteristics –

- The nature of soil is slightly alkaline to strongly alkaline in nature with pH range 6.79 – 8.01
- The available Nitrogen content range between 299.9 – 445.8 mg/kg
- The available Phosphorus content range between 15.7 – 17.05 mg/kg
- The available Potassium range between 0.50 – 1.23 mg/100g

Whereas, the micronutrient as zinc (Zn), iron (Fe) and copper (Cu) were found in the range of 6.21 – 13.16 mg/kg; 21.81 – 38.19 mg/kg and 2.76 – 4.25 mg/kg

Wilting coefficient in significant level would mean that the soil would support the vegetation. The soil properties in the buffer zone reveal that the soil can sustain vegetation. If amended suitability the core area can also withstand plantation.

3.2 Water Environment

The water resources, both surface and groundwater play a significant role in the development of the area. The purpose of this study is to assess the water quality characteristics for critical parameters and evaluate the impacts on agricultural productivity, domestic community usage, recreational resources and aesthetics in the vicinity. The water samples were collected and transported as per the norms in pre-treated sampling cans to laboratory for analysis.

3.2.1 Surface Water Resources:

Noyyal river lies at 6.2 km- N from the project cluster. The area is studded with few tanks that serve as the source for agriculture and also their surplus feeds adjoining tanks. The rainfall over the area is moderate, the rainwater storage in open wells, trenches is in practice over the area and the stored water acts as source of freshwater for couple of months after rainy season.

3.2.2 Ground Water Resources:

The terrain is underlain by hard rock formations, Fissured and fractured crystalline rocks constitute the important aquifer systems in the Tiruppur region. Ground water occurs under phreatic to semi-confined conditions in these formations and is being developed by means of dug wells and filter points. Proterozoic formation is the basement rocks which consist of quartzite, crystalline limestone, calc-granulite, hornblende – biotite gneiss, charnockite or pyroxene granulite, granite and pegmatite. Weathered, a fissured crack, shear zones and joints in the basement rock act as a good groundwater potential zone in the study area.

The study area falls in the Uthukuli which is categorized as over-exploited zone as per G.O (MS) No 113 dated 09.06.2016.

3.2.3 Methodology

Reconnaissance survey was undertaken to collect the sampling and locations were finalized based on;

1. Drainage pattern;
2. Location of residential areas representing different activities/likely impact areas; and
3. Likely areas, which can represent baseline conditions

two (2) surface water and four (4) ground water samples were collected in the study area and physico-chemical, heavy metals and bacteriological parameters were analysed. The samples were analysed as per the procedures specified by CPCB, IS-10500:2012 and 'Standard methods for the Examination of Water and Waste water' published by American Public Health Association (APHA). The water sampling locations are given in Table 3.8 and shown as Figure 3.6.

TABLE 3.8 – WATER SAMPLING LOCATIONS

S. No	Location code	Monitoring Locations	Distance & Direction	Coordinates
1	SW1	Noyyal River	6.2km North	11° 6'53.29"N 77°27'47.22"E
2	WW-1	Near Project Area	590m South	11° 3'2.39"N 77°27'57.46"E
3	WW-2	Saavadipalayam	6.3km NE	11° 5'16.59"N 77°31'1.61"E
4	WW-3	Alagumalai	5.5km SW	11° 0'32.24"N 77°26'29.61"E
5	BW-1	Near Project Area	280m SE	11° 3'12.36"N 77°28'5.75"E
6	BW-2	Mudalipalayam	5.2km NW	11° 6'0.23"N 77°26'21.72"E

Source: On-site monitoring/sampling by Global Lab and Consultancy Services

Note: SW- Surface water, WW – Well Water, BW – Bore well

FIGURE 3.6: WATER SAMPLING LOCATIONS AROUND 10 KM RADIUS

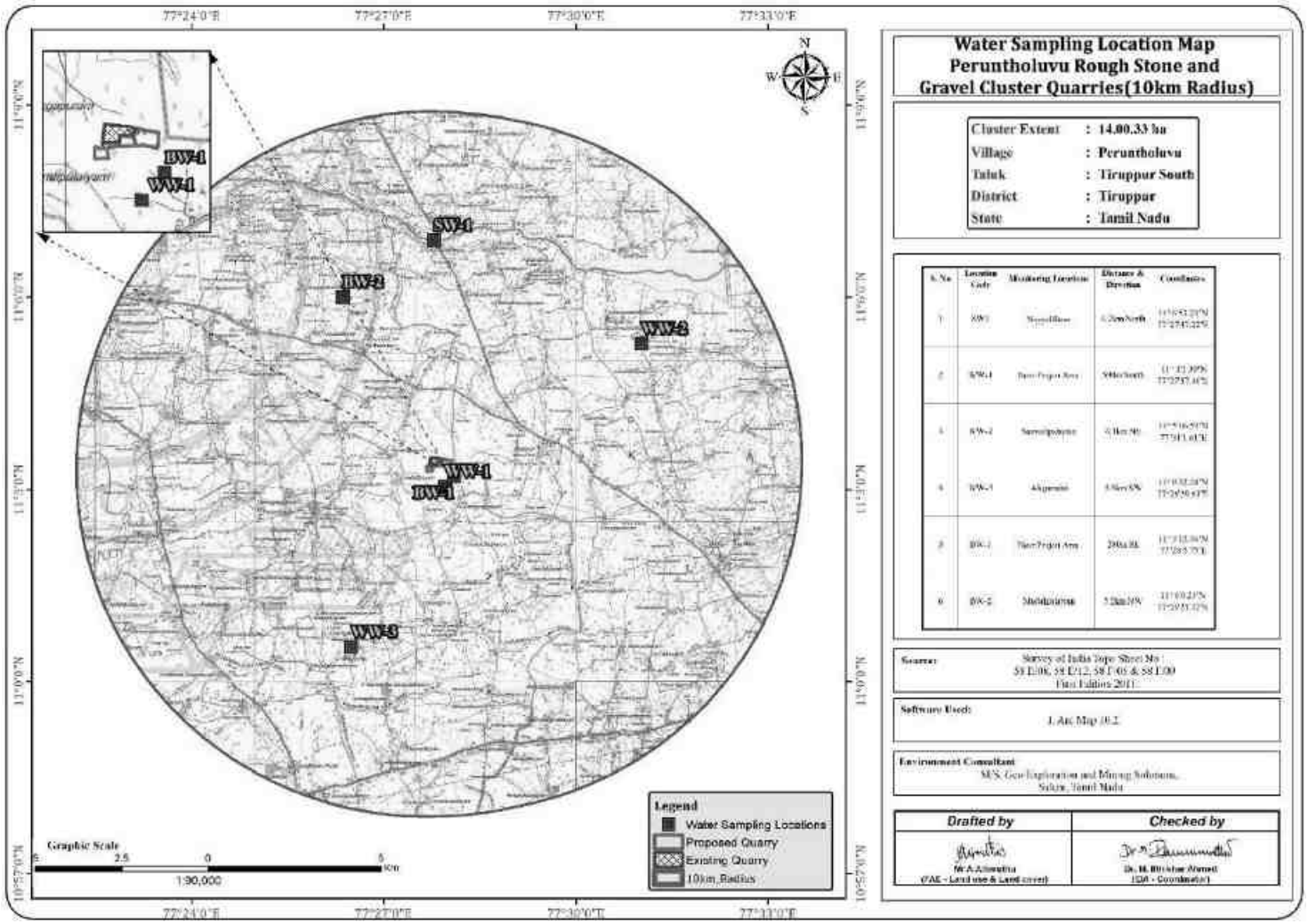


TABLE 3.9 – SURFACE WATER ANALYSIS RESULTS

S.No	Parameters	Units	SW-1 Noyyal River	Acceptable limit	Permissible limit
1	Aluminium	mg /l	0.023	0.03	0.2
2	Ammoniacal Nitrogen as NH3-N	mg /l	BDL(Dl;1.0)	0.5	No Relaxation
3	Arsenic as As	mg /l	BDL(DL;0.002)	0.01	0.05
4	Barium as Ba	mg /l	0.010	0.7	No Relaxation
5	Biochemical Oxygen Demand (BOD) at 27ºC for 3 Days	mg /l	10.0	30	30
6	Boron as B	mg /l	BDL(DL;0.1)	0.5	1.0
7	Cadmium as Cd	mg /l	BDL(DL;0.01)	0.003	No Relaxation
8	Calcium as Ca	mg /l	83.3	75	200
9	Chemical Oxygen Demand (COD)	mg /l	30.0	250	250
10	Chloride as Cl-	mg/l	295.9	250	1000
11	Chromium as Cr	mg/l	BDL(DL;0.01)	0.05	No Relaxation
12	Color	CU	<1	5	15
13	Copper as Cu	mg/l	BDL(DL;0.01)	0.05	1.5
14	Cyanide as CN	mg/l	BDL(DL;0.01)	0.05	No Relaxation
15	Dissolved Oxygen (DO)	mg/l	7.2	4-6	4-6
16	Electrical Conductivity (EC)	µS/cm	1695.0	2000	2000
17	Fluoride as F-	mg/l	0.39	1.0	1.5
18	Free Residual Chlorine as Cl_2	mg/l	BDL(DL;1.0)	0.2	1
19	Iron as Fe	mg/l	0.38	0.3	No Relaxation
20	Lead as Pb	mg/l	BDL(DL;0.01)	0.01	No Relaxation
21	Magnesium as Mg	mg/l	44.7	30	100
22	Manganese as Mn	mg/l	BDL(DL;0.01)	0.1	0.3
23	Mercury as Hg	mg/l	BDL(DL;0.002)	0.001	No Relaxation
24	Molybdenum as Mo	mg/l	BDL(DL;0.01)	0.07	No Relaxation
25	Nitrate as NO3	mg/l	5.2	45	No Relaxation
26	Odor	-	Agreeable	Agreeable	Agreeable
27	pH	-	7.98	6.5-8.5	No Relaxation
28	Phenols	mg/l	BDL(DL;01)	0.001	0.002

29	Selenium as Se	mg/l	BDL(DL;0.005)	0.01	No Relaxation
30	Sulphate as SO4	mg/l	67.8	200	400
31	Sulphide as S (IodometricMethod)	mg/l	BDL(DL;1.0)	0.05	No Relaxation
32	Total Alkalinity as CaCO3	mg/l	324.0	200	600
33	Total Dissolved Solids (TDS)	mg/l	988.0	500	2000
34	Total Hardness as CaCO3	mg/l	392.0	200	600
35	Total Suspended Solids (TSS)	mg/l	3.0	500	2000
36	Turbidity	NTU	4.0	1	5
37	Zinc as Zn	mg/l	BDL(DL;0.01)	5	15
38	Escherichia coli	per 100ml	Absent	Shall not be detectable in any100 ml	-
39	Total Coliforms		Absent		-

TABLE 3.10 – GROUND WATER ANALYSIS RESULTS

S.No	Parameters	Units	WW-1	WW-2	WW-3	BW-1	BW-2	Acceptable limit	Permissible limit
1	Aluminium	mg /l	0.034	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	0.03	0.2
2	Ammoniacal Nitrogen as NH3-N	mg /l	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	0.5	No Relaxation
3	Arsenic as As	mg /l	BDL(DL;0.002)	BDL(DL;0.002)	BDL(DL;0.002)	BDL(DL;0.002)	BDL(DL;0.002)	0.01	0.05
4	Barium as Ba	mg /l	0.093	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	0.7	No Relaxation
5	Boron as B	mg /l	BDL(DL;0.1)	BDL(DL;0.1)	BDL(DL;0.01)	BDL(DL;1.0)	BDL(DL;0.1)	0.5	1.0
6	Cadmium as Cd	mg /l	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	0.003	No Relaxation
7	Calcium as Ca	mg /l	78.5	75.3	76.9	60.9	62.5	75	200
8	Chloride as Cl-	mg/l	241.9	239.9	247.9	201.9	211.9	250	1000
9	Chromium as Cr	mg/l	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	0.05	No Relaxation
10	Color	CU	<1	<1	<1	<1	<1	5	15
11	Copper as Cu	mg/l	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	0.05	1.5
12	Cyanide as CN	mg/l	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;.01)	BDL(DL;0.01)	0.05	No Relaxation
13	Electrical Conductivity (EC)	µS/cm	1485.0	1465.0	1385	1309.0	1319.0	2000	2000
14	Fluoride as F-	mg/l	0.36	0.35	0.33	0.32	0.31	1.0	1.5
15	Free Residual Chlorine as Cl_2	mg/l	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	0.2	1
16	Iron as Fe	mg/l	0.38	0.34	0.33	0.38	0.36	0.3	No Relaxation
17	Lead as Pb	mg/l	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	BDL(DL;0.01)	0.01	No Relaxation
18	Magnesium as Mg	mg/l	33.0	36.4	37.9	34.0	36.9	30	100
19	Manganese as Mn	mg/l	BDL(DL;0.1)	BDL(DL;0.01)	BDL(DL;0.1)	BDL(DL;0.1)	BDL(DL;0.1)	0.1	0.3
20	Mercury as Hg	mg/l	BDL(DL;0.005)	BDL(DL;0.002)	BDL(DL;0.005)	BDL(DL;0.002)	BDL(DL;0.002)	0.001	No Relaxation
21	Molybdenum as Mo	mg/l	BDL(DL;0.01)	BDL(DL0.01)	0.010	BDL(DL;0.01)	BDL(DL;0.01)	0.07	No Relaxation

22	Nitrate as NO3	mg/l	BDL(DL;2.0)	BDL(DL;2.0)	BDL(DL;2.0)	BDL(DL;2.0)	BDL(DL;2.0)	45	No Relaxation
23	Odor	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
24	pH	-	7.81	7.79	7.84	7.31	7.65	6.5-8.5	No Relaxation
25	Phenols	mg/l	BDL()DL;0.01)	BDL(DL;0.01)	BDL(DL;0.1)	BDL(DL;0.01)	BDL(DL;0.1)	0.001	0.002
26	Selenium as Se	mg/l	BDL(DL;0.005)	BDL(DL;0.005)	BDL(DL;0.005)	BDL(DL;0.005)	BDL(DL;0.005)	0.01	No Relaxation
27	Sulphate as SO4	mg/l	48.2	59.8	41.1	36.6	34.8	200	400
28	Sulphide as S (IodometricMethod)	mg/l	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	BDL(DL;1.0)	0.05	No Relaxation
29	Total Alkalinity as CaCO3	mg/l	292.0	296	304	260.0	256.0	200	600
30	Total Dissolved Solids (TDS)	mg/l	876.0	864.0	817	772.0	778.0	500	2000
31	Total Hardness as CaCO3	mg/l	332.0	340.0	392.0	292.0	308.0	200	600
32	Total Suspended Solids (TSS)	mg/l	BDL(DL;2.0)	BDL(DL;2.0)	BDL(DL;2.0)	BDL(DL;2.0)	BDL(DL;2.0)	500	2000
33	Turbidity	NTU	<1	<1	<1	<1	<1	1	5
34	Zinc as Zn	mg/l	BDL(DL;0.01)	BDL(DL;0.01)	0.025	BDL(DL;0.01)	BDL(DL;0.01)	5	15
35	Escherichia coli	MPN/100ml	Absent	Absent	Absent	Absent	Absent	Shall not be detectable in any100 ml	-
36	Total Coliforms		present	Present	Absent	Absent	Present		-

* IS: 10500:2012-Drinking Water Standards; # within the permissible limit as per the WHO Standard. The water can be used for drinking purpose in the absence of alternate sources. Note: SW- Surface water, GW – Ground water.

Source: Sampling Results by Global Lab and Consultancy Services

3.2.4 Interpretation& Conclusion

Surface Water

The pH of surface 7.98 while turbidity found within the standards. Total Dissolved Solids 988 mg/l and Chloride 295.9 mg/l. Nitrates 5.2 mg/l, while sulphates 67.8 mg/l.

Ground Water

The pH of the water samples collected ranged from 7.31 – 7.84 and within the acceptable limit of 6.5 to 8.5. pH, Sulphates and Chlorides of water samples from all the sources are within the limits as per the Standard. on Turbidity, the water samples meet the requirement. Total Dissolved Solids were found in the range of 772.0 – 876.0 mg/l in all samples. The Total hardness varied between 292.0 – 392.0 mg/l for all samples.

On Microbiological parameters, the water samples from all the locations meet the requirement. The parameters thus analysed were compared with IS 10500:2012 and are well within the prescribed limits.

3.2.5 Hydrology and Hydrogeological studies

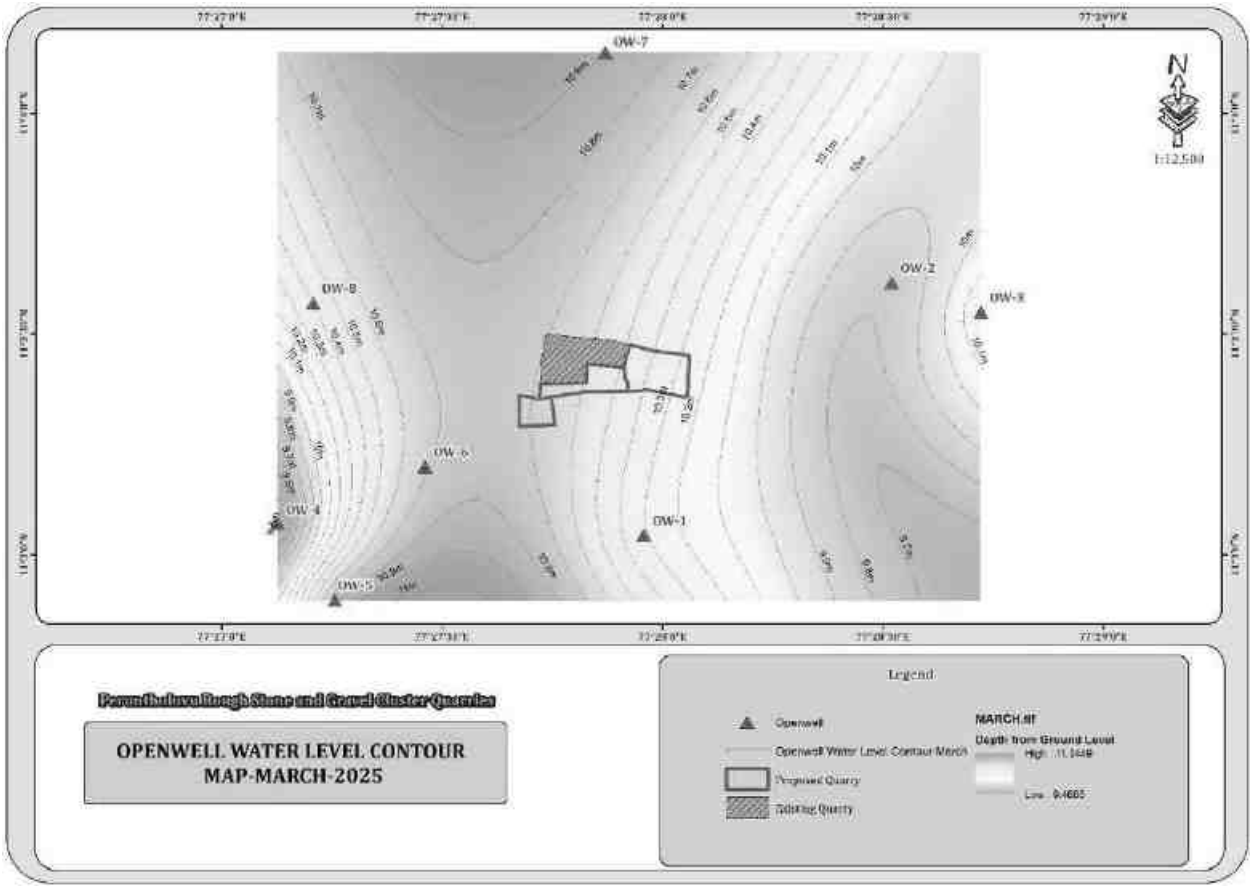
The district is underlain by hard rock formation Fissured and Fractured crystalline rocks constitute the important aquifer systems in the district. Geophysical prospecting was carried out in that area by SSRMP-ATS Instrument by qualified Geo physicist with the help of IGIS software and it was inferred that the low resistance encountered at the depth between 68m. the quarrying operations is restricted upto 32-37m hence there is no possibilities of water table intersection during the entire mine life period besides it is also inferred topographically that there are no major water bodies intersecting the project area. There is no necessity of stream, channel diversion due to this upcoming project.

During the rainy season there is a possibility of collection of seepage water from the subsurface levels this is due to the high intensity of fracture and weathered portion upto a depth of 10m thus the collected seepage water will be stored in the mine sump pits and will be used for dust suppression and greenbelt development and during the end of the life of the mine this collected water will be as a temporary reservoir in that area.

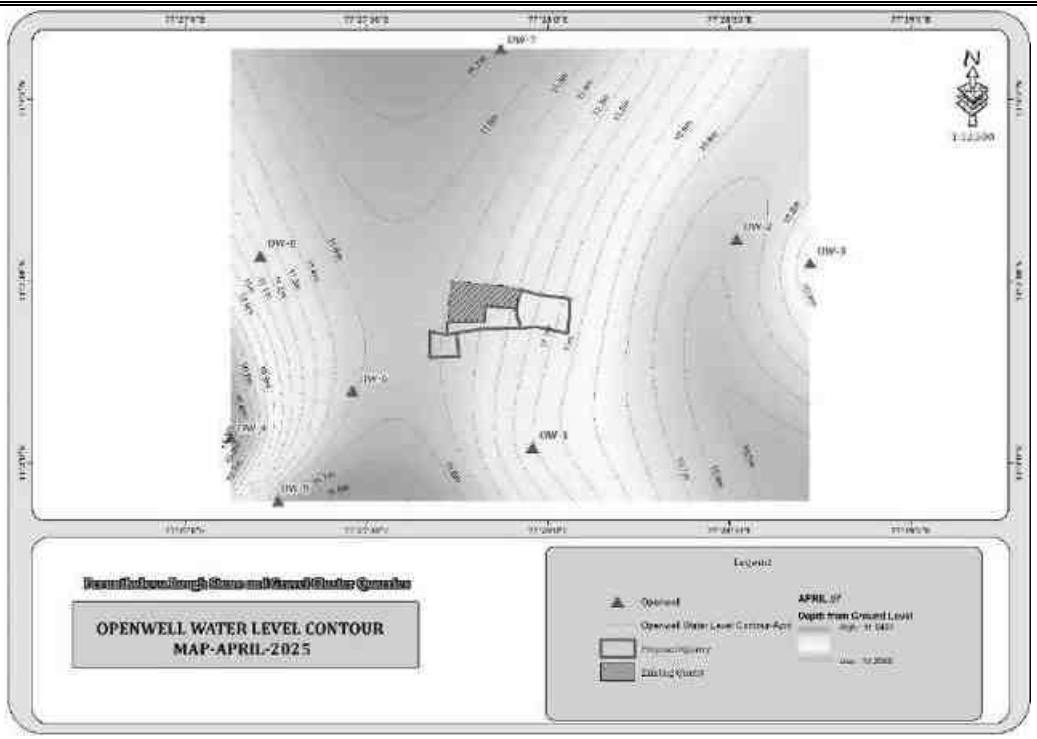
TABLE 3.11: POST MONSOON WATER LEVEL OF OPEN WELLS 1 KM RADIUS

S.No	LABEL	LONGITUDE	LATITUDE	MAR 25	APR 25	MAY 25
1	**OW-1**	77° 27' 57.4434" E	11° 03' 02.5789" N	10.3	11.1	11.7
2	**OW-2**	77° 28' 31.2222" E	11° 03' 36.9148" N	9.8	10.6	11.2
3	**OW-3**	77° 28' 43.3736" E	11° 03' 32.9441" N	10.2	11	11.6
4	**OW-4**	77° 27' 07.5995" E	11° 03' 04.2529" N	9.4	10.2	10.8
5	**OW-5**	77° 27' 15.4160" E	11° 02' 53.7797" N	10.8	11.6	12.2
6	**OW-6**	77° 27' 27.6854" E	11° 03' 11.8971" N	10.7	11.5	12.1
7	**OW-7**	77° 27' 52.1966" E	11° 04' 08.2676" N	10.9	11.7	12.3
8	**OW-8**	77° 27' 12.4588" E	11° 03' 34.1740" N	10.4	11.2	11.8

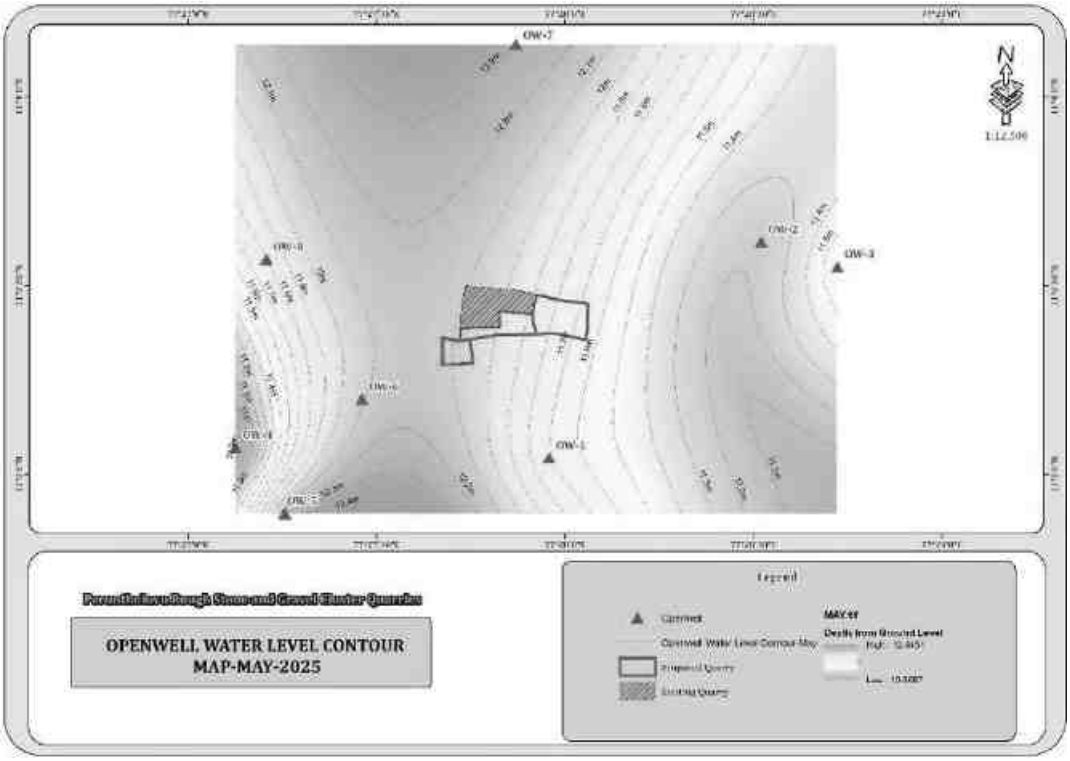
FIGURE 3.7: CONTOUR MAP OF OPEN WELL WATER LEVEL



March 2025



April 2025

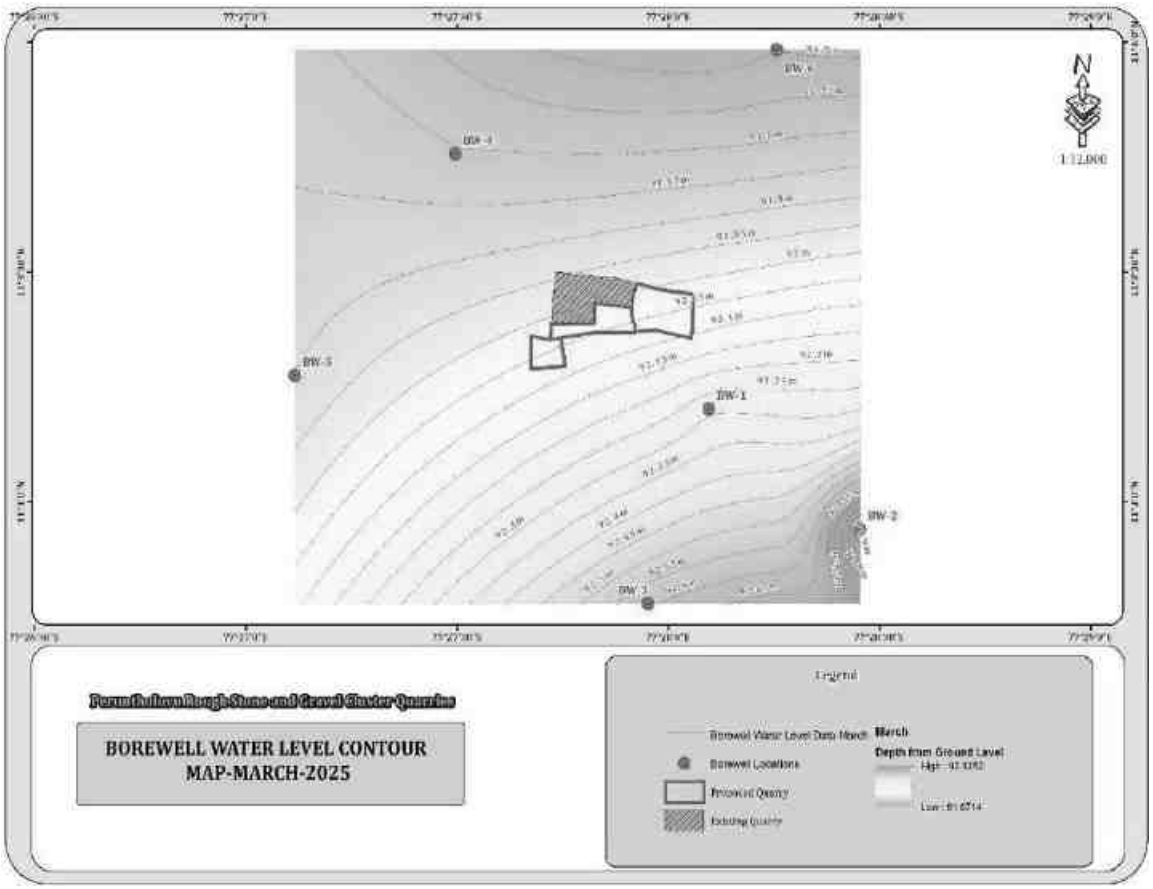


May 2025

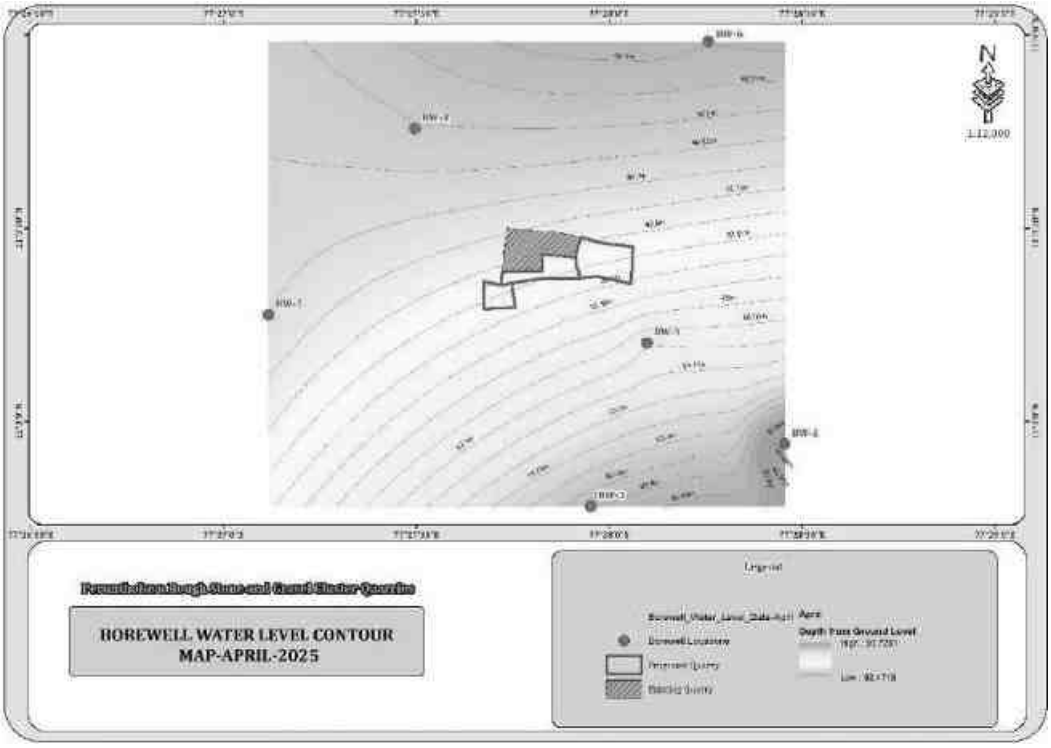
TABLE 3.12: POST MONSOON WATER LEVEL OF BOREWELLS 1 KM RADIUS

S.No	LABEL	LONGITUDE	LATITUDE	MAR 25	APR 25	MAY 25
1	BW1	77° 28' 05.8222" E	11° 03' 12.1720" N	92.3	93.1	93.5
2	BW2	77° 28' 27.2603" E	11° 02' 56.4474" N	93	93.8	94.2
3	BW3	77° 27' 57.1464" E	11° 02' 46.7391" N	92.6	93.4	93.8
4	BW4	77° 27' 29.7432" E	11° 03' 45.4192" N	91.8	92.6	93
5	BW5	77° 27' 06.9767" E	11° 03' 16.4894" N	91.9	92.7	93.1
6	BW6	77° 28' 15.4354" E	11° 03' 59.0018" N	91.7	92.5	92.9
7	BW-7	77° 11' 32.3796" E	11° 01' 21.5591" N	62.9	63.7	64.1
8	BW-8	77° 11' 26.9976" E	11° 01' 55.5474" N	63.5	64.3	64.7

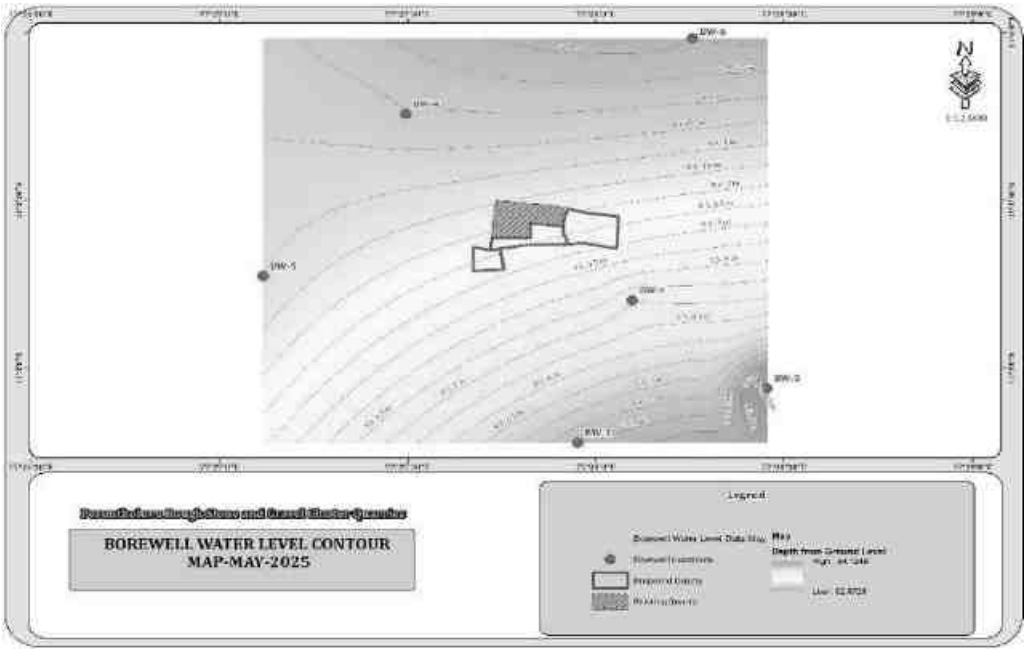
FIGURE 3.8: CONTOUR MAP OF BORE WELL WATER LEVEL



March 2025



April 2025



May 2025

FIGURE 3.9: DRAINAGE MAP AROUND 10 KM RADIUS FROM PROJECT SITE

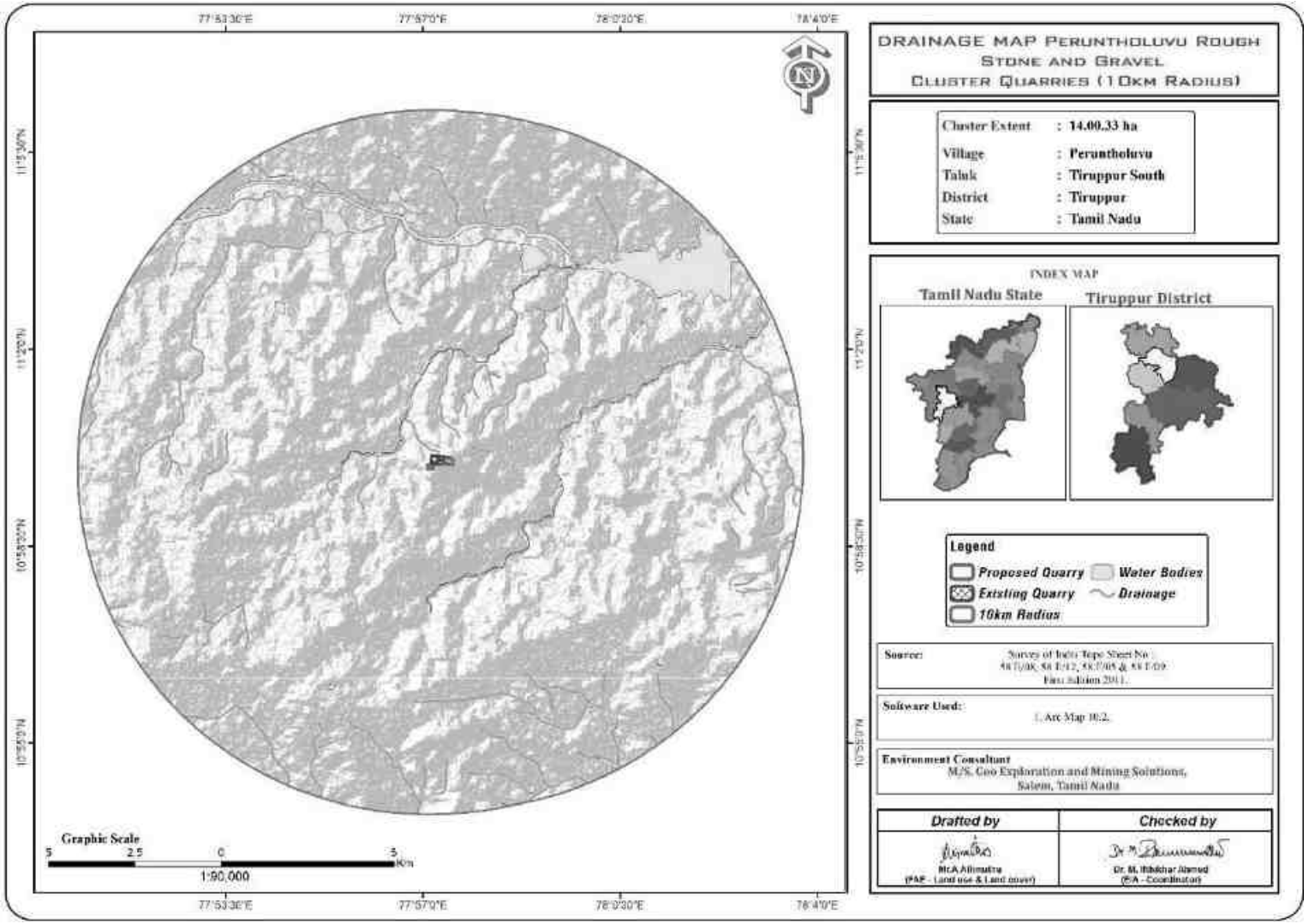
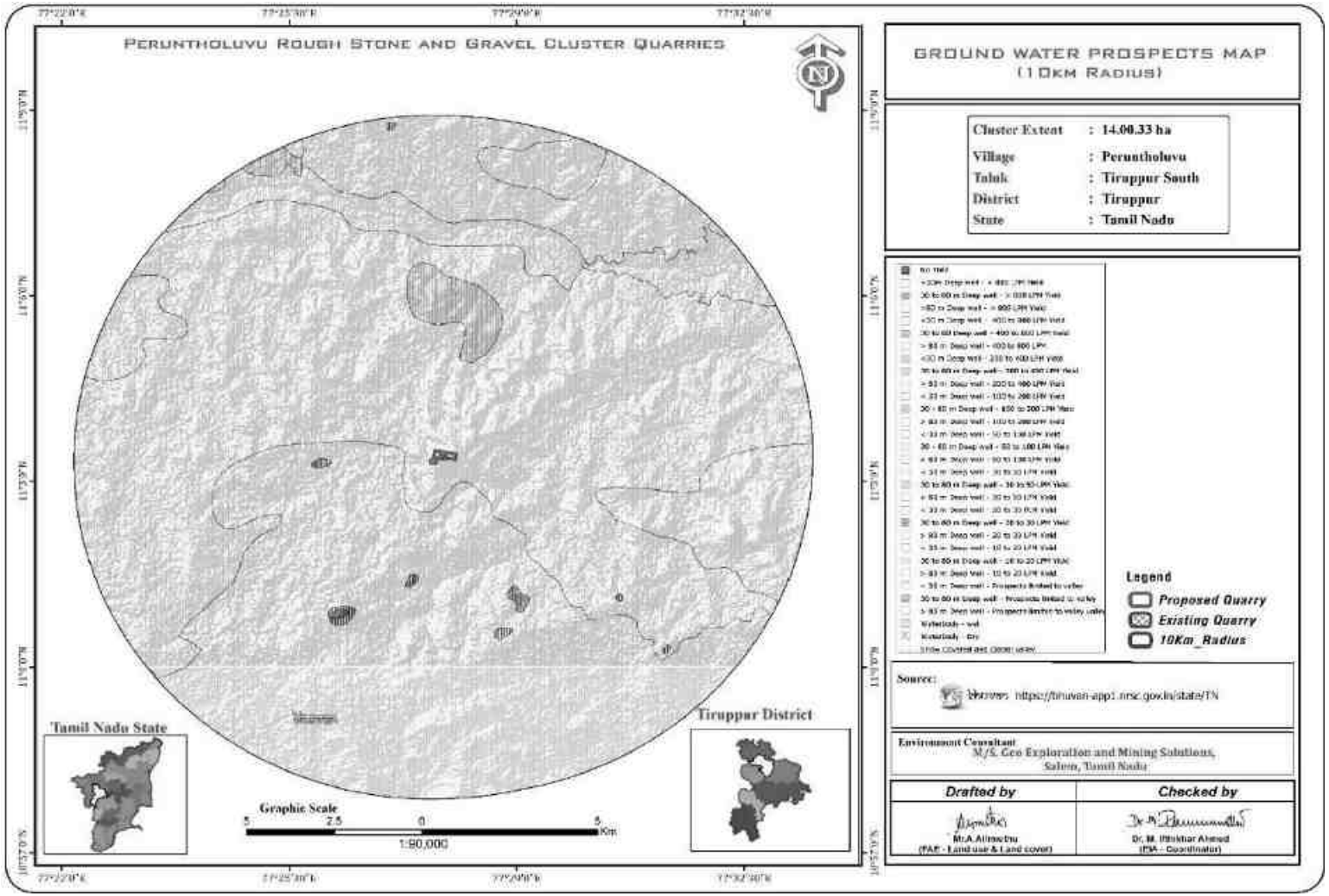


FIGURE 3.10: GROUND WATER PROSPECTS MAP



Source: Bhuvan

3.2.5.1 Methodology and Data Acquisition

Electric Resistivity Method is well established for delineating lateral as well vertical discontinuities in the resistive structure of the Earth's subsurface. The present study makes use of vertical electric sounding (VES) to delineate the Vertical Resistivity structure at depth. Schlumberger electrode set up was employed for making sounding measurements. Since it is least influenced by lateral in homogeneities and is capable of providing higher depth of investigation. This is four electrodes collinear set up where in the outer electrodes send current into the ground and the inner electrodes measure the potential difference.

The present study utilizes maximum current electrode separation AB/2. The data from this survey are commonly arranged and contoured in the farm of Pseudo-section that gives an approximate of the subsurface resistivity. This technique is used for the inversion of Schlumberger VES data to predict the layer parameter namely layer resistivity and Geo electric layer thickness. The main goal of the present study is to search the vertical in homogeneities that is consistent with the measured data.

For a Schlumberger among the Apparent resistivity can be calculated as follows

$$\rho_a = \frac{G\Delta V}{I}$$

ΔV = potential difference between receiving electrodes

G = Geometric Factor.

Rocks show wide variation in resistivity ranging from 10-8 more than 10+14 ohmmeter. On a broad classification, one can group the rocks falling in the range of 10-8 to 1 ohmmeter as good conductors. 1 to 106 ohmmeter as intermediate conductors and 106 to 1012 ohmmeter as more as poor conductor. The resistivity of rocks and subsurface lithology, which is mostly dependent on its porosity and the pore fluid resistivity is defined by Archie's Law,

$$\rho_r = F\rho_w = a\,\emptyset^m\rho_w$$

ρr = Resistivity of Rocks

ρw = Resistivity of water in pores of rock

F = Formation Factor

$\emptyset$ = Fractional pore volume

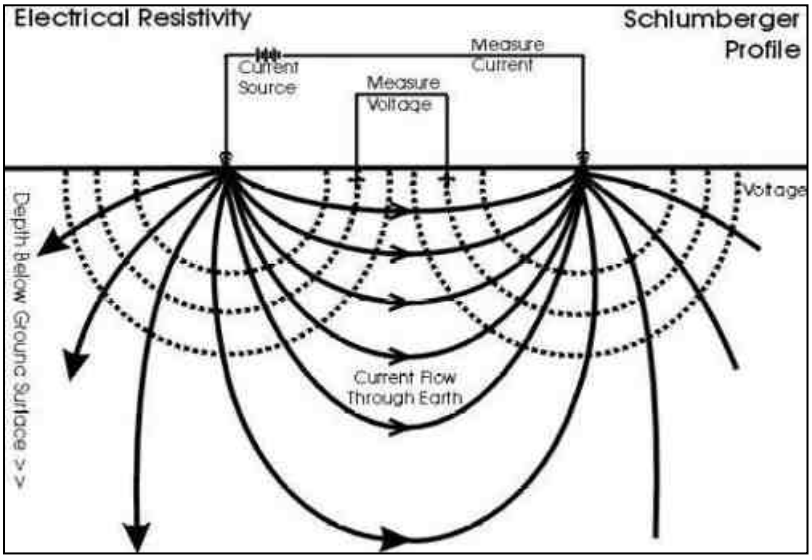
A = Constants with values ranging from 0.5 to 2.5

3.2.5.2 Survey Layout

The layout for a resistivity survey depends on the choice of the current and potential electrode arrangement, which is called electrode array. Here the present study is considered with Schlumberger array. In which the distance may be used for current electrode separation while potential electrode separation is kept on third to one fifth of the same. One interesting aspect in VES is the principle of reciprocity, which permits interchange of the potential and current electrode without any effect on the measured apparent resistivity.

The field equipment deployed for the study is in a deep resistivity meter with a model of SSR – MP – AT. This Signal stacking Resistivity meter is a high-quality data acquisition system incorporating several innovation features for Earth resistivity. In the presence of random earth Noises the signal to nose ration can be enhanced by $\sqrt{N}$ where N is the number of stacked readings. This SSR meter in which running averages of measurements [1, (1+2)/2, (1+2+3)/3 … (1+2...+16/16)] up to the chosen stacks are displayed and the final average is stored automatically, in memory utilizing the principles of stacking to achieve the benefit of high signals to noise ratio. Based on these above significations the signal stacking resistivity meter was used for (VES) Vertical Electric Resistivity Sounding.

RESISTIVITY SURVEY PROFILE



Measurements of ground Resistivity is essentially done by sending a current through two electrodes called current electrodes (C_1& C_2) and measuring the resulting potential by two other electrodes called potential electrode (P_1& P_2). The amount of current required to be sent into the ground depends on the contact resistance at the current electrode, the ground resistivity and the depth of interest.

3.2.5.3 Data Presentation

It was inferred that the low resistance encountered at the depth between 90-100 m. The maximum depth proposed out of proposed projects is 78 m BGL. Hence there is no possibilities of water table intersection during the entire mine life period besides it is also inferred topographically that there are no major water bodies intersecting the project area.

3.2.5.4 Geophysical Data Interpretation

The geophysical data was obtained to study the lateral variations, vertical in homogeneities in the sub – surface with respect to the availability of groundwater. From the interpreted data, it has inferred that the area has moderate groundwater potential in the investigated area. This small quarrying operation will not have any significant impact on the natural water bodies.

3.3 Air Environment

The ambient air quality with respect to the study area of 10 km radius including the cluster quarries forms the baseline information. The prime objective of baseline air quality monitoring is to assess existing air quality of the area. This will also be useful in assessing the conformity to standards of the ambient air quality during the operations

The existing ambient air quality of the area is important for evaluating the impact of mining activities on the ambient air quality. These will also be useful for assessing the conformity to standards of the ambient air quality during the operation of Existing and proposed quarries within the radius of 500m.

The sources of air pollution in the region are mostly due to vehicular traffic, dust arising from unpaved village road and domestic & agricultural activities. This section describes the identification of sampling locations, methodology adopted during the monitoring period and sampling frequency.

The baseline status of the ambient air quality has been assessed through scientifically designed ambient air quality network. The design of monitoring network in the air quality surveillance program has been based on the following considerations:

- Meteorological conditions.
- Topography of the study area.
- Likely impact area.

3.3.1 Meteorology & Climate

Meteorology is the key to understand the air quality. The essential relationship between meteorological condition and atmospheric dispersion involves the wind in the broadest sense. Wind fluctuations over a very wide range of time, accomplish dispersion and strongly influence other processes associated with them.

A temporary meteorological station was installed at project site. The station was installed at a height of 4 m above the ground level in such a way that there are no obstructions facilitating flow of wind, wind speed, wind direction, humidity and temperature are recorded on hourly basis.

Climate –

- The atmospheric conditions prevailing in this region are of a tropical nature. In Tiruppur, the precipitation during summers is significantly higher in comparison to winters. This location is classified as Aw by Köppen and Geiger. In Tiruppur, the average annual temperature is 26.4 °C | 79.6 °F. Approximately 943 mm | 37.1 inch of rainfall occurs on a yearly basis.
- Due to its proximity to the equator, it is quite challenging to precisely delineate summers in Tiruppur. The period of January, February, March, June, July, August, September, October, November, December is widely regarded as the peak season for visitation.
- The month with the least amount of precipitation is January exhibiting a mere 13 mm | 0.5 inch rainfall. The maximum quantity of rainfall is observed during the month of October, exhibiting an average value of 209 mm | 8.2 inch.
- The month of April boasts the highest average temperature, with a recorded maximum of 30.0 °C | 86.0 °F. During the month of December, there is a notable drop in temperature, with an average low of approximately 23.7 °C | 74.7 °F.

Source: https://en.climate-data.org/asia/india/tamil-nadu/tiruppur-2789/

Rainfall –

The average annual rainfall and the 5 years rainfall is as follows:

TABLE 3.13 – RAINFALL DATA

Actual Rainfall in mm					2024 (As on 30.09.2024)	Normal Rainfall in mm
2019	2020	2021	2022	2023	**2024**	**619**
488.1	968.1	845.1	830.4	570.8	397.5	

Source: https://www.twadboard.tn.gov.in/content/tiruppur

TABLE 3.14 – METEOROLOGICAL DATA RECORDED AT SITE

S.No	Parameters		Mar-2025	Apr-2025	May-2025
1	Temperature (^{0}C)	Max	31.52	31.5	25.35
		Min	28.47	25.89	21.38
		Avg	29.99	28.69	23.365
2	Relative Humidity (%)	Avg	58.17	69.76	85.475
3	Wind Speed (m/s)	Max	4.31	8.65	3.84
		Min	1.34	1.08	0.9
		Avg	2.82	4.86	2.37
4	Cloud Cover (OKTAS)		0-8	0-8	0-8

5	Wind Direction		WSW,ESE	WSW,W	ENE,E

Source: On-site monitoring/sampling by Global Lab and Consultancy Services in association with GEMS

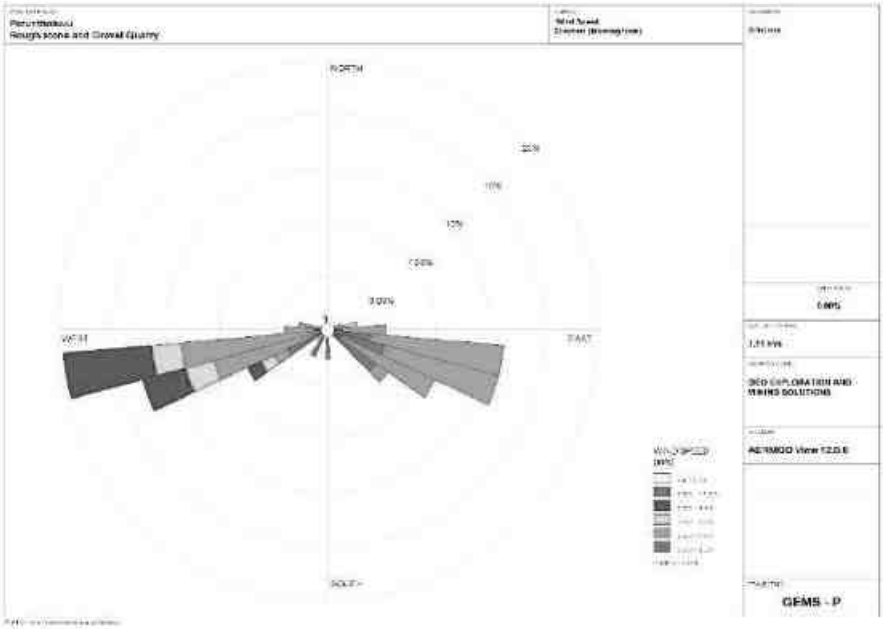
Correlation between Secondary and Primary Data

The meteorological data collected at the site is almost similar to that of secondary data collected from IMD Tiruppur. A comparison of site data generated during the three months with that of IMD, Tiruppur Agro reveals the following:

- The average maximum and minimum temperatures of IMD, Tiruppur agro showed a higher in respect of on-site data i.e. in Peruntholuvu village.
- The relative humidity levels were lesser at site as compared to IMD, Tiruppur agro.
- The wind speed and direction at site shows similar trend that of IMD, Tiruppur agro.

Windrose diagram of the study site is depicted in Figure. 3.8. Predominant downwind direction of the area during study season is North East to South West.

FIGURE 3.9: WINDROSE DIAGRAM



Environmental In the abstract of collected data wind rose were drawn on presented in figure No.3.14 during the monitoring period in the study area

1. Predominant winds were from SE, SW
2. Wind velocity readings were recorded between 5.70 – 8.80 km / hour
3. Calm conditions prevail of about 0.00% of the monitoring period
4. Temperature readings ranging from 25.89^0 to 31.5^0C
5. Relative humidity ranging from 57.39 to 69.76%
6. The monitoring was carried out continuously for three months (March – May 2025)

3.3.2 Methodology and Objective

The prime objective of the ambient air quality study is to assess the existing air quality of study area and its conformity to NAAQS. The observed sources of air pollution in the study area are industrial, traffic and domestic activities. The baseline status of the ambient air quality has been established through a scientifically designed ambient air quality monitoring network considering the followings:

- Meteorological condition on synoptic scale;
- Topography of the study area;
- Representatives of regional background air quality for obtaining baseline status;
- Location of residential areas representing different activities;
- Accessibility and power availability; etc

3.3.3 Sampling and Analytical Techniques

TABLE 3.15 – METHODOLOGY AND INSTRUMENT USED FOR AIR QUALITY ANALYSIS

Parameter	Method	Instrument
$PM_{2.5}$	Gravimetric Method Beta attenuation Method	Fine Particulate Sampler Make – Thermo Environmental Instruments – TEI 121
PM_{10}	Gravimetric Method Beta attenuation Method	Respirable Dust Sampler Make –Thermo Environmental Instruments – TEI 108
SO_2	IS-5182 Part II (Improved West & Gaeke method)	Respirable Dust Sampler withgaseous attachment
NO_x	IS-5182 Part II (Jacob & Hochheiser modifiedmethod)	Respirable Dust Sampler with gaseous attachment
Free Silica	NIOSH – 7601	Visible Spectrophotometry

Source: Sampling Methodology followed by Global Lab and Consultancy Services & CPCB Notification.

TABLE 3.16 – NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutant	Time Weighted Average	Concentration in ambient air	
			Industrial, Residential, Rural & other areas	Ecologically Sensitive area (Notified by Central Govt.)
1	Sulphur Dioxide ($\mu g/m^3$)	Annual Avg.* 24 hours**	50.0 80.0	20.0 80.0
2	Nitrogen Dioxide ($\mu g/m^3$)	Annual Avg. 24 hours	40.0 80.0	30.0 80.0
3	Particulate matter (size less than 10µm) PM_{10} ($\mu g/m^3$)	Annual Avg. 24 hours	60.0 100.0	60.0 100.0
4	Particulate matter (size less than 2.5 µm $PM_{2.5}$ ($\mu g/m^3$)	Annual Avg. 24 hours	40.0 60.0	40.0 60.0

Source: NAAQS CPCB Notification No. B-29016/20/90/PCI-I Dated: 18th Nov 2009

*Annual Arithmetic mean of minimum 104 measurements in a year taken twice a Week 24 hourly at uniform interval,

** 24 hourly / 8 hourly or 1 hourly monitored values as applicable shall be complied with 98 % of the time in a year. However, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

3.3.4 Frequency & Parameters for Sampling

Ambient air quality monitoring has been carried out with a frequency of two samples per week at seven (7) locations, adopting a continuous 24 hourly (3 shift of 8-hour) schedule for the period Mar-May2025. The baseline data of ambient air has been generated for PM_{10}, $PM_{2.5}$, Sulphur Dioxide (SO_2) & Nitrogen Dioxide (NO_2).

3.3.5 Ambient Air Quality Monitoring Stations

Seven (7) monitoring stations were set up in the study area as depicted in Figure 3.6.1 for assessment of the existing ambient air quality. Details of the sampling locations are as per given below.

TABLE 3.17 – AMBIENT AIR QUALITY (AAQ) MONITORING LOCATIONS

S. No	Location Code	Monitoring Locations	Distance & Direction	Coordinates
1	AAQ1	Core Zone	Project Area	11° 3'20.98"N 77°27'44.34"E
2	AAQ2	Core Zone	Project Area	11° 3'28.09"N 77°27'55.56"E
3	AAQ3	Perumtholuvu	3km SW	11° 2'47.89"N 77°26'3.81"E
4	AAQ4	Saavadipalayam	6.3km NE	11° 5'15.92"N 77°31'2.36"E
5	AAQ5	Sanarpatti	4.3km SE	11° 1'20.49"N 77°29'16.88"E
6	AAQ6	Mudalipalayam	5.2km NW	11° 6'0.73"N 77°26'23.30"E
7	AAQ7	Alagumalai	5.5km SW	11° 0'29.65"N 77°26'29.32"E

Source: On-site monitoring/sampling by Global Lab and Consultancy Services in association with GEMS

FIGURE 3.10 AMBIENT AIR QUALITY LOCATIONS AROUND 10 KM RADIUS

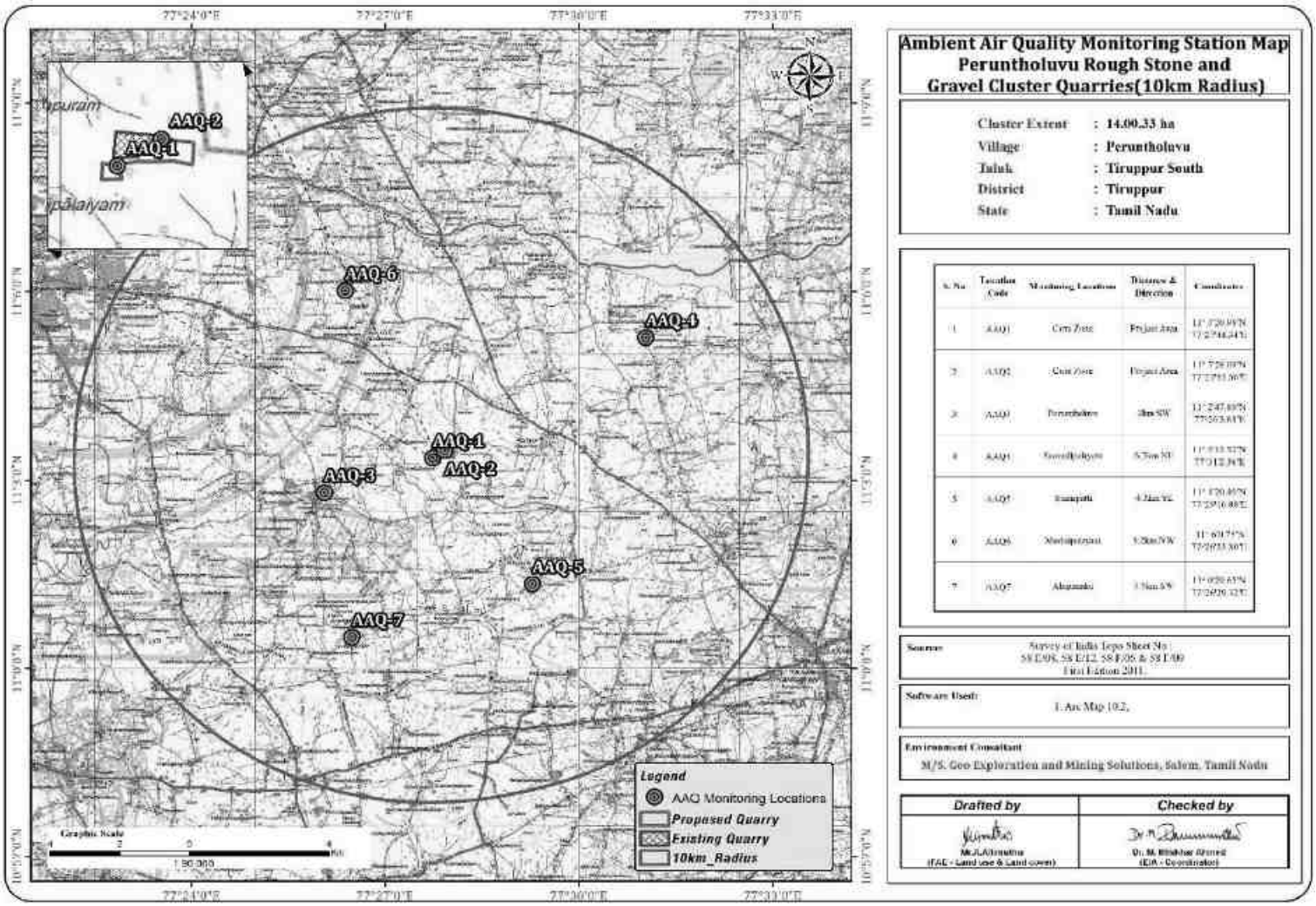


TABLE 3.18 – ABSTRACT OF AMBIENT AIR QUALITY DATA

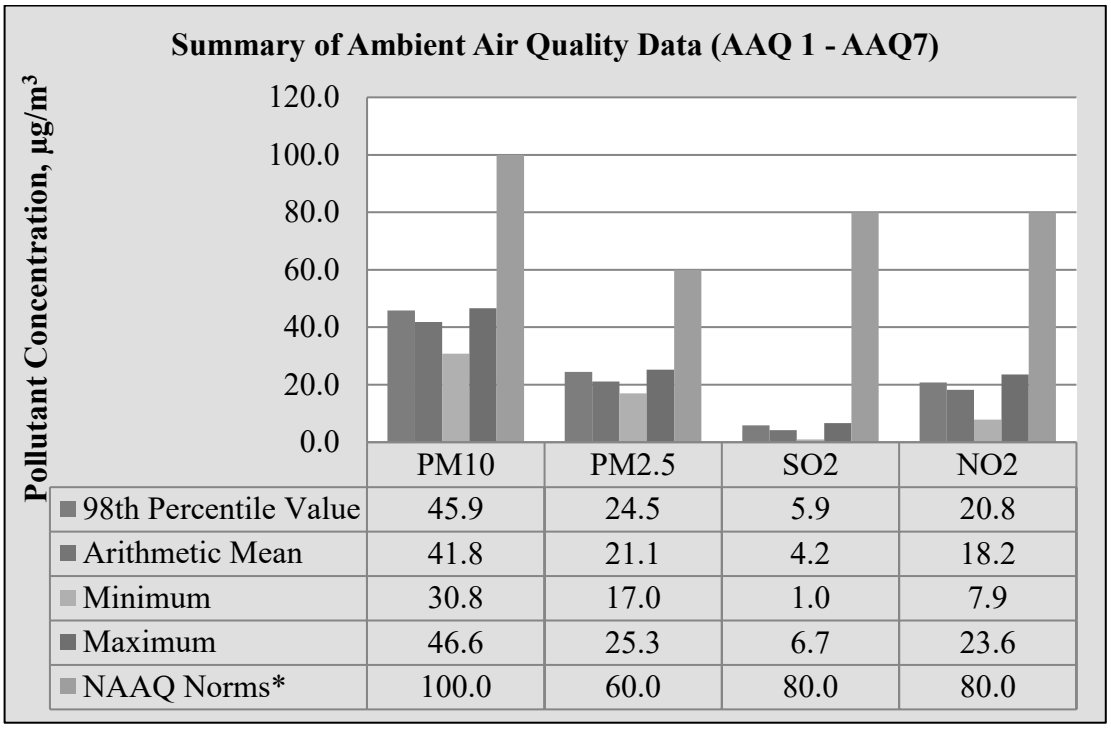
1	**Parameter**	**PM10**	**PM2.5**	**SO_2**	**NO_2**
2	No. of Observations	175	175	175	175
3	10th Percentile Value	39.3	18.9	1.0	16.8
4	20th Percentile Value	40.1	19.5	4.1	17.3
5	30th Percentile Value	40.6	20.0	4.2	17.6
6	40th Percentile Value	41.3	20.8	4.3	17.9
7	50th Percentile Value	41.9	21.2	4.5	18.1
8	60th Percentile Value	42.3	21.6	4.6	18.3
9	70th Percentile Value	42.9	22.0	4.6	18.7
10	80th Percentile Value	43.6	22.5	4.8	19.2
11	90th Percentile Value	44.6	23.3	5.2	19.8
12	95th Percentile Value	44.9	23.8	5.5	20.2
13	98th Percentile Value	45.9	24.5	5.9	20.8
14	Arithmetic Mean	41.8	21.1	4.2	18.2
15	Geometric Mean	41.8	21.0	3.8	18.1
16	Standard Deviation	2.1	1.8	1.3	1.4
17	Minimum	30.8	17.0	1.0	7.9
18	Maximum	46.6	25.3	6.7	23.6
19	**NAAQ Norms***	**100.0**	**60.0**	**80.0**	**80.0**
	% Values exceeding Norms*	0.0	0.0	0.0	0.0

Legend:$PM_{2.5}$-Particulate Matter size less than 2.5 µm; PM_{10}-Respirable Particulate Matter size less than 10 µm; SO_2-Sulphur dioxide; NO_2-Nitrogen Dioxide; CO-Carbon monoxide; O_3-Ozone; NH_3-Ammonia; Pb-Particulate Lead; As-Particulate Arsenic; Ni-Particulate Nickel; C_6H_6-Benzene & BaP- Benzo (a) pyrene in particulate phase levels were monitored below their respective detectable limits.

* NAAQ Norms-National Ambient Air Quality Norms-Revised as per GSR 826(E) dated 16.11.2009 for Industrial, Residential, Rural and other Area.

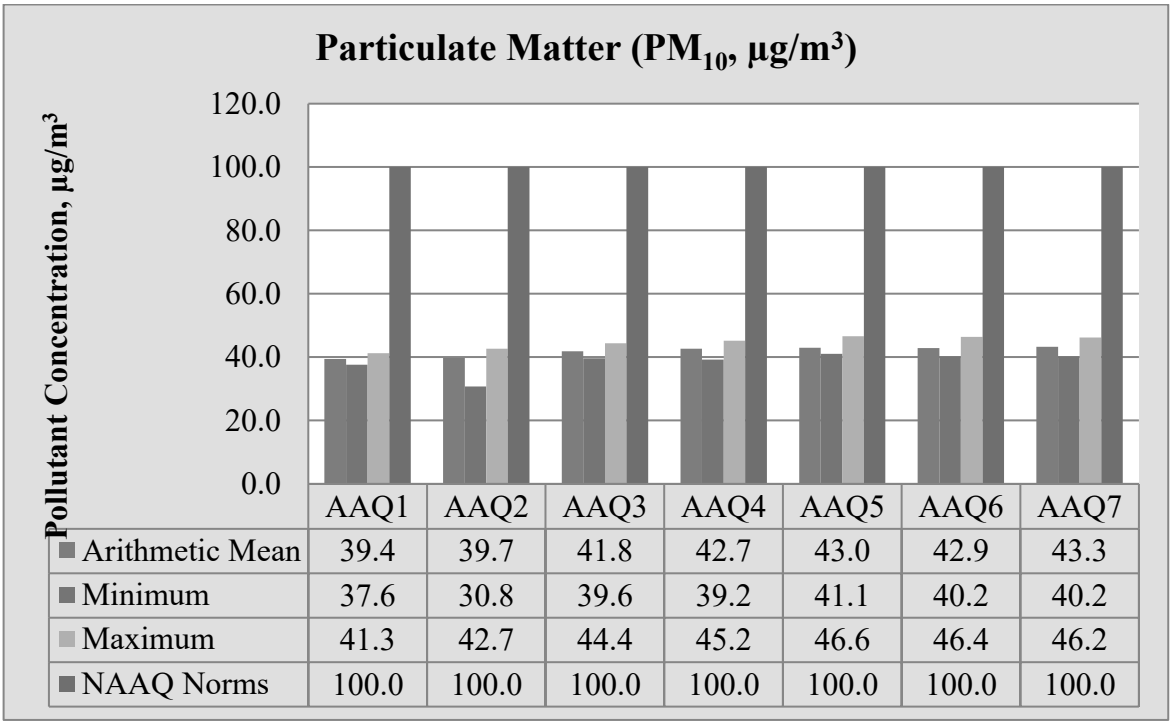
TABLE 3.19 –SUMMARY OF AMBIENT AIR QUALITY DATA

PM10	**AAQ1**	**AAQ2**	**AAQ3**	**AAQ4**	**AAQ5**	**AAQ6**	**AAQ7**
Arithmetic Mean	39.4	39.7	41.8	42.7	43.0	42.9	43.3
Minimum	37.6	30.8	39.6	39.2	41.1	40.2	40.2
Maximum	41.3	42.7	44.4	45.2	46.6	46.4	46.2
NAAQ Norms	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
PM2.5	**AAQ1**	**AAQ2**	**AAQ3**	**AAQ4**	**AAQ5**	**AAQ6**	**AAQ7**
Arithmetic Mean	18.9	19.6	21.1	21.7	22.0	22.0	22.3
Minimum	17.0	17.9	19.1	20.0	19.5	19.1	19.9
Maximum	21.2	22.0	23.3	23.7	24.9	25.3	24.9
NAAQ Norms	**60.0**	**60.0**	**60.0**	**60.0**	**60.0**	**60.0**	**60.0**
SO2	**AAQ1**	**AAQ2**	**AAQ3**	**AAQ4**	**AAQ5**	**AAQ6**	**AAQ7**
Arithmetic Mean	3.8	4.3	4.1	4.1	4.1	4.5	4.3
Minimum	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Maximum	6.7	5.2	5.7	5.6	5.6	6.4	6.1
NAAQ Norms	**80.0**	**80.0**	**80.0**	**80.0**	**80.0**	**80.0**	**80.0**
NO2	**AAQ1**	**AAQ2**	**AAQ3**	**AAQ4**	**AAQ5**	**AAQ6**	**AAQ7**
Arithmetic Mean	18.7	18.6	18.0	17.9	18.0	18.0	18.2
Minimum	16.3	16.0	16.3	7.9	16.6	16.5	16.9
Maximum	21.2	23.6	19.9	19.9	19.4	20.1	20.2
NAAQ Norms	**80.0**	**80.0**	**80.0**	**80.0**	**80.0**	**80.0**	**80.0**



	PM10	PM2.5	SO2	NO2
98th Percentile Value	45.9	24.5	5.9	20.8
Arithmetic Mean	41.8	21.1	4.2	18.2
Minimum	30.8	17.0	1.0	7.9
Maximum	46.6	25.3	6.7	23.6
NAAQ Norms*	100.0	60.0	80.0	80.0

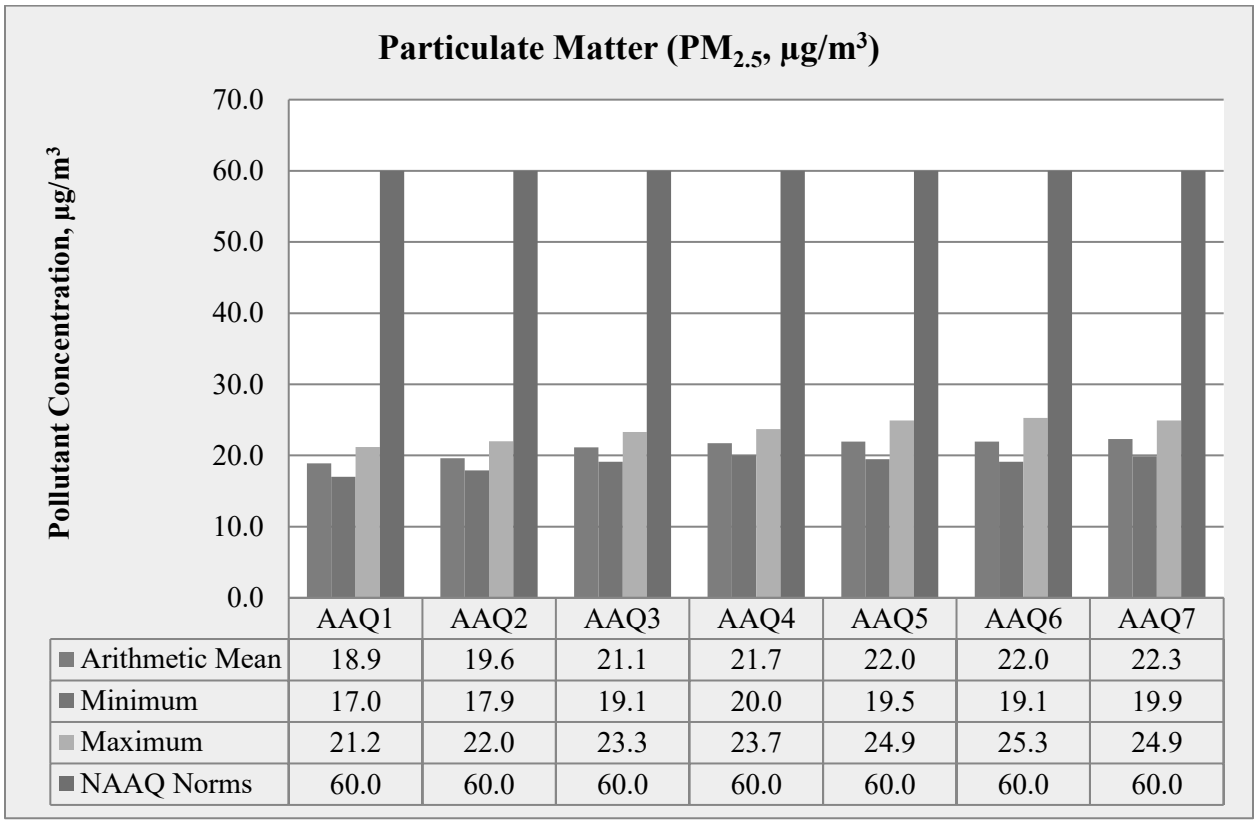
FIGURE 3.11: BAR DIAGRAM OF SUMMARY OF AAQ



	AAQ1	AAQ2	AAQ3	AAQ4	AAQ5	AAQ6	AAQ7
Arithmetic Mean	39.4	39.7	41.8	42.7	43.0	42.9	43.3
Minimum	37.6	30.8	39.6	39.2	41.1	40.2	40.2
Maximum	41.3	42.7	44.4	45.2	46.6	46.4	46.2
NAAQ Norms	100.0	100.0	100.0	100.0	100.0	100.0	100.0

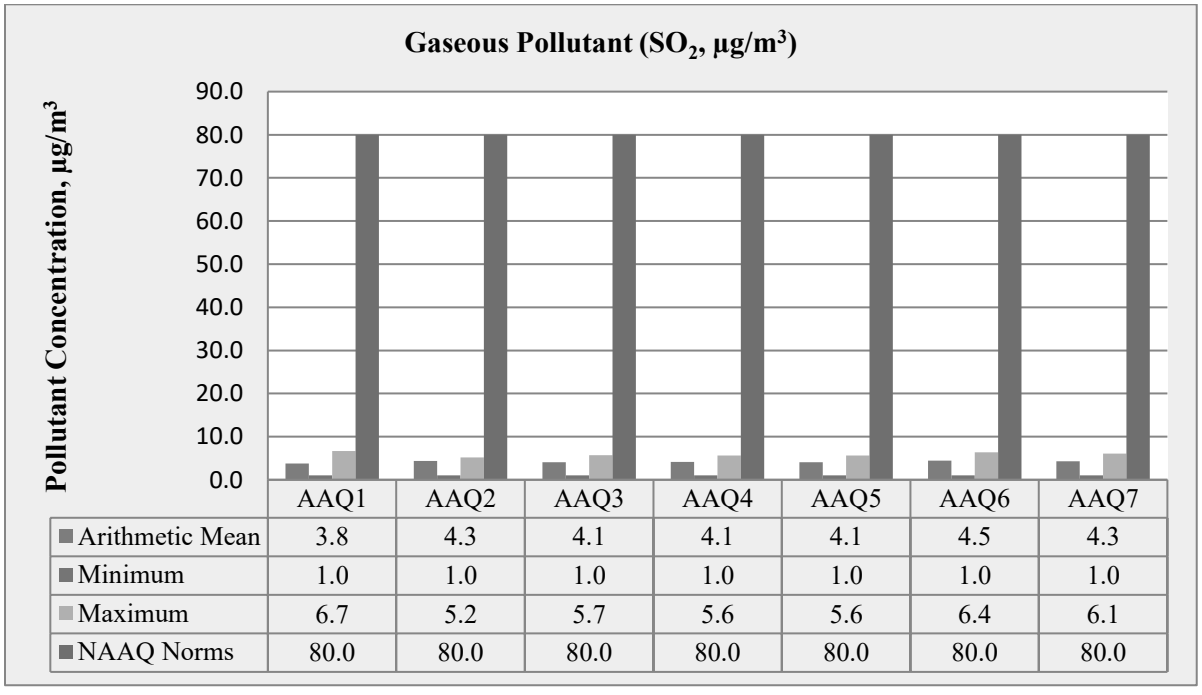
FIGURE 3.12: BAR DIAGRAM OF PARTICULATE MATTER (PM_{10})

FIGURE 3.13: BAR DIAGRAM OF PARTICULATE MATTER ($PM_{2.5}$)



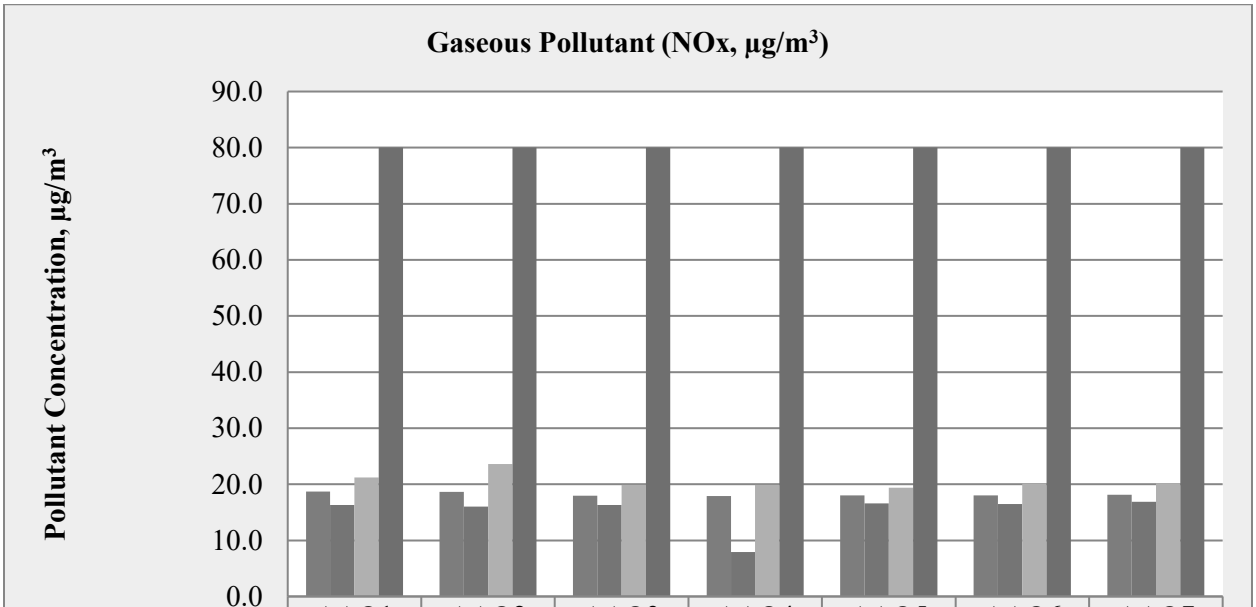
	AAQ1	AAQ2	AAQ3	AAQ4	AAQ5	AAQ6	AAQ7
Arithmetic Mean	18.9	19.6	21.1	21.7	22.0	22.0	22.3
Minimum	17.0	17.9	19.1	20.0	19.5	19.1	19.9
Maximum	21.2	22.0	23.3	23.7	24.9	25.3	24.9
NAAQ Norms	60.0	60.0	60.0	60.0	60.0	60.0	60.0

FIGURE 3.14: BAR DIAGRAM OF PARTICULATE MATTER (SO_2)



	AAQ1	AAQ2	AAQ3	AAQ4	AAQ5	AAQ6	AAQ7
Arithmetic Mean	3.8	4.3	4.1	4.1	4.1	4.5	4.3
Minimum	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Maximum	6.7	5.2	5.7	5.6	5.6	6.4	6.1
NAAQ Norms	80.0	80.0	80.0	80.0	80.0	80.0	80.0

FIGURE 3.15: BAR DIAGRAM OF PARTICULATE MATTER (NOx)



	AAQ1	AAQ2	AAQ3	AAQ4	AAQ5	AAQ6	AAQ7
Arithmetic Mean	18.7	18.6	18.0	17.9	18.0	18.0	18.2
Minimum	16.3	16.0	16.3	7.9	16.6	16.5	16.9
Maximum	21.2	23.6	19.9	19.9	19.4	20.1	20.2
NAAQ Norms	80.0	80.0	80.0	80.0	80.0	80.0	80.0

3.3.6 Interpretations & Conclusion

As per monitoring data, PM_{10} ranges from 30.8 µg/m^3 to 46.6 µg/m^3, $PM_{2.5}$ data ranges from 17.0 µg/m^3 to 25.3 µg/m^3, SO_2 ranges from 1.0 µg/m^3 to 6.7 µg/m^3 and NO_2 data ranges from 7.6 µg/m^3 to 23.6 µg/m^3. The concentration levels of the above criteria pollutants were observed to be well within the limits of NAAQS prescribed by CPCB.

3.4 Noise Environment

The vehicular movement on road and mining activities is the major sources of noise in study area, the environmental assessment of noise from the mining activity and vehicular traffic can be undertaken by taking into consideration various factors like potential damage to hearing, physiological responses, and annoyance and general community responses.

The main objective of noise monitoring in the study area is to establish the baseline noise level and assess the impact of the total noise expected to be generated during the project operations around the project site.

3.4.1 Identification of Sampling Locations

In order to assess the ambient noise levels within the study area, noise monitoring was carried out at Seven (7) locations. The noise level monitoring locations were carried out by covering commercial, residential, rural areas within the radius of 10km. A noise monitoring methodology was chosen such that best suited the purpose and objectives of the study.

TABLE 3.20 – DETAILS OF SURFACE NOISE MONITORING LOCATIONS

S. No	Location code	Monitoring Locations	Distance & Direction	Coordinates
1	N1	Core Zone	Project Area	11° 3'17.69"N 77°27'40.76"E
2	N2	Core Zone	Project Area	11° 3'27.91"N 77°27'56.57"E
3	N3	Perumtholuvu	3km SW	11° 2'47.05"N 77°26'3.32"E

4	N4	Saavadipalayam	6.3km NE	11° 5'16.62"N 77°31'2.36"E
5	N5	Sanarpatti	4.3km SE	11° 1'20.16"N 77°29'16.89"E
6	N6	Mudalipalayam	5.2km NW	11° 5'59.87"N 77°26'23.41"E
7	N7	Alagumalai	5.5km SW	11° 0'29.53"N 77°26'30.41"E

Source: On-site monitoring/sampling by Global Lab and Consultancy Services in association with GEMS

3.4.2 Method of Monitoring

Digital Sound Level Meter was used for the study. All reading was taken on the 'A-Weighting' frequency network, at a height of 1.5 meters from ground level. The sound level meter does not give a steady and consistent reading and it is quite difficult to assess the actual sound level over the entire monitoring period. To mitigate this shortcoming, the Continuous Equivalent Sound level, indicated by Leq, is used. Equivalent sound level, 'Leq', can be obtained from variable sound pressure level, 'L', over a time period by using following equation.

Leq = 10 Log L / T∑ (10Ln/10)

Where L = Sound pressure level at function of time dB (A)

T = Time interval of observation

3.4.3 Analysis of Ambient Noise Level in the Study Area

An analysis of the different Leq data obtained during the study period has been made. Variation was noted during the day-time as well as night-time. The results are presented in below Table 3.6

Day time : 6:00 hours to 22.00 hours.

Night time : 22:00 hours to 6.00 hours

TABLE 3.21 – NOISE MONITORING RESULTS IN CORE AND BUFFER ZONE

S. No	Locations	Noise level (dB (A) Leq)		Ambient Noise Standards
		Day Time	Night Time	
N-1	Core Zone	44.2	36.5	**Industrial Day Time- 75 dB (A) Night Time- 70 dB (A)**
N-2	Core Zone	44.5	35.3	
N-3	Perumtholuvu	47.9	34.6	**Residential Day Time– 55 dB (A) Night Time- 45 dB (A)**
N-4	Saav adipalayam	47.4	37.7	
N-5	Sanarpatti	45.2	35.5	
N-6	Mudalipalayam	47.2	37.1	
N-7	Alagumalai	48.5	37.3	

Source: On-site monitoring/sampling by Global Lab and Consultancy Services in association with GEMS

FIGURE 3.16: NOISE MONITORING STATIONS AROUND 10 KM RADIUS

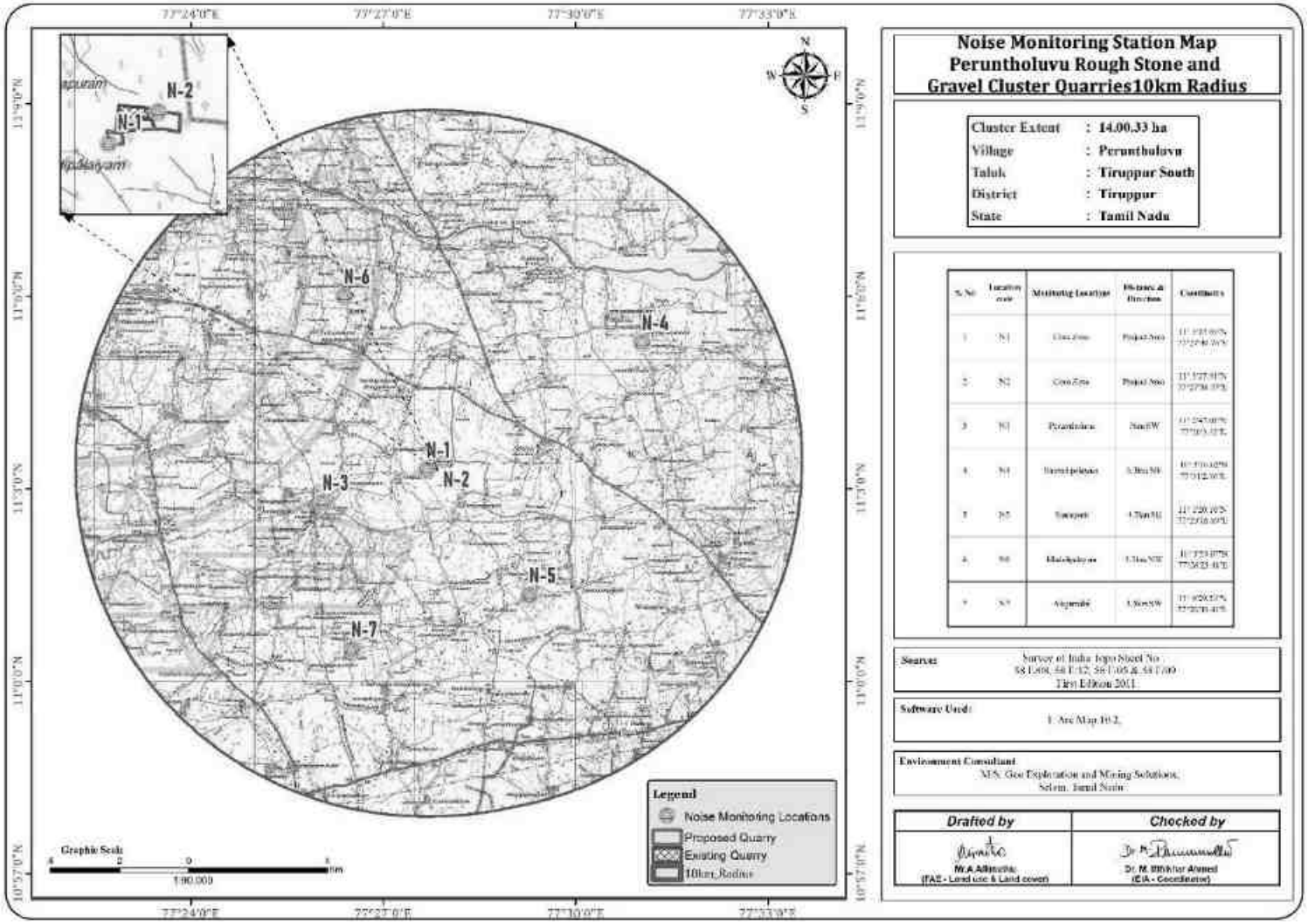
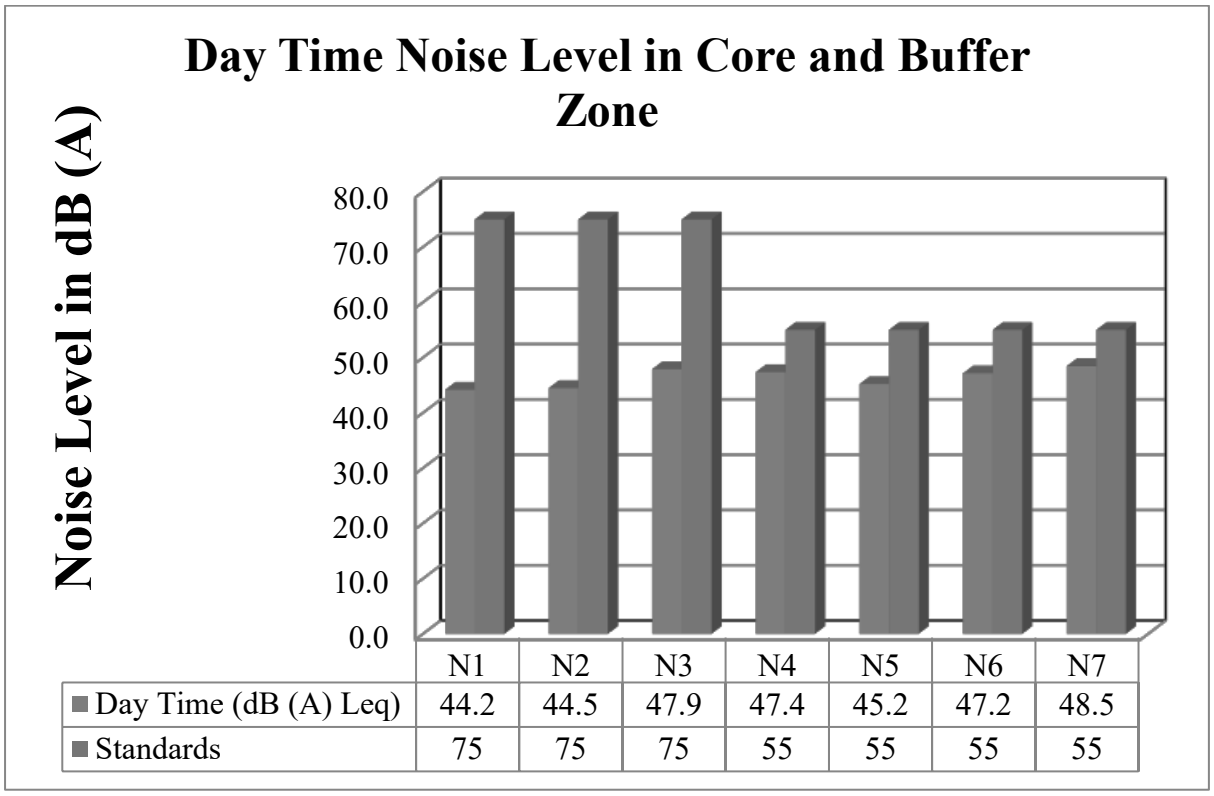
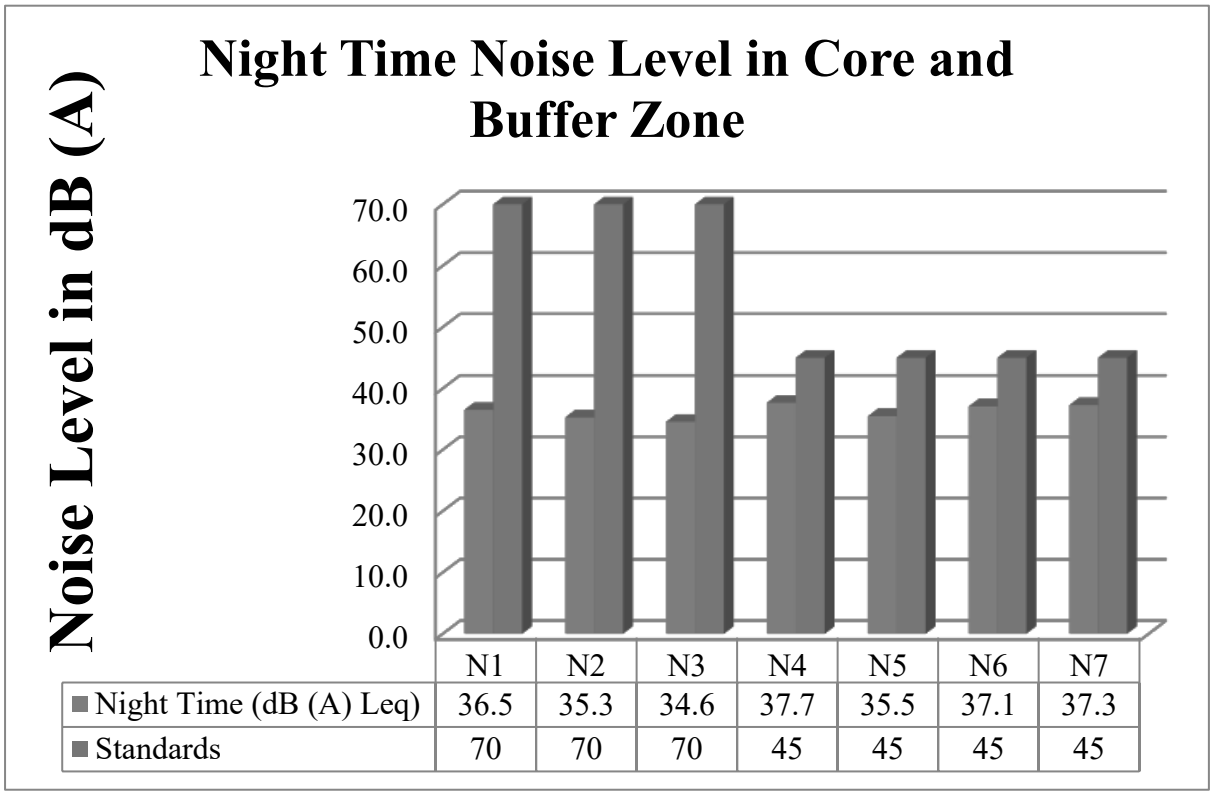


FIGURE 3.17: DAY & NIGHT TIME NOISE LEVELS IN CORE AND BUFFER ZONE





3.4.4 Interpretation & Conclusion:

Ambient noise levels were measured at 7 (Seven) locations around the project area considering cluster quarries. Noise levels recorded in core zone during day time were from 44.2 – 44.5 dB (A) Leq and during night

time were from 35.3 – 36.5 dB (A) Leq. Noise levels recorded in buffer zone during day time were from 45.2–48.5 dB (A) Leq and during night time were from 34.6 – 37.7 dB (A) Leq.

3.5 ECOLOGICAL ENVIRONMENT

3.5. Biological Environment:

3.5.1 Study area Ecology

The core area extent of 9.05.38Ha has an impact on the diversity of flora and fauna of the surrounding area. But present work was carried out on the detailed study of the impacts of the Rough stone and gravel quarry on the ecology and biodiversity of the core lease area with the proper mitigation and sustainable management plan. The proposed mine lease area exhibits undulated topography. The following methods were applied during the baseline study of flora, fauna and diversity assessment.

3.5.2 Objectives of Biological Studies

a) To study the likely impact of the proposed mining project on the local biodiversity and to suggest mitigation measures, if required, for vulnerable biota.
b) Undertake intensive field survey to assess the status of floral & faunal component in different habitats in the core and buffer areas of the project site.
c) Identification and listing of flora and fauna which are important as per the Wildlife (Protection) Act 1972/ the Wildlife (Protection) Amendment Act 2022.
d) Suggest Wildlife conservation (species specific/habitat specific) and management plan for the threatened (critically endangered & endangered species - schedule I) faunal species if any reported within the study area as per the Wildlife (Protection) Amendment Act 2022.
e) To identify the impacts of mining on agricultural lands and how it affects.
f) Proper collection of information about wildlife Sanctuaries/ national parks/ biosphere reserves of the project area.
g) Devise management & conservation measures for biodiversity.

3.5.3 Methodology of Sampling

Primary survey was conducted with established and accepted ecological methods in different habitats of study area. The field data collection mainly included biodiversity status assessment of different life forms habit of flora elements such as Trees, Shrubs, Climbers Herbs and Grass. Faunal diversity was assessed by inventorying the taxonomical groups like Mammals, Herpetofauna, birds and butterflies.

Nocturnal faunal species were searched by locating their calls during night time and by searching along the forest shrubs areas, dense dry bushes, below the stones, water bodies. During the study, to know more about the seasonal presence of flora and faunal species, information was obtained from local people and forest department.

Identification of vegetation in relation to the natural flora and crops was conducted through reconnaissance field surveys and onsite observations in core and buffer zone. The plant species identification was done based on the reference materials and also by examining the morphological characteristics and reproductive materials i.e. flowers, fruits and seeds. Land use pattern in relation to agriculture crop varieties were identified through physical verification of land and interaction with local villagers.

Plot method is used in the floral documentation in the core and buffer zone. For trees (10x10-m), shrubs (5x5-m) and herbs (1x1-m) plots were taken. Birds and butterflies were mainly focused during faunal assessment, transect method was employed for birds and butterflies. Transect is a path along which one counts and records the occurrence of an individual for study. A straight-line walk covering desired distance, within a time span of one hour to 30 minutes was carried out in the proposed region. Bird species were recorded during the hours of peak activity. 0700 to 1100 Hrs and 1430 to 1730 Hrs (Bibby et al. 2000).

Direct observations and bird calls were used for bird documentation. Same transects were used for counting butterflies. Opportunistic observations were made for Amphibians, reptiles and ordinates. Presence of mammals was recorded by direct and indirect signs. All possible transects were taken for birds and butterflies. Birds and butterflies were classified into species level. Recorded bird species were identified to species level using standard books (Ali & Ripley 1987, Grimmett et al., 2016).

The secondary baseline data of flora and fauna has been complied through the following data sources:

1. Forest working plan
2. Schedule I to IV: The Indian Wildlife (Protection) Amendment Act, 2022
3. Vivek Menon, Indian Mammals: A Field Guide. Hachette Book publishing India Pvt. Ltd., India.
4. Daniel J.C. The Book of Indian Reptiles and Amphibians, Bombay Natural History Society., India.
5. Ali, S and Ripley. handbook of the Birds of India and Pakistan together with those of Nepal, Sikkim and Bhutan, Oxford University Press, Bombay.
6. ENVIS Centre on Wildlife and Protected Area.
7. Birds Life Data Zone
8. Ebird.org
9. Global Biodiversity Information Facility

3.5.4 . Sampling

A stratified simple random sampling procedure was employed to obtain a sample from study area. The study area was further stratified in different land use/ecosystems.

3.5.5 Sampling Size

Keeping in mind both random sampling technique and covering all land use patterns for the study following sampling locations were chosen depending up on the area of the proposed site.

3.5.6 Timing of Study

The study was carried out during morning and evening hours, to cover the different activity phases for important species such as time resting, feeding, hunting, and daily movements.

3.5.7 Observations from Sampling

The various observations relating to flora and fauna species are discussed in detail below, in separate sections.

3.5.8 . Field Equipment's/ References

Following tools/equipment were used for conducting phytosociological study.

- Ballpoint pen, Field bags, Field notebooks, field shoes, gloves, GPS, Measuring tapes and scales, Plant cutters, packet lens, ropes etc.
- Canon Mark III Camera with 50-500mm lens– Snap shots taken
- Leica Binoculars (8x 20) to spot/identify species
- IUCN Red Data Book – https://www.iucnredlist.org/species

Ornithological/Entomological/Herpetological/Mammalian catalogues and pictorial descriptions from various authors and websites are followed for species identification.

3.5.9 Part I Field Sampling Techniques (Fauna Sampling)

3.5.9.1 Transect walk – Birds

Six no transect lines with varying length (100m-300m) and fixed width (2m) were laid which cuts through the core and buffer areas of proposed site. The transect surveys were conducted from 0700 to 1100Hrs and 1430 to 1730Hrs (Bibby et al. 2000). All avifauna found along these transects were recorded for analysing the data. Counts were conducted while there is no heavy rain, mist or strong wind.

3.5.9.2 Modified Pollard Walk – for Butterflies

The Modified Pollard Walk (Pollard 1977, 1993, Walpole 1999) using fixed width transect walk method were employed to investigate butterfly spatial distribution, diversity and abundance at the different survey sites.

3.5.9.3. Visual Encounter Survey (VES) - reptiles and Amphibians

VES is a time-constrained sampling technique (Campbell and Christman, 1982; Corn and Bury, 1990). It needs a systematic search through an area or habitat for a prescribed time period (Campbell and Christman, 1982). The result of VES is measured against the time spent on search. VES technique is one of the simplest methods, and an appropriate technique for both inventory and monitoring Herpetofauna (Heyer et al. 1994).

3.5.9.4. Observational methods- Mammals

For the purpose of recording mammals, we used two different observational techniques: (1) direct observations, and (2) recording of occurrences like holes, markings, scats, hairs, and spines (Menon 2003). For identification confirmations, photographs with a scale reference were used, and locations were recorded using a portable GPS device. Indigenous knowledge particularly that of the locals, was occasionally employed to compile a preliminary list of species and/or aid in the recognition of indicators.

3.5.9.5. Multiple Stage Quadrats – Vegetation

A variety of habitat or vegetation structure variables were measured using the Multiple Stage Quadrat sampling protocol (Sykes and Horrill 1977). All of those areas were sampled, and the major corners were temporarily delineated with colored ribbons. Each site was identified in the field using a compass and clinometer, and the plot's latitude, longitude, and elevation were recorded using a handheld Global Positioning System (Garmin 12XL).

3.5.9.6. Flora

3.5.9.7 Quadrat Sampling Method

The quadrat sampling technique was used for sampling vegetation. Sampling quadrats of the regular shape of dimensions 10 × 10 m, 5 × 5 m, and 1 × 1 m, were nested within each other and were defined as the units for sampling the area and measuring the diversity for trees, Shrubs, and herbs respectively.

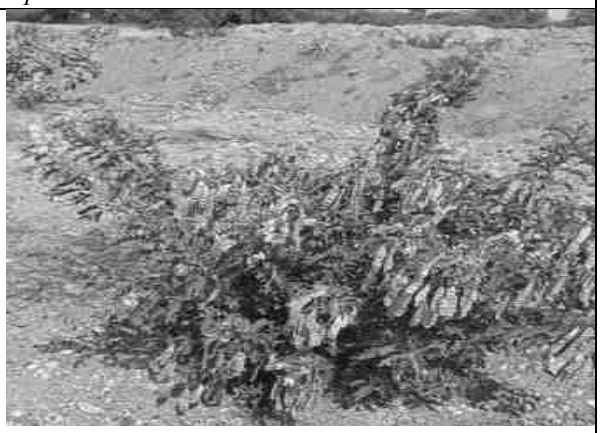
3.5.9.8 Flora Composition in the Core Zone (Primary data)

Core zone flora samplings were conducted between 8.30 pm to 10.00 pm in three locations. The applied area is a plain terrain, so we used quadrat sampling methods. Taxonomically a total of 19 species belonging to 9 families have been recorded from the core mining lease area based on habitat classification of the enumerated plants the majority of species were Herbs 7 (37%) followed by Trees 7 (37%), Shrubs 3 (16%), and Grasses 2 (10%). Details of flora with the scientific name were mentioned in Table No. 3.53. The result of the core zone of flora studies shows that Fabaceae and Lamiaceae are the main dominating species in the study area mentioned in Table No.3.53. No species were found as a threatened category Table No.3.53. The percentage distribution of floral life forms in Core Zone is given in Fig No.3.35.

Flora in the Core zone of Perunthuoluvu Village, Rough stone and Gravel quarry, Tiruppur South Taluk, Tiruppur District (Primary data)

SI. No	English Name	Vernacular Name	Scientific Name	Family Name
Trees				
1.	Neem	Vembu	*Azadirachta indica*	Meliaceae
2.	Mesquite	Mullu maram	*Neltuma juliflora*	Fabaceae
3.	White Bark Acacia	Vela maram	*Vachellia leucophloea*	Fabaceae
4.	Bitter Albizia	Arappu	*Albizia amara*	Fabaceae
5.	Pala indigo	Paalai Maram	*Wrightia tinctoria*	Apocynaceae
6.	Asian Palmyra palm	Panai maram	*Borassus flabellifer*	Arecaceae
7.	River tamarind	Savundal	*Leucaena leucocephala*	Fabaceae
Shrubs				
1.	Milk Weed	Erukku	*Calotropis gigantea*	Apocynaceae
2.	Avaram	Avaram	*Senna auriculata*	Fabaceae
3.	Common prickly pea	Sappathikalli	*Opuntia stricta*	Cactaceae
Herbs				
1.	Common leucas	Thumbai	*Leucas aspera*	Lamiaceae
2.	Fish poison	Kolunchi	*Tephrosia purpurea*	Fabaceae
3.	Pignut	Nattapoochedi	*Hyptis suaveolens*	Lamiaceae
4.	Indian Catmint Plant	Pei viratti	*Anisomeles malabarica*	Lamiaceae
5.	Coat buttons	Thatha poo	*Tridax procumbens*	Asteraceae
6.	Desert cotton	Perumpoolai	*Aerva javanica*	Amaranthaceae
7.	Knotgrass	Siru Poolai	*Ouret lanata*	Amaranthaceae
Grasses				
1.	Great brome	Thodappam	*Bromus diandrus*	Poaceae
2.	Needle Grass	Cheevam pul	*Aristida adscensionis*	Poaceae

Sources: Species observation in the field study

	
Vachellia leucophloea	*Azadirachta indica*
	
Calotropis gigantea	*Opuntia stricta*
	
Tephrosia purpurea	*Senna auriculata*
	
Albizia amara	*Leucaena leucocephala*

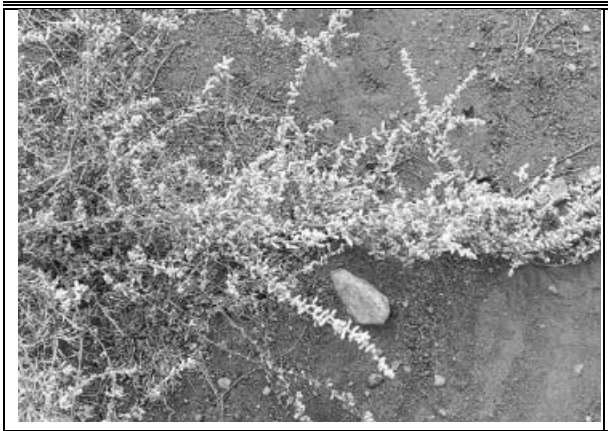
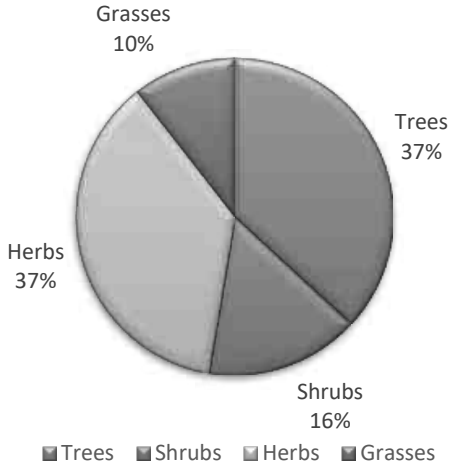
	
Ouret lanata	*Wrightia tinctoria*

Fig No: 3.34. Flora species observation in the Core zone area

Fig No. 3.35. Graph Showing % Distribution Of Floral Life Forms (Core Zone)



The trees surveys were conducted around 300m radius from the proposed project site cluster are of Peruntholuvu village. While sampling, circumference at breast Height (CBH) of tree species was measured at 1.26m from ground level, along with the name of the species, phenology (flowering, fruiting, and flushes), and uses. After surveying areas, a detailed trees inventory has been compiled. A list of all plants from the study area was prepared and their habitats were recorded. The species of trees were documented during this base line survey. The dominant plant species growing in this area were *Cocos nucifera*, *Vachellia leucophloea*, etc.

Tree survey around 300m radius from the proposed project site (Primary data)

S.No	English Name	Vernacular Name	Scientific Name	No of trees
Trees				
1.	Acacia Nilotica	Karuvelammaram	*Vachellia nilotica*	15
2.	White Bark Acacia	Vela maram	*Vachellia leucophloea*	109
3.	Neem	Vembu	*Azadirachta indica*	58
4.	Coconut	Thennai maram	*Cocos nucifera*	143
5.	Bitter Albizia	Arappu	*Albizia amara*	26
6.	Mesquite	Mullumaram	*Prosopis juliflora*	15
7.	Pala indigo	Paalai Maram	*Wrightia tinctoria*	23
8.	Asian Palmyra palm	Panai maram	*Borassus flabellifer*	18

(**Sources**: Species observation in the field study)

Flora in the Buffer zone Peruntholuvu Village, Rough stone and Gravel quarry, Tiruppur South Taluk, Tiruppur District (Primary data and Secondary data)

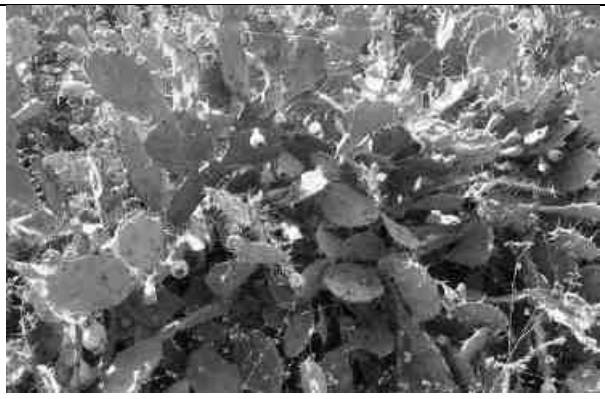
Sl.No.	English Name	Vernacular Name	Scientific Name	Resource use type *(E,M,EM)
Trees				
1.	White Bark Acacia	Vela maram	*Vachellia leucophloea*	E
2.	Coconut	Thennai maram	*Cocos nucifera*	EM
3.	Gum arabic tree	Karuvelam	*Acacia nilotica*	NE
4.	Neem or Indian lilac	Vembu	*Azadirachta indica*	M
5.	River tamarind	Savundal	*Leucaena leucocephala*	E
6.	Lemon	Ezhumuchaipalam	*Citrus lemon*	EM
7.	Bitter Albizia	Arappu	*Albizia amara*	M
8.	Banyan tree	Alamaram	*Ficus benghalensis*	E
9.	Madras Thorn	Kodukapuli	*Pithecellobium dulce*	E
10.	Bamboo	Moonghil	*Bambusa bambo*	E
11.	Asian Palmyra palm	Panai maram	*Borassus flabellifer*	E
12.	Peepal	Arasamaram	*Ficus religiosa*	M
13.	Castor oil plant	Amanakku	*Ricinus communis*	M
14.	Tamarind	Puliyamaram	*Tamarindus indica*	EM
15.	False ashoka	Asoka maram	*Polyalthia longifolia*	E
16.	Monkey pod tree	Thungumoonchi	*Samanea saman*	E
17.	Mesquite	Sema Karuvelam	*Prosopis juliflora*	E
18.	Mango	Manga	*Mangifera indica*	E
19.	Eucalyptus	Eucalyptus	*Eucalyptus globules*	EM
20.	Custard apple	Seethapazham	*Annona reticulata*	E
21.	Black plum	Navalmaram	*Sygygium cumini*	EM
22.	Indian gooseberry	Nelli	*Emblica officinalis*	EM
23.	Indian almond	Padam maram	*Terminalia catappa*	EM
24.	Sacred fig	Arasan	*Ficus religiosa*	E
25.	Indian mulberry	Nuna	*Morinda tinctoria*	E
26.	Teak	Thekku	*Tectona grandis*	E
27.	Portia tree	Poovarasan	*Thespesia populnea*	E

28.	Banana Tress	Vazhaimaram	*Musa paradisiaca*	EM
29.	Millettia pinnata	Pongam oiltree	*Pongamia pinnata*	E
30.	Guava	Koyya	*Psidium guajava*	EM
31.	Curry tree	Karuveppilai	*Murraya koenigii*	EM
32.	Henna	Marudaani	*Lawsonia inermis*	EM
33.	Drumstick tree	Murunga maram	*Moringa oleifera*	EM
34.	Papaya	Pappali maram	*Carica papaya*	EM
35.	Indian elm	Ayya maram	*Holoptelea integrifolia*	E
36.	Pencil tree	Chakkalavi	*Euphorbia tirucalli*	M
37.	Flame Tree	Vathanarana maram	*Delonix Elata*	EM
38.	Pala indigo	Paalai Maram	*Wrightia tinctoria*	E
39.	Indian Medlar	Magizhamboo tree	*Mimusops elengi*	M
Shrubs				
1.	Triangular spruge	Chaturakalli	*Euphorbia antiquorum*	NE
2.	Rosy Periwinkle	Nithyakalyani	*Cathranthus roseus*	M
3.	Shoe flower	Chemparuthi	*Hibiscu rosa-sinensis*	EM
4.	Rough cocklebu	Ottarachedi	*Xanthium strumarium*	M
5.	Castor oil plant	Amanakku	*Ricinus communis*	M
6.	Lantana	Unnichedi	*Lantana camara*	M
7.	Devils'claw	Kaakkaa mookuchedi	*Martynia annua*	M
8.	Common prickly pea	Sappathikalli	*Opuntia stricta*	M
9.	Milk Weed	Erukku	*Calotropis gigantea*	M
10.	Avaram	Avarai	*Senna auriculata*	M
11.	Indian mallow	Thuthi	*Abutilon indicum*	M
12.	Indian Oleander	Arali	*Nerium indicum*	M
13.	Night shade plan	Sundaikai	*Solanum torvum*	EM
14.	Thorn apple	Uumaththai	*Datura metel*	NE
15.	Bush Morning Glory	Neyvelik Kattamanakku	*Ipomoea carnea*	E
16.	Century plant	Anaikathalai	*Agave americana*	M
17.	Jackal jujube	Soorai pazham	*Ziziphus oenopolia*	M

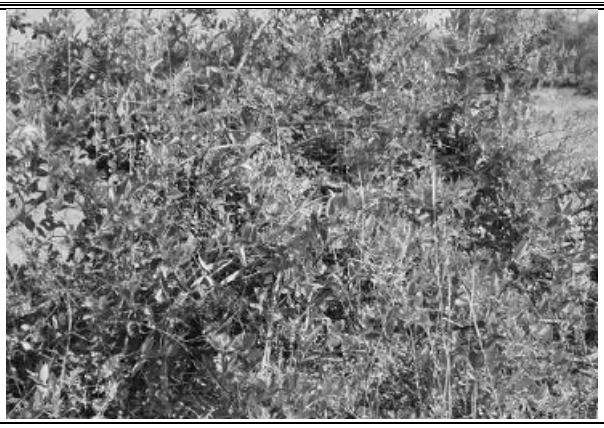
18.	Indian jujube	Elanthai	*Ziziphus mauritiana*	M
19.	Peacock Flower	Mayil Kontai	*Caesalpinia pulcherrima*	M
20.	Puriging nut	Kattamanakku	*Jatropha curcas*	EM
21.	Paper flower	Kahitha poo	*Bougainvillea glabra*	M
22.	Coffee senna	Pon Avarai	*Senna occidentalis*	M
23.	Indian Bowstring Hemp	Marul-kalang	*Sansevieria roxburghiana*	M
24.	Coromandel Boxwood	Karai sedi	*Canthium coromandelicum*	M
Herbs				
1.	Indian Catmint Plant	Pei viratti	*Anisomeles malabarica*	M
2.	Tridax daisy	Veetukaaya poondu	*Tridax procumbens*	M
3.	Sessile Joyweed	Ponnankanni	*Alternanthera sessilis*	M
4.	Indian Copperleaf	Kuppaimeni	*Acalypha indica*	M
5.	Fish poison	Kolinchi	*Tephrosia purpurea*	M
6.	Marsh barbel	Neermulli	*Hygrophila auriculata*	M
7.	Asthma-plant	Amman pacharisi	*Euphorbia hirta*	M
8.	Common Wireweed	Arivalmanai poondu	*Sida acuta*	M
9.	Carrot grass	Parttiniyam	*Parthenium hysterophorus*	NE
10.	Mexican prickly poppy	Piramathanda, Kudiyotti	*Argemone mexicana*	M
11.	Common leucas	Thumbai	*Leucas aspera*	M
12.	Prickly chaff flower	Nayuruvi	*Achyranthes aspera*	M
13.	Holy basil	Thulasi	*Ocimum tenuiflorum*	M
14.	Green amaranth	Mulai keerai	*Amaranthus viridis*	M
15.	Yellow-fruit nightshade	Kandakathirikai	*Solanum surattense*	M
16.	Threadstem carpetweed	Parpatakam sedi	*Mollugo cerviana*	M
17.	Node Flower	Kumatti keerai	*Allmania nodiflora*	M
18.	Indian doab	Arugampul	*Cynodon dactylon*	E
19.	Indian mint	Karpura valli	*Coleus amboinicus*	EM
20.	Pignut	Nattapoochedi	*Hyptis suaveolens*	M
21.	Aloe barbadensis	Katrazhai	*Aloe vera*	EM
22.	Madagascar Periwinkle	Nithykalyani Po	*Catharanthus roseus*	E
23.	Asian spider flower	Naaikaduku	*Cleome viscosa*	M
24.	Red Spiderling	Mukirattai	*Boerhavia diffusa*	M

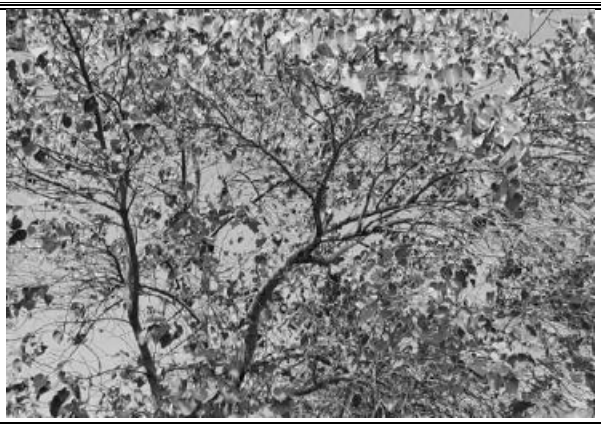
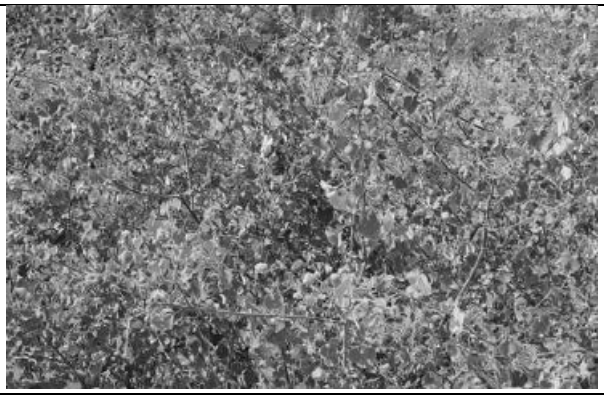
25.	Mountain knotgrass	Pulaa poo	*Aerva lanata*	M
26.	Bindii	Nerunchi	*Tribulus terrestris*	M
27.	Shame plant	Thottachenunki	*Mimosa pudica*	M
28.	Tomato	Thakkali	*Solanum lycopersicum*	EM
29.	False daisy	Karisalankanni	*Eclipta alba*	M
30.	Flannel Weed	Sida mutti	*Sida cordifolia*	M
31.	Eggplant	Kathrikkai	*Solanum melongena*	EM
32.	Coat buttons	Thatha poo	*Tridax procumbens*	M
33.	Desert cotton	Perumpoolai	*Aerva javanica*	M
Climber/ Creepers				
1.	Stemmed vine	Perandai	*Cissus quadrangularis*	M
2.	Balloon plant	Mudakathan	*Cardiospermum halicacabum*	M
3.	Cucumis maderaspatanus	Musumusukkai	*Mukia maderaspatana*	M
4.	Rosary Pea	Gundumani	*Abrus precatorius*	M
5.	Ivy gourd	Kovai	*Coccinia grandis*	M
6.	Butterfly pea	Sangu poo	*Clitoria ternatea*	M
7.	Wild jasmine	Malli	*Jasminum augustifolium*	EM
8.	Pointed gourd	Kovakkai	*Trichosanthes dioica*	EM
9.	Bottle Guard	Sorakkai	*Lagenaria siceraria*	EM
Grass				
1.	Jungle rice	Kozhikalpul	*Echinochloa colona*	NE
2.	Nut grass	Korrai pull	*Cyperus rotundus*	NE
3.	Swollen Windmill Grass	Kuruthu-pillu	*Chloris barbata*	NE
4.	Buffel grass	Erumaipul	*Cenchrus ciliaris*	NE
5.	Needle Grass	Cheevam pul	*Aristida adscensionis*	E
6.	Mauritian Grass	Moongil pul	*Apluda mutica*	NE

Sources: Species observation in the field study and secondary data

	
Leucas aspera	*Calotropis gigantea*
	
Leucaena leucocephala	*Opuntia stricta*
	
Cardiospermum halicacabum	*Cocos nucifera*

	
Vachellia leucophloea	*Tamarindus indica*
	
Sansevieria roxburghiana	*Euphorbia tirucalli*
	
Aloe vera	*Lantana camera*

	
Albizia amara	*Canthium coromandelicum*
	
Euphorbia antiquorum	*Agave americana*
	
Nerium indicum	*Holoptelea integrifolia*

	
Moringa oleifera	*Thespesia populnea*
	
Azadirachta indica	*Abutilon indicum*
	
Prosopis juliflora	*Borassus flabellifer*

	
Senna auriculata	*Aerva javanica*
	
Wrightia tinctoria	*Delonix Elata*
	
Ricinus communis	*Mimusops elengi*

Flora species observation in the Buffer zone area

3.5.9.9. Flora Composition in the Buffer Zone (Primary data & Secondary data)

Buffer zone flora sampling was conducted between 10.30 am to 12.30 pm in eight different locations in 10 km radius as per the ToR. The most important and widely used methods for a general assessment is belt transect/quadrate methods. The study area was divided according to habitat types followed the random sampling methods in the selected area. For plant biodiversity study in the ecosystems, the quadrate methods were followed. The proposed project site there are 111 species in the buffer zone study area in total, based on records. The floral (111) varieties among them Trees 39, Herbs 33, Shrubs 24, Climbers/ Creepers 9 and Grasses 6 were identified. The result of the buffer zone of flora studies shows that Fabaceae and Cucurbitaceous, Euphorbiaceae is the main dominating species in the study area mentioned in Table No.3.55. There are no impacts due to this mining activity. There are no Rare, Endangered, and Threatened Flora species in the mining area and their surrounding study area. Apart from the proposed project area, there is agricultural land. Horticulture and agricultural land are untouched. There are no Rare,

Endangered, and Threatened Flora species in the mining area and their surrounding study area. A list of floral species has been prepared based on primary survey (site observations) and discussion with local people. The total number of different plant life forms under trees, shrubs, herbs, and climbers is shown in Table No 3.56 and their % distribution is shown in Figure No 3.37.

Number of floral life forms in the Study Area

S. No	Plant Life Form	Number of Species
1	Trees	39
2	Shrubs	24
3	Herbs	33
4	Climber/Creepers	9
6	Grasses	6
Total No. of Species		**111**

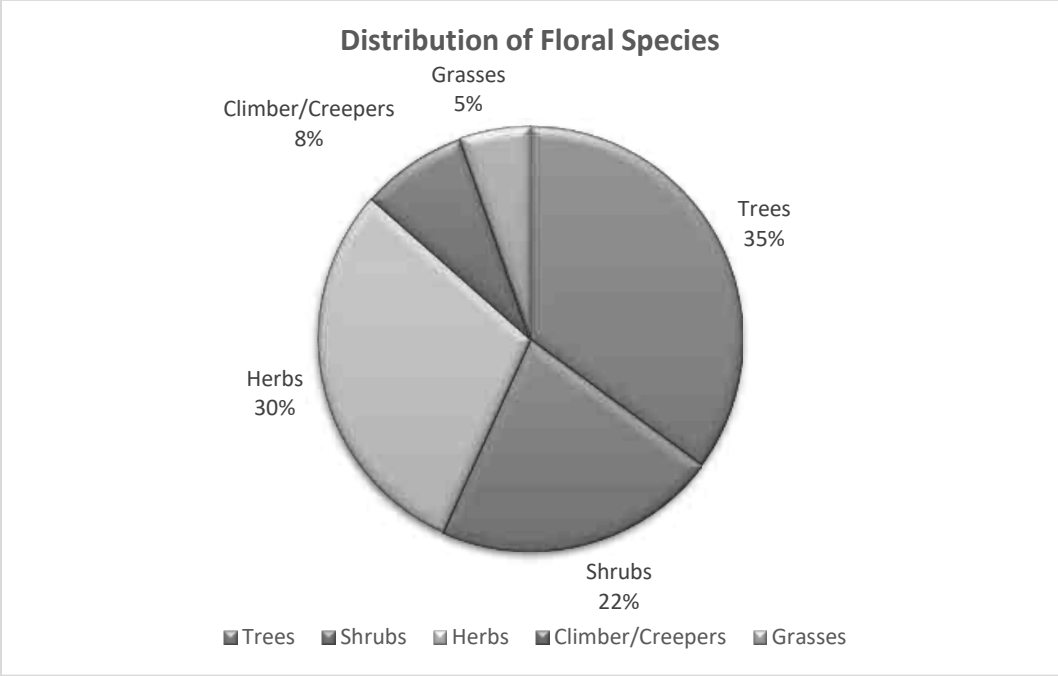
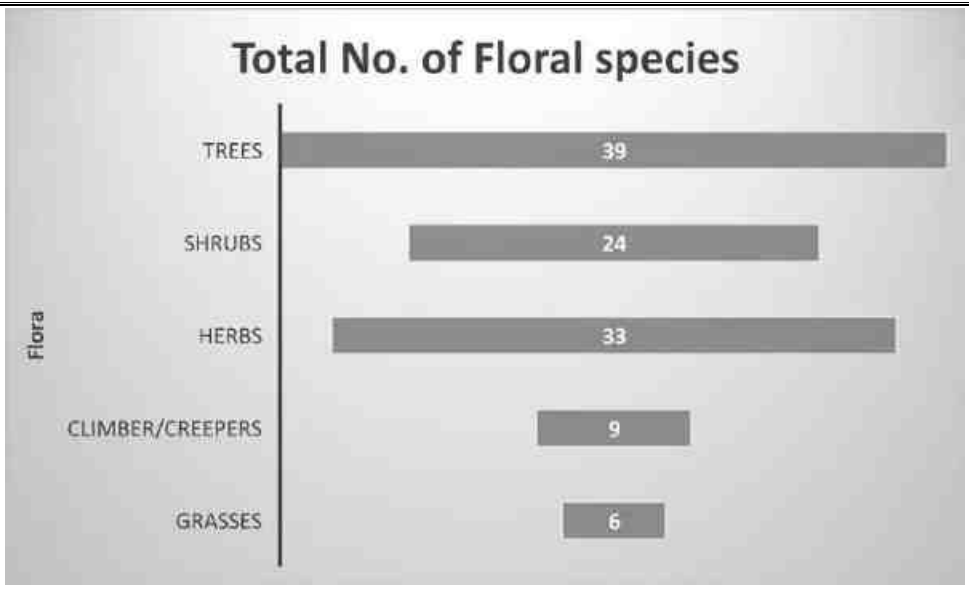


Fig No. 3.37: Diagram showing % distribution of floral life forms



3.5.9.10. Major Agricultural Crops

Tiruppur district though an industrial district plays important role in Agriculture also. The food production required to be enhanced to provide food and nutritional security to the growing district population. In Tiruppur more than 80% of the farmers belong to small and marginal category and they play a key role in overall development in Agriculture. The total area of cultivation is around 2,28,556 hectares, mainly food and commercial crops. The chief food crops are paddy, millets and pulses. The non-food or commercial crops in the district are cotton, oil seeds and coconut. Details of the major crops are given in Table No: 3.57.

Major crops in Tiruppur District

S.No	Major crops	Scientific name	Families
1	Paddy	*Oryza sativa*	Grasses
2	Sorghum	*Sorghum bicolor*	Grasses
3	Maize	*Zea mays*	Grasses

(**Source:** Agriculture Contingency Plan– Tiruppur-2013)

3.5.9.11. Horticulture

Major horticulture crops cultivated in this district are fruits crops like mango, banana, aonla, sapota and papaya, vegetables like bhendi, tomato, brinjal, onion, tapioca, moringa, spices and condiments like chillies and turmeric, plantation crops like cocoa ,flower crops like jasmine, tube rose, marigold, cock's comb and medicinal plants like gloriosa and coleus. Details of major field crops and horticulture in Tiruppur district is given in Table No: 3.58.

Major Field crops & horticulture in Tiruppur District.

Sl.No	Common Name	Scientific Name	Family
Major Horticultural Crops			
1	Banana	*Musa paradisia*	Musaceae
2	Mango	*Mangifera indica*	Anacardiaceae
3	Jack	*Artocarpus heterophyllus*	Mulberry
4	Guava	*Psidium guajava*	Myrtle
5	Sapota	*Manilkara zapota*	Sapotaceae
Vegetables			

7	Onion	*Allium cepa*	Amaryllidaceae
8	Tapioca	*Manihot esculenta*	Spurges
9	Brinjal	*Solanum melongena*	Nightshade
10	Tomato	*Solanum lycopersicum*	Nightshade
11	Gourds	*Lagenaria siceraria*	Cucurbits
13	Moringa	*Moringa oleifera*	Moringaceae
Medicinal and Aromatic Plants			
14	Gloriosa superba	*Colchicaceae*	Colchicaceae
15	Coleus	*Plectranthus scutellarioides*	Mints
Flowers			
16	Jasmine	*Jasminum*	Jasminaceae
17	Crossandra	*Crossandra infundibuliformis*	
18	Crysanthimum	*Asteraceae*	Asteraceae
19	Rose & Jathi	*Rosa*	Rosaceae
20	Tuberose	*Polianthes tuberosa*	Asparagus
Spices and Condiments			
21	Chillies	*Capsicum frutescens*	Solanaceae
22	Turmeric	*Curcuma longa*	Zingiberaceae
23	Tamarind	*Tamarindus indica*	Legumes
24	Curry leaf	*Murraya koenigii*	Rutaceae
Plantation Crops			
25	Cashew	*Anacardium occidentale*	Cashews
26	Cocoa	*Theobroma cacao*	Mallows

(**Source**: Statistical handbook of Tamil Nadu-2013)

3.5.9.12 Types of Irrigation

Irrigation is the artificial application of water to the soil for normal growth of plants. Water is an important determinant factor for production of crops in agriculture sector. Intensive and extensive cultivation of land depends mainly on the availability of water. Medium and minor irrigation schemes are implemented in the state for augmenting the water supply for agriculture. The various sources of irrigation are canals, tanks, tube wells, ordinary wells, springs and channels. The Following Table No: 3.59. Shows the area irrigated in Tiruppur District**.**

Area irrigated in the district

S.No	Irrigation	Area ('000 ha)
1	Net irrigated area	119.3
2	Gross irrigated area	123.1
3	Rain fed area	72.9

(**Source:** Statistical handbook of Tamil Nadu-2013)

Dug wells are the major source of water for irrigation in Tiruppur district, accounting for about 59.97 percent of the total area irrigated in this district. Tube wells accounting for about 9.48 percent of the total area irrigated in this district. Of the net area irrigated, the canal irrigated area is only 29.45 percent. The area irrigated under tank is 1.10 percent.

(**Source**: Statistical handbook of Tamil Nadu-2013)

3.5.9.13 The vegetation in the RF / PF areas, ecologically sensitive areas

There are neither reserved (RF) nor protected (PF) forests either in the mine lease area or in the buffer zone. Thus, no forest land is involved in any manner. Hence, no certificate from the Forest department is required. There are no impacts due to this mining activity.

There are no protected or ecologically sensitive areas such as National parks or Important Bird Areas (IBAs), or Wetlands or migratory routes of fauna or water bodies or human settlements within the proposed mine lease area. There are no Biosphere reserves or wildlife sanctuaries or National parks or Important Bird Areas (IBAs), or migratory routes of fauna. Thus, the area under study (Mine lease area and the 10 Km buffer zone) is not ecologically sensitive. It is away from the proposed project site. There are neither forests nor forest dwellers nor forest-dependent communities in the mine lease area. There shall be no forest-impacted families (PF) or people (PP). Thus, the rights of Traditional Forest Dwellers will not be compromised on account of the project.

3.5.9.14 Fauna

The faunal 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 the Red Data Book and the Indian Wildlife Protection Act, 1972. There are no rare, endangered, threatened (RET), and endemic species present in the core area.

3.5.9.15 Fauna Composition in the Core Zone (Primary Data)

Core zone fauna samplings were conducted between 12.30 pm to 1.30 pm in two locations. A total of 23 varieties of species were observed in the Core zone of Peruntholuvu Village, Rough stone and gravel quarry (Table No.3.60) among them numbers of Insects/Butterfly 10 (44%), Reptiles 3 (13%), Mammals 1 (4%) and Avian 9 (39%). A total of 23 species have been recorded from the core mining lease area. The percentage of distribution of fauna life forms in Core Zone is given in Fig No.3.38. None of these species are threatened or endemic in the study area and surroundings. There is no Schedule I species and eight species are under schedule II according to the Indian wild life Protection Amendment Act 2022. A total of 9 species of bird were sighted in the mining lease area.

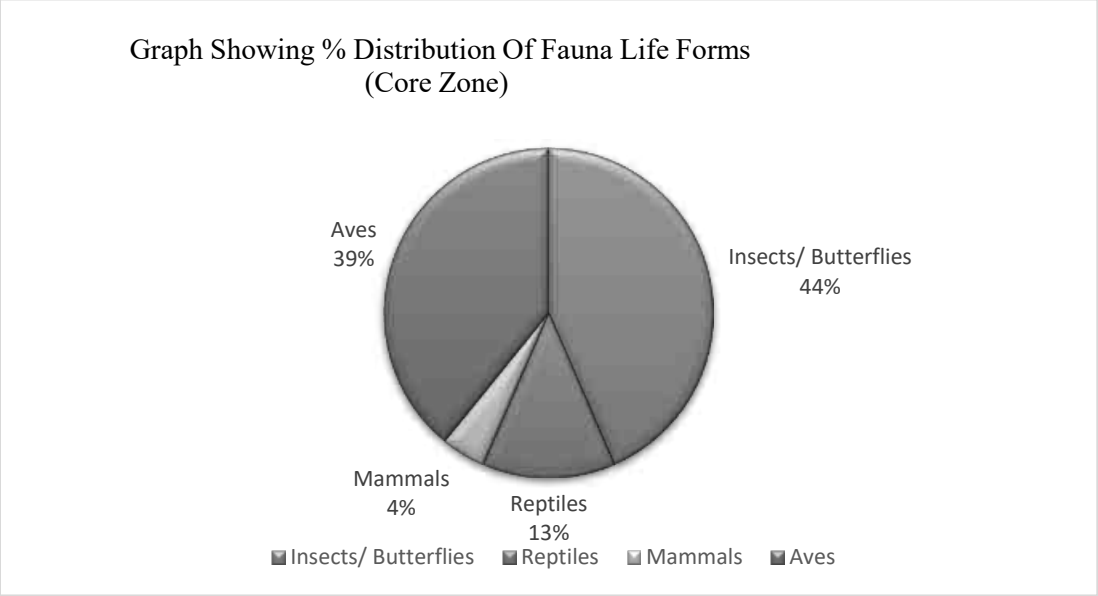
There are no critically endangered, endangered, vulnerable and endemic species were observed. Details of fauna in core zone with the scientific name were mentioned in Table No. 3.60.

Fauna in the Core zone of Peruntholuvu Village, Rough stone and Gravel quarry, Tiruppur South Taluk, Tiruppur District (Primary data)

SI. No	Common Name/English Name	Scientific Name	Schedule list The Wildlife (Protection) Amendment Act, 2022
Insects/Butterflies			
1.	Common Tiger	*Danaus genutia*	---
2.	Mottled emigrant	*Catopsilia pyranthe*	---
3.	Striped tiger	*Danaus plexippus*	---
4.	Red-veined darter	*Sympetrum fonscolombii*	---
5.	Plain Tiger Butterfly	*Danaus chrysippus*	---
6.	Blue Tiger	*Tirumala limniace*	---
7.	Carolina Mantis	*Stagmomantis carolina*	---

8.	Common Red Soldier Beetle	*Rhagonycha fulva*	---
9.	Gray Bird Grasshopper	*Schistocerca nitens*	---
10.	Dragonfly	*Ceratogomphus pictus*	---
Reptiles			
1.	Oriental Garden lizard	*Calotes versicolor*	---
2.	Indian forest skink	*Sphenomorphus indicus*	---
3.	House lizards	*Hemidactylus flaviviridis*	---
Mammals			
1.	Common rat	*Rattus rattus*	---
Aves			
1.	Common myna	*Acridotheres tristis*	Schedule II
2.	Green Bee Eater	*Merops orientalis*	Schedule II
3.	Ashy Drongo	*Dicrurus leucophaeus*	Schedule II
4.	Asian Koel	*Eudynamys scolopaceus*	Schedule II
5.	Yellow-billed Babbler	*Argya affinis*	Schedule II
6.	Rose-ringed parkeet	*Psittacula krameri*	Schedule II
7.	House crow	*Corvus splendens*	---
8.	Cattle egret	*Bubulcus ibis*	Schedule II
9.	Common quail	*Coturnix coturnix*	Schedule II

(Sources: Species observation in the field study)



3.5.9.16 Fauna Composition in the Buffer Zone

The Buffer zone fauna samplings were conducted between 3.00 pm to 6.00 pm in different locations. As animals, especially vertebrates move from place to place in search of food, shelter, mate or other biological needs, separate lists for core and buffer areas are not feasible however, a separate list of fauna pertaining to core and buffer zone are listed separately. Though there are no reserved forests in the buffer zone. As such there are no chances of occurrence of any rare or endangered or endemic or threatened (REET) species within the core or buffer area.

There are no Sanctuaries, National Parks, Tiger Reserve or Biosphere reserves or Elephant Corridor or other protected areas within 10 km radius of from the core area. It is evident from the available records, reports, and circumstantial evidence that the entire study area including the core and buffer areas were free from any endangered animals. There were no resident birds other than common bird species such as Red-whiskered Bulbul, Asian Koel, House crow, Black drangos, Crows etc.

Taxonomically a total of 58 species recorded were from the buffer zone area. Based on habitat classification the majority of species were birds 26, followed by Butterflies 12, Reptiles 6, Insects 5, Mammals 5, and Amphibians 4. There are two Schedule II species, two species are under the schedule III and forty six species are under Schedule IV according to the Indian Wildlife Act 1972. A total of 26 species of bird were sighted in the study area. There are no critically endangered, endangered, vulnerable, and endemic species were observed. There are no impacts on nearby fauna species.

Dominant species are mostly birds, butterflies, and insects, and four amphibian was observed during the extensive field visit Sphaerotheca breviceps, Euphlyctis hexadactylus, Bufomelanostictus, etc. There is no Schedule I Species in the study area. There are no critically endangered, endangered, vulnerable, and endemic species were observed.

. List of Fauna & Their Conservation Status,
Mammals: (*directly sighted animals & Secondary data)

SI. No	Common Name/English Name	Scientific Name	Schedule list The Wildlife (Protection) Amendment Act, 2022
1.	Indian palm squirrel	*Funambulus palmarum*	---
2.	Indian Field Mouse	*Mus booduga*	---
3.	Brown rat	*Rattus norwegicus*	---
4.	Indian hare	*Lepus nigricollis*	Schedule II

Listed birds (Primary & Secondary data)

SI. No	Common Name	Scientific Name	Schedule list The Wildlife (Protection) Amendment Act, 2022
1.	House Sparrow	*Passer domesticus*	Schedule II
2.	Common myna	*Acridotheres tristis*	Schedule II
3.	Tawny pipit	*Anthus campestris*	Schedule II
4.	Spotted owlet	*Athene brama*	Schedule II
5.	Cattle egret	*Bubulcus ibis*	Schedule II
6.	Square tailed Black Bulbul	*Hypsipetes ganeesa*	Schedule II
7.	Greater Coucal	*Centropus sinensis*	Schedule II
8.	Purple sunbird	*Cinnyris asiaticus*	Schedule II
9.	Yellow browed Bulbul	*Acritillas indica*	Schedule II
10.	Black-rumped Flameback	*Dinopium benghalense*	Schedule II
11.	Yellow wagtail	*Motacilla flava*	Schedule II
12.	Rose-ringed Parakeet	*Psittaculakrameria*	Schedule II
13.	Indian roller	*Coracias benghalensis*	Schedule II
14.	Common Hawk Cuckoo	*Hieroccycx varius*	Schedule II
15.	Brown Shrike	*Lanius cristatus*	Schedule II
16.	Spotted dove	*Streptopelia chinensis*	Schedule II
17.	Ashy Drongo	*Dicrurus leucophaeus*	Schedule II
18.	Asian koel	*Eudynamys scolopacea*	Schedule II
19.	Common kingfisher	*Alcedo atthis*	Schedule II
20.	White-thoratd kingfisher	*Halcyon smyrnensis*	Schedule II
21.	Pale-billed Flowerpecker	*Dicaeum erythrorhynchos*	Schedule II
22.	Blue-rock pigeon	*Colomba livia*	---
23.	House crow	*Corvus splendens*	---
24.	Large-billed Crow	*Corvus macrorhynchos*	Schedule II
25.	Black Drongo	*Dicrurus macrocercus*	Schedule II
26.	Ashy Prinia	*Prinia socialis*	Schedule II
27.	Red-vented Bulbul	*Pycnonotus cafer*	Schedule II
28.	Yellow-billed Babbler	*Argya affinis*	Schedule II
29.	Baya Weaver	*Ploceus philippinus*	Schedule II
30.	Purple-rumped Sunbird	*Leptocoma zeylonica*	Schedule II
31.	Asian Palm Swift	*Cypsiurus balasiensis*	Schedule II
32.	Common Tailorbird	*Orthotomus sutorius*	---
33.	Pied Cuckoo	*Clamator jacobinus*	Schedule II
34.	Indian Pond-Heron	*Ardeola grayii*	Schedule II
35.	Gray Francolin	*Francolinus pondicerianus*	Schedule II
36.	Red-wattled Lapwing	*Vanellus indicus*	Schedule II

Reference: Ali, S. (2002). The Book of Indian Birds (13th revised edition). Oxford University Press, New Delhi. 326pp**.**

Direct observation & Secondary data

List of Reptiles either spotted or reported from the study area
(*indicates direct observations & Secondary data)

SI. No	Common Name	Scientific Name	Schedule list The Wildlife (Protection) Amendment Act, 2022
1.	Oriental garden lizard	*Calotes versicolor*	---

2.	Common krait	*Bungarus caeruleus*	---
3.	House lizards	*Hemidactylus flaviviridis*	---
4.	Green vine snake	*Ahaetulla nasuta*	---
5.	Common skink	*Mabuya carinatus*	---
6.	Keeled / Common Grass Skink	*Eutropis carinata*	---

List of insects either spotted or reported from the study area

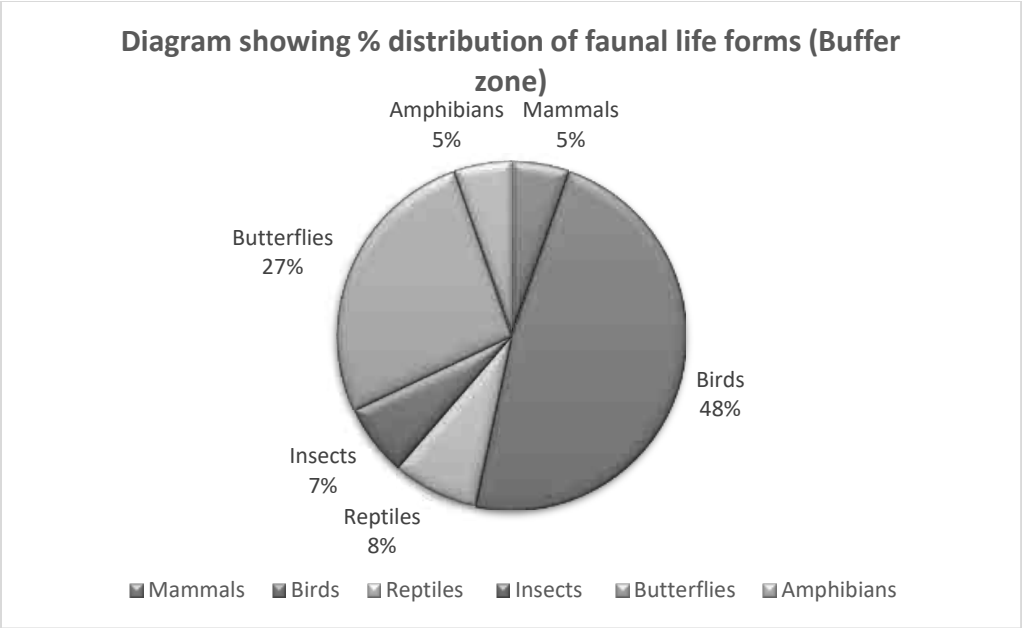
SI. No	Common Name	Scientific Name	Schedule list WLPAA 2022
1.	Indian honey bee	*Apis cerana*	---
2.	Termite	*Hamitermes silvestri*	---
3.	Grasshopper	*Hieroglyphus daganensis*	---
4.	Ant	*Camponotus Vicinus*	---
5.	Dragonfly	*Ceratogomphus pictus*	---

List of Butterflies reported from the study area and Secondary data

SI. No	Common Name	Scientific Name	Schedule
1.	Indian palm bob	*Suastus gremius*	---
2.	Common Mormon	*Papilio polytes*	---
3.	Lemon Pansy	*Junonia lemonias*	---
4.	Common Crow	*Euploea core*	---
5.	Common rose	*Pachliopta aristolochiae*	---
6.	Spotless grass yellow	*Eurema laeta*	---
7.	Common Evening Brown	*Melanitis leda*	---
8.	Common Tiger	*Danaus genutia*	---
9.	Lime Butterfly	*Papilio demoleus*	---
10.	Blue Mormon	*Papilio polymnestor*	---
11.	Danaid Eggfly	*Hypolimnas misippus*	Schedule II
12.	Great Eggfly	*Hypolimnas bolina*	---
13.	Common emigrant	*Catopsilia pomona*	---
14.	Blue Tiger	*Tirumala limniace*	---
15.	Crimson tip	*Colotisdanae*	---
16.	Common Indian crow	*Euploea core*	---

17.	Yellow Pansy	*Junonia hierta*	---
18.	Chocolate Pansy	*Junonia iphita*	---
19.	Plain Tiger Butterfly	*Danaus chrysippus*	---
20.	Common Mime	*Papilio clytia*	Schedule II

Sources: https://www.ifoundbutterflies.org/taxonomy/term/6734
https://www.inaturalist.org/places/tiruppur



Livestock like cattle, buffalo, goat, poultry, duck and pig are reared for dairy products, meat, and egg and for agriculture purpose. Majority of cattle and buffalo are of local variety. Backyard poultry farms are mostly common in this area; however, some commercial poultry farms are also recorded in the study area. The study area is marked with moderate population of flora and fauna. With reference to the Wildlife Protection Amendment Act 2022 total number of wildlife tabulated in this study can be characterized as given in the Table No 3.66.

Characterization of Fauna in the Study Area (As Per W.P.A. Act, 2022)

S.No	Schedule of Wildlife Protection Amendment Act 2022	No. of species	Remark
1.	Schedule I	0	-
2.	Schedule II	38	-
3.	Schedule III	0	-
4.	Schedule IV	0	-

Description of Flora & Fauna

S.No	Type of Species	Name	Local Name
Flora			
1.	Endangered species	None	None
2.	Threatened species	None	None
3.	Near Threatened species	None	None
4.	Vulnerable species	None	None
Fauna			
5.	Endangered species	None	None
6.	Threatened species	None	None
7.	Near Threatened species	None	None
8.	Vulnerable species	None	None
9.	Migratory Corridors & Flight Paths	No corridors & flight paths	-
10.	Breeding & Spawning grounds	None	-

A comprehensive Central Legislation namely Wild Life (Protection) Act was enforced in 1972 to provide protection to wild animals. Schedule-I of this act contains the list of rare and endangered species, which are completely protected throughout the country. The list of wild animals and their conservation status as per Wild Life Protection Amendment Act (2022) presented in Table 3.67 are the species recorded/reported from the study area, out of which 38 species belongs to schedule-II of Wildlife protection Amendment Act, 2022

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3.5.9.17. Aquatic Ecology

The study area has seasonal water bodies (lake and river) is located away from the proposed project site. Mining activities will not have an impact on aquatic ecosystems because no effluent discharge from the Rough stone and gravel quarry is planned. There are no natural perennial surface water bodies, such as marshes, rivers, streams, lakes, or agricultural sites, inside the mining lease area. There is no aquatic flora and, aquatic fauna. Hence, it does not harbour any significant aquatic life. Therefore, the project is not likely to affect the aquatic ecology. Aquatic weeds are found to be growing everywhere in 10 km radius area, in every water bog, pond, etc. Typha angustata can be found growing all along the drains of villages, small water-logged depressions, and agricultural fields lacking water but containing enough moisture to support its growth. And where water is present, Eichhornia crassipes has taken its roots and covers the entire water surface by its sprawl and invasion.

3.5.9.18. Objectives of Aquatic Studies

- ✓ Generating data through actual field collection in these locations over the study period.
- ✓ Impacts on aquatic fauna/flora
- ✓ Consulted with locals to obtain knowledge about aquatic flora and animals.

3.5.9.19 Macrophytes

The macrophytes observed within the study area are tabulated in Table 3.68

Description of Macrophytes (Primary data & Secondary data)

Sl.No	Common Name	Scientific name	Vernacular Name (Tamil)	IUCN Red List of Threatened Species
1.	Water hyacinth	*Eichornia crassipe*	Agayatamarai	NA
2.	Floating lace plant	*Aponogetonnatans*	Kottikizhnagu	NA
3.	Blue water lily	*Nymphaea nouchali*	Nellambal	LC
4.	Sambu	*Typha angustifolia*	Narrowleaf cattail	LC
5.	Cross Grass	*Carex cruciata*	Koraipullu	NA
6.	Tall Flat Sedge	*Cyperus exaltatus*	Koraikizhangu	LC

Sources: Species observation in the field study

3.5.9.20. Aquatic Faunal Diversity

Amphibian species like the common Indian Burrowing frog, and Indian pond frog, and etc. were sighted near the water bodies located in the study area.

Amphibians Observed/Recorded from the Study Area& Secondary data

SI. No	Common Name	Scientific Name	Schedule list The Wildlife (Protection) Amendment Act, 2022
1.	Indian Burrowing frog	*Sphaerotheca breviceps*	---
2.	Indian pond frog	*Phrynoderma hexadactylum*	Schedule II
3.	Asian common Toad	*Duttaphrynus melanostictus*	---
4.	Indian bull Frog	*Hoplobatrachus tigerinu*	Schedule II

3.5.9.21 Other Aquatic Fauna

3.5.9.22. Fishes

The study area has low aquatic diversity, with few types of fish living. The species of fish reported during the primary visit are Rohu, Catla, Catfish, etc. Species of fish reported in the study area are given in Table

Based on Actual Sighting, based on inputs from locals and Perused from Secondary Data

S.No	Common name	Scientific name	Family
1.	Ponthia	*Puntius sophore*	Cyprinidae
2.	Catla	*Catla Catla*	Cyprinidae
3.	Catfish	*Siluriformes*	-
4.	Rohu	*Labeo rohita*	Cyprinidae

3.5.9.23 Findings/Results

The assessment was carried out during the summer season. The inspection day was quite alright with respectable weather. The details of the flora and fauna observed are given below.

S.No	Ecological sensitive habitat	Direction and Distance from the project site
1.	National Parks/ Wildlife Sanctuary/ Biosphere reserves/ Elephant Reserve/ Any Other Reserve	Nil.
2.	Reserved Forests	Nil
3.	Wildlife Corridors & Routes	No notified wildlife corridors are present in 10 km vicinity.
4.	Wetlands / Water bodies	-
5.	Ramsar Site	Nil
6.	Important Bird Habitats	Nil

7.	Breeding/nesting areas of endangered species	Not present
8.	Mangroves	None

There are no critically endangered, endangered, vulnerable and endemic species were observed. As the rainfall in the area is scanty and as no toxic wastes are produced or discharged on account of mining, the proposed mining activity is not going to have any additional and adverse impacts on these RET species. There are no ecologically sensitive areas or protected areas within the 10 Km radius. Hence no specific conservation for conservation of any RET species or Wildlife is envisaged. There are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar sites, Tiger/Elephant Reserves/(existing as well as proposed) within 10 km of the mine lease area. There are no protected forests within the project area. Hence submission of clearance from the National Board of Wildlife does not arise.

There is no endangered, endemic and RET Species. There is no Schedule I species in study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] The proposed project is not going to have any direct or indirect adverse impact on the species mentioned above.

3.5.9.24 Conclusion

The observations and assessment of the overall ecological scenario involve details such as classification of Biogeographic zone, eco-region, habitat types and land cover, distances from natural habitats, vegetation/forest types, and sensitive ecological habitats such as Wetlands sites, Important Bird areas, migration corridors of important wildlife etc. Such baseline information provides better understanding of the situation and overall ecological importance of the area. This baseline information viewed against proposed project activities help in predicting their impacts on the wildlife and their habitats in the region. Data collected and information gathered from secondary literature on flora, fauna, protected area, natural habitats, and wildlife species etc., and consulted and discussed with local people, from the villages, herders and farmers who inhabit close to the proposed project area.

3.6 SOCIO ECONOMIC ENVIRONMENT

Socio-economic study is an essential part of environmental study. It includes demographic structure of the area, provision of basic amenities viz., housing, education, health and medical services, occupation, water supply, sanitation, communication, transportation, prevailing diseases pattern as well as feature like temples, historical monuments etc., at the baseline level. This will help in visualizing and predicting the possible impact depending upon the nature and magnitude of the project.

It is expected that the Socio-Economic Status of the area will substantially improve because of this proposed project. As the proposed project will provide direct and indirect employment and improve the infrastructural facilities in that area and, thus, improve their standard of living.

3.6.1 Objectives of the Study

The objectives of the socio-economic study are as follows:

- To study the socio-economic status of the people living in the study area of the proposed mining project.
- To assess the impact of the project on Quality of life of the people in the study area.
- To recommend Community Development measures needs to be taken up in the study Area.

3.6.2 Scope of Work

- To study the Socio-economic Environment of the area from the secondary sources;
- Data Collection & Analysis
- Prediction of project impact
- Mitigation Measures

3.6.3 District Profile

Tiruppur or Tirupur is a city in the Indian state of Tamil Nadu. Tiruppur is the administrative headquarters of Tiruppur district and the eighth largest city as well as urban agglomeration in Tamil Nadu. Located on the banks of Noyyal River, it has been ruled at different times, by the Early Pandyas, Medieval Cholas, Later Cholas, Mysore Kingdom and the British. It is about 450 kilometres (280 mi) southwest of the state capital Chennai about 50 kilometres (31 mi) east of Coimbatore 50 kilometres (31 mi) south of Erode and 50 kilometres (31 mi) north of Dharapuram.

Tiruppur is administered by municipal corporation which was established in 2008 and the total area of the corporation is 159.6 km^2 divided into 60 wards. The total population of the city as per the 2011 census is 877,778. Tiruppur is a part of the Tiruppur constituency that elects its member of parliament.

Tiruppur is a major textile and knit wear hub contributing to 90% of total cotton knit wear exports from India. The textile industry provides employment to over six lakh people and contributed to exports worth ₹200 billion (US$2.8 billion) in 2014–15.

3.6.4 Study area:

PERUNTHOLUVU VILLAGE

Peruntholuvu village is situated in Teshil Tiruppur, District Tiruppur and in State of Tamil Nadu India. Village has population of 4631 as per census data of 2011, in which male population is 2344 and female population is 2287. Total geographical area of Peruntholuvu village is 1961.3 Hectares. Population density of Peruntholuvu is 2 persons per Hectares. Total number of house hold in village is 1295.

TABLE 3.22: PERUNTHOLUVU VILLAGE POPULATION FACTS

Number of Households	1295
Population	4631
Male Population	2344
Female Population	2287
Children Population	414
Sex-ratio	1006
Literacy	2929
Male Literacy	1638
Female Literacy	1291
Scheduled Tribes (ST) %	995
Scheduled Caste (SC) %	1

Source:

Gram Panchayat name of the Peruntholuvu village is Peruntholuvu. CD Block name is Pongalur and Teshil/Taluk or sub-district is Tiruppur. Data Reference year is 2009 of Census 2011. Sub District HQ Name is TIRUPPUR and Sub District HQ Distance is 16 Km from the village. District Head Quarter name is TIRUPPUR and it's distance from the village is 16KM. Nearest Town of the Peruntholuvu village is S. NALLUR and nearest town distance is 13 km. Pincode of Peruntholuvu village is 641665. As per census 2011 village code of village Peruntholuvu is 644783.

TABLE 3.23: DEMOGRAPHICS POPULATION OF VILLAGE PERUNTHOLUVU

Total Population	Male Population	Female Population
4631	**2344**	**2287**

Source: https://etrace.in/census/village/peruntholuvu-tiruppur-district-tiruppur-tamil-nadu-644783/

Sex Ratio of Peruntholuvu Village -Census 2011

As per the Census Data 2011 there are 976 Femals per 1000 males out of 4631 total population of village. There are 899 girls per 1000 boys under 6 years of age in the village.

Literacy of Peruntholuvu Village

Out of total poplation total 2929 people in Peruntholuvu Village are literate, among them 1638 are male and 1291 are female in the village. Total literacy rate of of Peruntholuvu is 69.46%, for male literacy is 77.05% and for female literacy rate is 61.74%.

Worker's profile of Peruntholuvu Village

Total working population of Peruntholuvu is 2319 which are either main or marginal workers. Total workers in the village are 2319 out of which 1543 are male and 776 are female. Total main workers are 2003 out of which female main workers are 1371 and male main workers are 632. Total marginal workers of village are 316

TABLE 3.24: PERUNTHOLUVU VILLAGE CENSUS 2011 DATA

Description	Census 2011 Data
Village Name	Peruntholuvu
Teshil Name	Tiruppur
District Name	Tiruppur
State Name	Tamil Nadu
Total Population	4631
Total Area	1961 (Hectares)
Total No of House Holds	1295
Total Male Population	2344
Total Female Population	2287
0-6 Age group Total Population	414
0-6 Age group Male Population	218
0-6 Age group Female Population	196
Total Person Literates	2929
Total Male Literates	1638
Total Male Literates	1291
Total Person Illiterates	1702
Total Male Illiterates	706
Total Male Illiterates	996
Scheduled Cast Persons	995
Scheduled Cast Males	500
Scheduled Cast Females	495
Scheduled Tribe Persons	1
Scheduled Tribe Males	0
Scheduled Tribe Females	1

Source: https://etrace.in/census/village/peruntholuvu-tiruppur-district-tiruppur-tamil-nadu-644783/

TABLE 3.25: PERUNTHOLUVU WORKING POPULATION ---CENSUS 2011

	Total	Male	Female
Total Workers	2319	1543	776
Main Workers	2003	1371	632
Main Workers Cultivators	475	310	165
Agriculture Labourer	556	332	224
Household Industries	51	24	27
Other Workers	921	705	216
Marginal Workers	316	172	144
Non Working Persons	2312	801	1511

Source: https://etrace.in/census/village/peruntholuvu-tiruppur-district-tiruppur-tamil-nadu-644783/

TABLE 3.26: POPULATION DATA OF STUDY AREA

SI.No.	Village Name	No of House Holds	Total Population	Male	Female	Total Literate Population	Male Literate	Female Literate	Total Illiterate Population	Male Illiterate	Female Illiterate
1	Ganapathipalayam	547	1808	896	912	1315	732	583	493	164	329
2	Kandiankoil	2008	6953	3453	3500	4255	2408	1847	2698	1045	1653
3	Kathanganni	708	2221	1119	1102	1260	737	523	961	382	579
4	Mudalipalayam	3941	13900	6948	6952	9832	5314	4518	4068	1634	2434
5	Nachipalayam	802	2815	1436	1379	1918	1061	857	897	375	522
6	Padiyur	759	2628	1315	1313	1750	952	798	878	363	515
7	Peruntholuvu	1295	4631	2344	2287	2929	1638	1291	1702	706	996
8	Sivanmalai	2377	7927	3972	3955	5078	2852	2226	2849	1120	1729
9	Thonguttipalayam	1507	5200	2649	2551	3075	1735	1340	2125	914	1211

Source: www.censusindia.gov.in - Tamilnadu Census of India – 2011

TABLE 3.27: WORKERS PROFILE OF STUDY AREA

SI.No.	Village Name	Total Workers Population	Male Workers	Female Workers	Total Main Workers	Main Workers Male	Main Workers Female	Main Cultivation Workers	Main Agriculture Workers	Main Other Workers	Non-Worker Population
1	Ganapathipalayam	1037	602	435	882	631	251	96	274	498	771
2	Kandiankoil	4099	2383	1716	2006	1197	809	1262	1417	783	2854
3	Kathanganni	1388	789	599	87	43	44	440	335	520	833
4	Mudalipalayam	6879	4604	2275	4825	3225	1600	296	614	5362	7021
5	Nachipalayam	1437	920	517	3593	2430	1163	149	212	977	1378
6	Padiyur	1436	887	549	3397	2320	1077	264	166	792	1192
7	Peruntholuvu	2319	1543	776	2784	1806	978	475	556	921	2312
8	Sivanmalai	4681	2749	1932	2753	2337	416	847	685	2502	3246
9	Thonguttipalayam	3151	1851	1300	5268	3649	1619	487	633	1446	2049

Source: www.censusindia.gov.in – Tamil Nadu Census of India – 2011

TABLE 3.28: COMMUNICATION & TRANSPORT FACILITIES IN THE STUDY AREA

Sl	Village Name	PO	SPO	PTO	T	PCO	MP	IC / CSC	PCF	BS	PBS	RS	NH	SH	MDR	BTR	GR	NWR	FP
1	Ganapathipalayam	2	2	2	1	1	1	2	2	1	2	2	2	1	1	1	1	2	1
2	Kandiankoil	2	1	2	1	1	1	2	2	1	1	2	1	1	1	1	1	2	1
3	Kathanganni	2	1	2	1	1	1	2	2	1	1	2	2	1	1	1	1	2	1
4	Mudalipalayam	2	1	1	1	1	1	2	1	1	1	2	2	2	1	1	1	2	1
5	Nachipalayam	2	1	2	1	1	1	1	2	1	1	2	2	2	1	1	1	2	1
6	Padiyur	2	1	2	1	1	1	2	2	1	1	2	2	1	1	1	1	2	1
7	Peruntholuvu	2	1	2	1	1	1	1	1	1	1	2	2	2	2	1	1	2	1
8	Sivanmalai	2	1	2	1	2	1	2	2	1	1	2	2	1	1	1	1	2	1
9	Thonguttipalayam	2	1	2	1	1	1	2	2	1	1	2	1	1	1	1	1	2	1

Abbreviations: PO - Post Office; MP - Mobile Phone Coverage; RS - Railway Station; GR - Gravel Roads; SPO - Sub Post Office; IC / CSC - Internet Cafe/Common Service Centre; NH - National Highways; NWR - Navigate waterways River; PTO - Post & Telegraph office; PCF - Private Courier Facility; SH - State Highways; FP - Foot path; T- Telephone (Landline); BS - Public Bus Service; MDR - Major District Road; PCO - Public call office / Mobile; PBS - Private Bus Service; BTR - Black Topped (Pucca Roads). Note: 1 - Available within the village 2 - Not available

TABLE 3.29: WATER & DRAINAGE FACILITIES IN THE STUDY AREA

Sl	Village Name	TP	CW	UCW	HP	TW/BH	S	R/C	T/P/L	CD	OD	CT
1	Ganapathipalayam	1	1	1	1	1	2	2	2	1	1	2
2	Kandiankoil	1	1	1	1	1	2	2	2	1	1	2
3	Kathanganni	1	2	1	1	1	1	2	2	1	1	1
4	Mudalipalayam	1	1	1	1	1	1	2	2	1	1	2
5	Nachipalayam	1	2	1	1	1	2	2	2	1	1	1
6	Padiyur	1	1	1	2	1	1	2	2	1	1	1
7	Peruntholuvu	1	1	1	1	1	2	2	2	1	1	1
8	Sivanmalai	1	1	1	1	1	2	2	2	1	1	2
9	Thonguttipalayam	1	1	1	1	1	2	2	2	1	1	2

Abbreviations: T - Tap Water; R / C - River / Canal; CW - Covered Well; T/P/L - Tank / Pond / Lake; UCW - Uncovered Well; CD - Covered Drainage; HP - Hand Pump; OD - Open Drainage; TW/BH - Tube / Bore Well; CT - Community Toilet Complex for General public; S - Spring
Note – 1 - Available within the village; 2 - Not available

TABLE 3.30: OTHER FACILITIES IN THE STUDY AREA

Sl	Village Name	ATM	CB	COB	ACS	SHG	PDS	RM	AMS	NC	NC-AC	CC	SF	PL	NPS	APS	BDRO	PS
1	Ganapathipalayam	2	2	1	2	1	1	2	2	1	1	1	1	1		1	1	1
2	Kandiankoil	2	2	2	1	1	1	2	2	1	1	2	1	1		1	1	1
3	Kathanganni	2	2	2	2	1	1	2	2	1	1	1	1	1		1	1	1
4	Mudalipalayam	1	2	1	1	1	1	2	2	1	1	1	1	1		1	1	1
5	Nachipalayam	2	2	2	2	1	1	2	2	1	1	2	1	1		1	1	1
6	Padiyur	1	1	2	2	1	1	2	2	1	1	1	1	1		1	1	1
7	Peruntholuvu	2	1	2	2	1	1	2	2	1	1	2	2	1		1	1	1
8	Sivanmalai	1	1	1	1	1	1	2	2	1	1	1	2	1		1	1	1
9	Thonguttipalayam	2	2	1	1	1	1	2	2	1	1	1	1	2		1	1	1

Abbreviations: ATM - Automatic Teller Machine; PDS - Public Distribution System (Shop); CB - Commerical Bank; RM - Regular Market; COB - Co-operative Bank; AMS - Agricultural Market Society; ACS - Agricultural Credit Societies; NC - Nutritional Centres; SHG - Self Help Group; NC-AC - Nutritional Centres - Anganwadi Centre; DBRO - Birth & Death Registration Office; PS - Power Supply Note – 1 - Available within the village; 2 - Not available

TABLE 3.31: EDUCATIONAL FACILITIES IN THE STUDY AREA

		PPS		PS		MS		SS		SSS		DC		EC		MC		MI		PT		VTS		SSD	
Sl	Village Name	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P
1	Ganapathipalayam	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2	Kandiankoil	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	Kathanganni	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
4	Mudalipalayam	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
5	Nachipalayam	1	2	1	1	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	Padiyur	1	2	1	2	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2
7	Peruntholuvu	1	2	1	2	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
8	Sivanmalai	1	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2
9	Thonguttipalayam	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Abbreviations: PPS-Pre Primary School; SSS-Senior Secondary School; DC-Degree School; PT-Polytechnic; PS-Primary School; G-Government; EC-Engineering College; VTS-Vocational School /ITI; MS-Middle School; P-Private; MC-Medical College; SSD-Special School For Disabled; SS-Secondary School; MI-Management College/Institute;
Note – 1 - Available within the village; 2 - Not available

TABLE 3.32: MEDICAL FACILITIES IN THE STUDY AREA

Sl. No.	Village Name	CHC	PHC	PHSC	MCW	TBC	HA	HAM	D	VH	MHC	FWC	NGM-I/O
1	Ganapathipalayam	0	0	0	0	0	0	0	0	0	0	0	a
2	Kandiankoil	0	0	1	0	0	0	0	0	1	0	0	b
3	Kathanganni	0	0	0	0	0	0	0	0	0	0	0	b
4	Mudalipalayam	0	2	1	2	2	0	0	2	1	0	2	
5	Nachipalayam	0	0	1	0	0	0	0	0	1	0	0	c
6	Padiyur	0	0	1	1	0	0	0	0	1	0	0	b
7	Peruntholuvu	0	0	1	0	0	0	0	0	1	0	0	b
8	Sivanmalai	1	1	1	1	1	0	0	1	0	0	1	
9	Thonguttipalayam	0	0	1	0	0	0	0	0	0	0	0	b

Abbreviations: CHC-Community Health Centre; TBC-TB Clinic; VH- Veternity Hospital; PHC-Primary Health Centre; HA-Aallopathic Hospital; FWC-Family Welfare Centre; PHSC-Primary Health Sub Centre ; HAM-Alternative Medicine Hospital; MH-Mobile Health Clinic; MCW-Maternity and Child Welfare Centre; D-Dispensary; NGM-I/O-Non Government Medical Facilities In & Out Patient

Note – 1 - Available within the village; 2 - Not available a-facility available at <5kms b-facility available at>10kms

Source: www.censusindia.gov.in – Tamil Nadu Census of India – 2011

3.6.6 Recommendation and Suggestion

- Awareness program to be conducted to make the population aware to get education and a better livelihood.
- Vocational training programme can be organized to make the people self - employed, particularly for women and unemployed youth.
- On the basis of qualification and skills local community may be preferred. Long term and short-term employments can be generated.
- Health care centre and ambulance facility can be provided to the population to get easy access to medical facilities. Maternity facility should be made available at the place to avoid going to distant places for treatment which involves risks. Apart from that as these areas are prone to various diseases a hospital with modern facilities should be opened on a priority basis in a central place to provide better health facilities to the villagers around the project.
- While developing an Action Plan, it is very important to identify the population who falls under the marginalized and vulnerable groups. So that special attention can be given to these groups with special provisions while making action plans.

3.6.7 Summary & Conclusion

The socio-economic study of surveyed villages gives a clear picture of its population, average household size, literacy rate and sex ratio etc. It is also found that a part of population is suffering from lack of permanent job to run their day-to-day life. Their expectation is to earn some income for their sustainability on a long-term basis.

The proposed project will aim to provide preferential employment to the local people there by improving the employment opportunity in the area and in turn the social standards will improve.

3.7 Structure Studies upto 300m Radius for P1

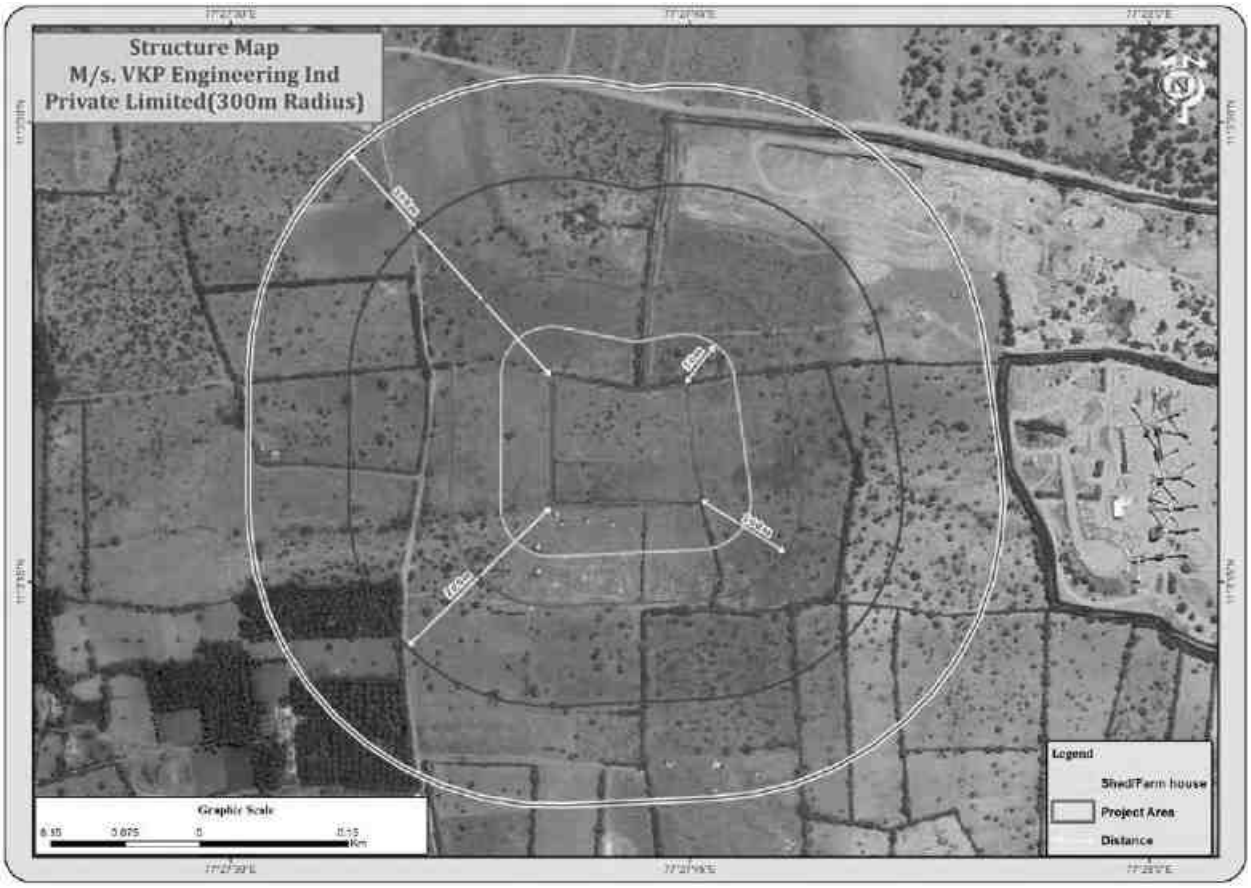
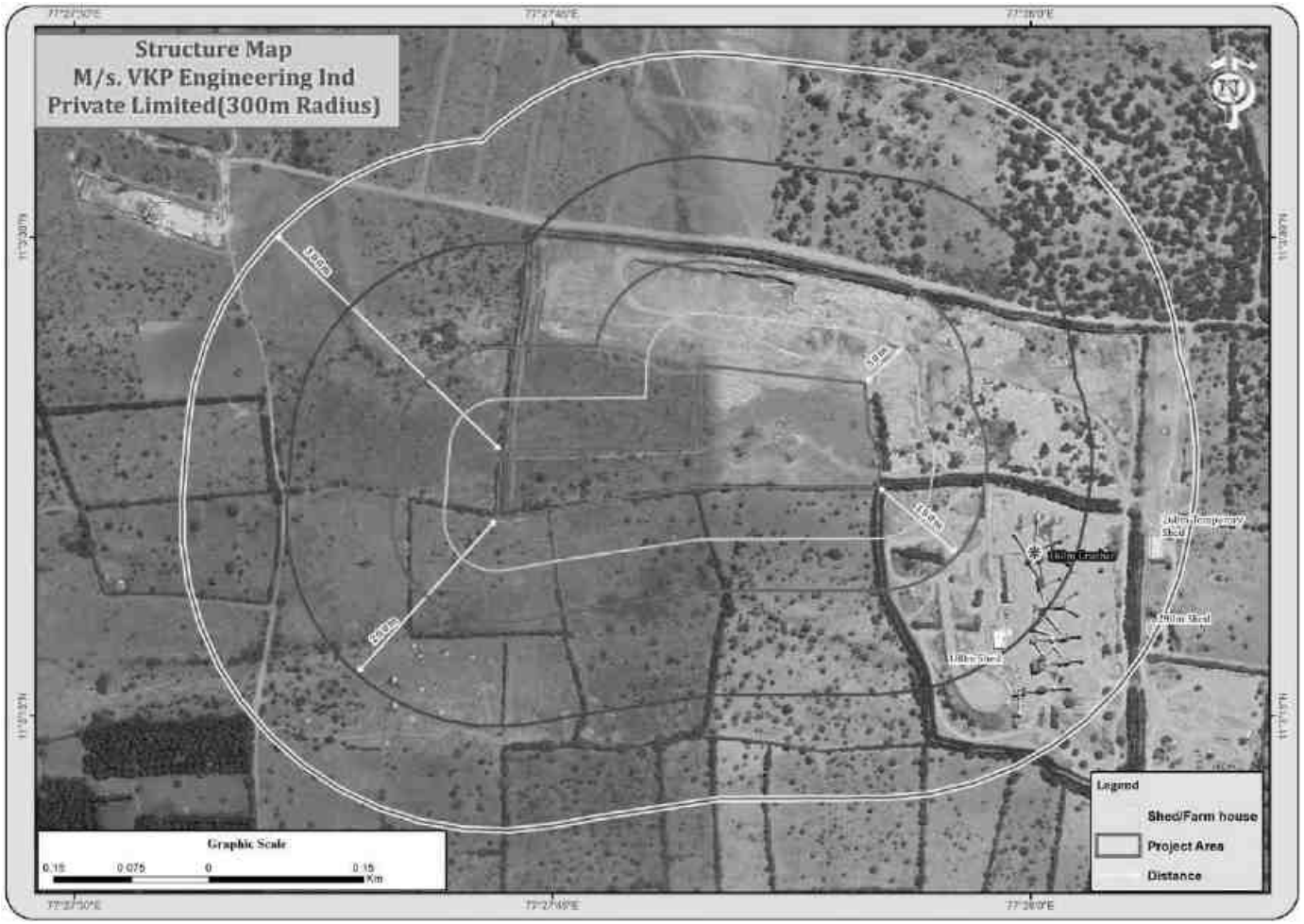


Fig.3.41 Structure map around 300m Radius

Structures details in the study area around 300m Radius Enumeration of Structures from 0 - 300m Radius						
Structure Numbers	Distance & Direction from the project site	Structure Details and Usage Purpose	Type of Structure Structures (Kutcha/ Brick/ Cement/ RCC/ Framed Structures)	No.of Occupants	Structure belongs to owner (Yes/No)	Remarks
Nil						

3.7 Structure Studies upto 300m Radius for P2



Structure Numbers	Distance & Direction from the project site	Structure Details and Usage Purpose	Type of Structure Structures (Kutcha/ Brick/ Cement/ RCC/ Framed Structures)	No of Occupants	Structure belongs to owner (Yes/No)	Remarks
1	160m - SE	Crusher	Framed Structure	5 Nos	Yes	Production of M & P Sand and Jally
2	180m - SE	Shed	RCC Structure	2 Nos	Yes	Storage Purposes – No Stay
3	260m – SE	Temporary Shed	RCC Structure	Nil	Yes	Storage Purposes – No Stay
4	290m - SE	Shed	Sheet Structure	Nil	Yes	Storage Purposes – No Stay

3.7 Structure Studies upto 300m Radius for P2

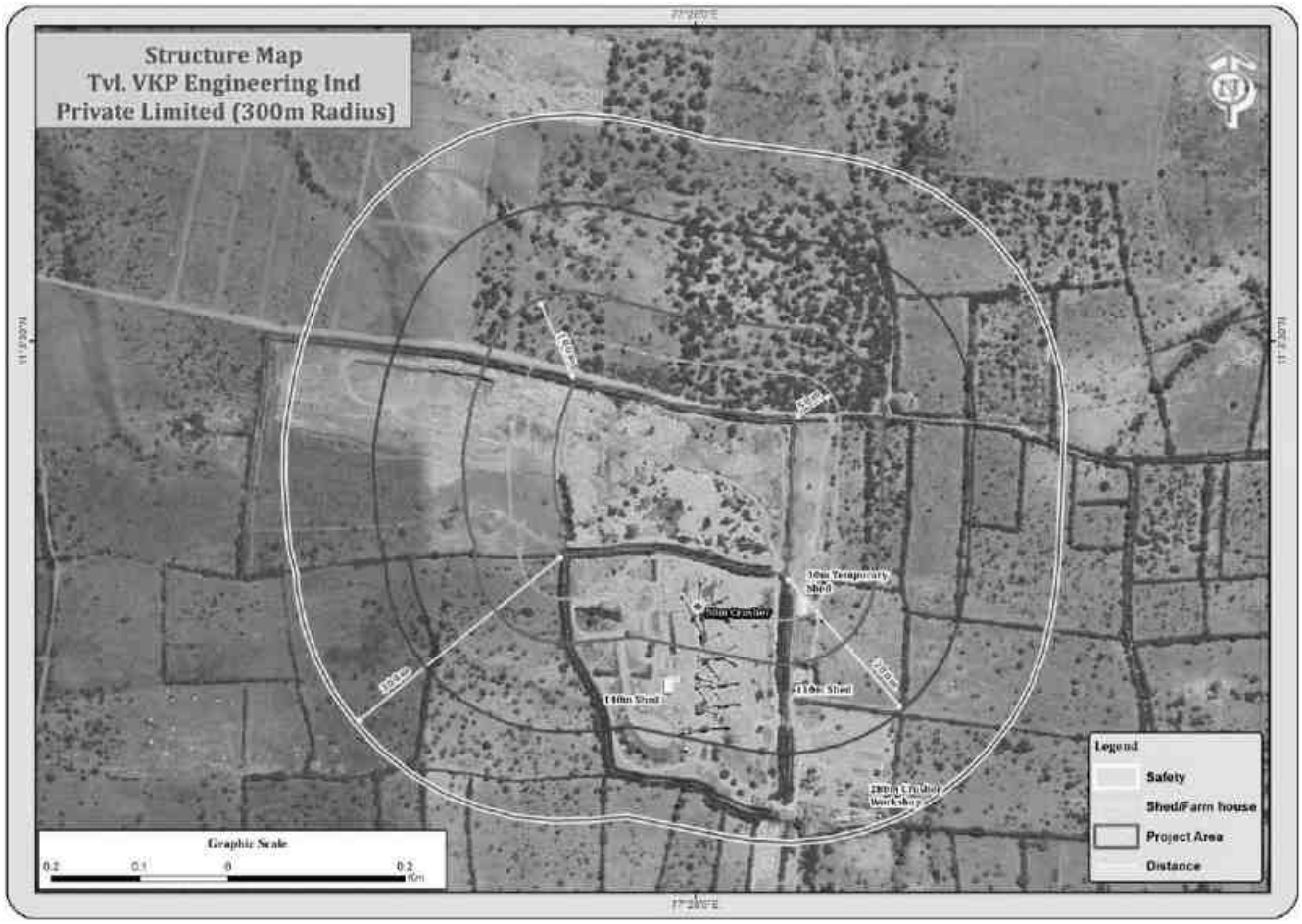


Fig.3.41 Structure map around 300m Radius

TABLE 3.47: Structures Details in The Study Area Around 300m Radius

ENUMERATION OF STRUCTURE 0-300m						
Structure Numbers	**Distance & Direction from the project site**	**Structure Details and Usage Purpose**	**Type of Structure Structures (Kutcha/ Brick/ Cement/ RCC/ Framed Structures)**	**No.of Occupants**	**Structure belongs to owner (Yes/No)**	**Remarks**
1	**30m - SE**	**Temporary Shed**	**Sheet Structure**	**Nil**	**Yes**	**Storage Purposes – No Stay**
2	**50m – South**	**Crusher**	**Framed Structure**	**5 Nos**	**No**	**Production of M-Sand, P-Sand & Jally**
3	**110m - SE**	**Shed**	**Sheet Structure**	**Nil**	**Yes**	**Storage Purposes – No Stay**
4	**140m – South**	**Shed**	**RCC Structure**	**Nil**	**Yes**	**Storage Purposes – No Stay**
5	**280m - SE**	**Crusher Workshop**	**Sheet & Brick Structure**	**3 Nos**	**Yes**	**Storage Purposes – No Stay**

CHAPTER – 4: ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

4.0 General

The environmental impact can be categorized as either primary or secondary, primary impacts which are attributed directly by the project; secondary impacts are those which are indirectly induced. The open cast mining operations involve development of benches, Approach Road, Haul Road, Excavation and handling of material. If adequate control measures are not taken to prevent/mitigate the adverse environmental impacts/lead to damage of the eco-system.

In order to maintain the environmental commensuration with the mining operation, it is essential to undertake studies on the existing environmental scenario and assess the impact on different environmental components. This would help in formulating suitable management plans for sustainable resource extraction. Based on the baseline environmental status at the existing mine site, the environmental factors that are likely to be affected (Impacts) are identified, quantified and assessed. The various anticipated impacts will be on

- Land environment
- Water Environment
- Air Environment
- Noise Environment
- Socio economic environment
- Solid waste
- Soil environment

4.1 Land Environment

4.1.2 Anticipated Impact from all Proposed Projects

- Permanent or temporary change on land use and land cover.
- Change in Topography: Topography of the ML area will change at the end of the life of the mine.
- Movement of heavy vehicles sometimes cause problems to agricultural land, human habitations due to dust, noise and it also causes traffic hazards.
- Due to degradation of land by pitting the aesthetic environment of the core zone may be affected.
- Earthworks during the rainy season increase the potential for soil erosion and sediment laden water entering the water ways.
- If no due care is taken wash off from the exposed working area may choke the water course & can also causes the siltation of water course

4.1.2.1 Common Mitigation Measures for Respective Individual Proposed Projects

- The mining activity will be gradual confined in blocks and excavation will be undertaken progressively along with other mitigative measures like phase wise development of greenbelt etc.,
- Construction of garland drains all around the quarry pits and construction of check dam at strategic location in lower elevations to prevent erosion due to surface runoff during rainfall and also to collect the storm water for various uses within the proposed area
- Green belt development along the boundary within safety zone. The small quantity of water stored in the mined-out pit will be used for greenbelt
- Thick plantation will be carried out on unutilized area, top benches of mined out pits, on safety barrier, etc.,
- At conceptual stage, the land use pattern of the quarry will be changed into Greenbelt area and temporary reservoir
- In terms of aesthetics, natural vegetation surrounding the quarry will be retained (such as in a buffer area i.e., 7.5 m safety barrier and other safety provided) so as to help minimise dust emissions.
- Proper fencing will be carried out at the conceptual stage, Security will be posted round the clock, to prevent inherent entry of the public and cattle

4.1.3 Soil Environment

4.1.4 Impact on Soil Environment

The top layer of the project site in the form of Gravel formation, the Gravel will be directly loaded into tippers for the filling and levelling of low-lying areas. There is no disposal of Gravel. The excavated rough stone will be directly loaded into dumpers to the needy customers.

There will be no disposal of waste water from the quarry operation, No discharge of toxic effluent from the proposed projects. The dust emission at working face and haul roads will be controlled by water sprinkling and plantation.

Erosion and Sedimentation (Removal of protective vegetation cover; Exposure of underlying soil horizons that may be less pervious, or more erodible than the surface layers; Reduced capacity of soils to absorb rainfall; Increased energy in storm-water runoff due to concentration and velocity; and Exposure of subsurface materials which are unsuitable for vegetation establishment).

4.1.5 Common Mitigation Measures for Respective Individual Proposed Projects

- Run-off diversion – Garland drains will be constructed all around the project boundary to prevent surface flows from entering the quarry works areas. And will be discharged into vegetated natural drainage lines, or as distributed flow across an area stabilised against erosion.
- Sedimentation ponds - Run-off from working areas will be routed towards sedimentation ponds. These trap sediment and reduce suspended sediment loads before runoff is discharged from the quarry site. Sedimentation ponds should be designed based on runoff, retention times, and soil characteristics. There may be a need to provide a series of sedimentation ponds to achieve the desired outcome.
- Retain vegetation – Retain existing or re-plant the vegetation at the site wherever possible.
- Monitoring and maintenance – Weekly monitoring and daily maintenance of erosion control systems so that they perform as specified specially during rainy season

4.1.6 Waste Dump Management

There are no wastages anticipated in this rough stone and gravel quarrying operation. The entire quarried out materials will be utilized (100%).

The overburden in the form of gravel formation the gravel will be also sold to needy customers for the filling and levelling of low-lying areas.

4.2 Water Environment

4.2.1 Anticipated Impact on Surface and ground water

The impact due to quarrying on the water quality is expected to be insignificant because of no use of chemicals or hazardous substances during quarrying process. The quarrying activity will not intersect ground water table as the maximum depth of the quarry in the cluster is 30m and water table is found at a depth of 70-65m BGL-P1 maximum depth of the quarry in the cluster is 36m and water table is found at a depth of 78-73m BGL-P2. maximum depth of the quarry in the cluster is 37m and water table is found at a depth of 68m BGL-P3. The quarrying operation will be carried out well above the water table. There is no intersection of surface water bodies (Streams, Canal, Odai etc.,) in the project area. During rainy season rain water will be collected in the quarry pit and later used for greenbelt development and for the water sprinkling in the haul roads. There is no proposal for discharging of quarry pit water outside the project area.

TABLE 4.1: WATER REQUIREMENTS P1-P3

PROPOSAL – P1		
***Purpose**	**Quantity**	**Source**
Dust Suppression	0.6 KLD	From Nearby Existing bore well
Green Belt	1.0 KLD	From Nearby Existing bore well
Domestic & Drinking purpose	0.4 KLD	Approved water vendors
Total	**2.2 KLD**	
PROPOSAL – P2		
***Purpose**	**Quantity**	**Source**
Dust Suppression	1.5 KLD	From Nearby Existing bore well
Green Belt	1.0 KLD	From Nearby Existing bore well
Domestic & Drinking purpose	0.5 KLD	Approved water vendors
Total	**3.0 KLD**	
PROPOSAL – P3		
***Purpose**	**Quantity**	**Source**
Dust Suppression	0.7KLD	From Nearby Existing bore well
Green Belt	1.0KLD	From Nearby Existing bore well
Sanitation & Drinking	0.7KLD	Approved water vendors
Total	**2.2 KLD**	

* Water for drinking purpose will be brought from approved water vendors

Source: Approved Mining Plan Pre-Feasibility Report

Total water requirement in the cluster quarries is about 7.4 KLD, the water for dust suppression and greenbelt development will be sourced from the mine pit water collected during rainy seasons, the water for domestic purpose and drinking will be sourced from the approved water vendors.

4.2.2 Common Mitigation measures:

- Garland drain, settling tank will be constructed along the proposed mining lease area. The Garland drain will be connected to settling tank and sediments will be trapped in the settling traps and only clear water will be discharged out to the natural drainage
- Rainwater will be collected in sump in the mining pits 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 and such sites where dust likely to be generated and for developing green belt. The proponent will collect and judicially utilize the rainwater as part of rainwater harvesting system.
- Providing benches with inner slopes and through a system of drains and channels, allowing rain water to descent into surrounding drains, so as to minimize the effects of erosion & water logging arising out of uncontrolled descent of water.
- Reuse the water collected during storm for dust suppression and greenbelt development within the mines
- Installing interceptor traps/oil separators to remove oils and greases. Water from the tipper wash-down facility and machinery maintenance yard will pass through interceptor traps/oil separators prior to its reuse;
- Using flocculating or coagulating agents to assist in the settling of suspended solids during monsoon seasons;
- Periodic (every 6 months once) analysis of quarry pit water and ground water quality in nearby villages.
- Domestic sewage from site office & urinals/latrines provided in ML is discharged in septic tank followed by soak pits.
- Waste water discharge from mine will be treated in settling tanks before using for dust suppression and tree plantation purposes.
- De-silting will be carried out before and immediately after the monsoon season.
- Regular monitoring (every 6 months once) and analysing the quality of water in open well, bore wells and surface water

4.3 Air Environment

The air borne particulate matter is the main air pollutant in this opencast mining. The mining operation will be carried out by jackhammer drilling (35mm dia) and Hydraulic Excavators will be utilized for excavation of Rough Stone waste.

4.3.1 Anticipated Impact

- During mining, at various stages activities such as excavation, drilling, blasting, and transportation of materials, particular matter (PM), gases such as Sulphur dioxide, oxides of Nitrogen from vehicular exhaust are the main air pollutants.
- Emissions of noxious gases due to incomplete detonation of explosive may sometimes pollute the air.
- The fugitive dust released from the mining operations may cause effect on the mine workers who are directly exposed to the fugitive dust.
- Simultaneously, the air-borne dust may travel to longer distances and settle in the villages located near the mine lease area.

4.3.1.1. Modelling of Incremental Concentration from all Proposed Projects

Wind erosion of the exposed areas and the air borne particulate matter generated by quarrying operation, and transportation are mainly PM_{10} & $PM_{2.5}$ and emissions of Sulphur dioxide (SO_2) & Oxides of Nitrogen (NOx) due to excavation/loading equipment and vehicles plying on haul roads are the cause of air pollution in the project area.

Similarly, loading - unloading and transportation of Rough Stone, wind erosion of the exposed area and movement of light vehicles causes of pollution. This leads to an impact on the ambient air environment around the project area.

Anticipated incremental concentration due to this quarrying activity and net increase in emissions due to quarrying activities within 500 meters around the project area is predicted by Open Pit Source modelling using AERMOD Software.

The impact on Air Environment is due to the mining and allied activities during Land Development phase, Mining process and Transportation. The emissions of Sulphur dioxide (SO_2), Oxides of Nitrogen (NOx) due to excavation/loading equipment and vehicles plying on haul roads are marginal. Loading - unloading and transportation of Rough Stone, wind erosion of the exposed area and movement of light vehicles will be the main polluting source in the mining activities releasing Particulate Matter (PM_{10}) affecting Ambient Air of the area. Prediction of impacts on air environment has been carried out taking into consideration cumulative production three proposed quarries. Air environment and net increase in emissions by Open pit source modelling in AERMOD Software.

4.3.1.2 Emission Estimation

An emissions factor is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant.

The general equation for emissions estimation is:

$$E = A \times EF \times (1-ER/100)$$

Where:

E = emissions;

A = activity rate;

EF = emission factor, and

ER =overall emission reduction efficiency, %

The proposed mining activity includes various activities like ground preparation, excavation, handling and transport of ore. These activities have been analysed systematically basing on USEPA-Emission Estimation Technique Manual, for Mining AP-42, to arrive at possible emissions to the atmosphere and estimated emissions are given in Table 4-2.

TABLE 4.2: ESTIMATED EMISSION RATE FOR P1, P2 & P3

EMISSION ESTIMATION FOR QUARRY "P1"				
	Activity	**Source type**	**Value**	**Unit**
Estimated Emission Rate for PM_{10}	Drilling	Point Source	0.110094853	g/s
	Blasting	Point Source	0.003912457	g/s
	Mineral Loading	Point Source	0.046141471	g/s
	Haul Road	Line Source	0.002505038	g/s/m
	Overall Mine	Area Source	0.050540511	g/s
Estimated Emission Rate for SO_2	Overall Mine	Area Source	0.001466521	g/s
Estimated Emission Rate for NOx	Overall Mine	Area Source	0.000057719	g/s
EMISSION ESTIMATION FOR QUARRY "P2"				
	Activity	**Source type**	**Value**	**Unit**
Estimated Emission Rate for PM_{10}	Drilling	Point Source	0.116871514	g/s
	Blasting	Point Source	0.005274215	g/s
	Mineral Loading	Point Source	0.047400570	g/s
	Haul Road	Line Source	0.002512106	g/s/m
	Overall Mine	Area Source	0.064949043	g/s
Estimated Emission Rate for SO_2	Overall Mine	Area Source	0.001976274	g/s
Estimated Emission Rate for NOx	Overall Mine	Area Source	0.000131724	g/s
EMISSION ESTIMATION FOR QUARRY "P3"				
	Activity	**Source type**	**Value**	**Unit**
Estimated Emission Rate for PM_{10}	Drilling	Point Source	0.195192534	g/s
	Blasting	Point Source	0.068537850	g/s
	Mineral Loading	Point Source	0.055345390	g/s
	Haul Road	Line Source	0.002623197	g/s/m
	Overall Mine	Area Source	0.108293613	g/s
Estimated Emission Rate for SO_2	Overall Mine	Area Source	0.007897684	g/s
Estimated Emission Rate for NOx	Overall Mine	Area Source	0.000992146	g/s

4.3.2 Frame work of Computation & Model details

The prediction included the impact of Excavation, Drilling, Blasting, loading and movement of vehicles during transportation and meteorological parameters such as wind speed, wind direction, temperature, rainfall, humidity and Cloud cover.

Impact was predicted over the distance of 10 km around the source to assess the impact at each receptor separately at the various locations and maximum incremental GLC value at the project site. Maximum impact of PM_{10} was observed close to the source due to low to moderate wind speeds. Incremental value of PM_{10} was superimposed on the base line data monitored at the proposed site to predict total GLC of PM_{10} due to combined impacts

Air Pollution Dispersion Modelling

Baseline Air Quality –

Baseline air quality has been measured at 2 locations in the cluster and 6 locations within the buffer zone of the study area. The 24 - hourly average samples of particulate matters (PM_{10} and $PM_{2.5}$), SO_2 and NO_x were measured following the National Ambient Air Quality Standards (NAAQS), 2009. Monitoring data of 7 sampling stations are given below –

Meteorological Data –

Meteorology is the key to understand the air quality. The essential relationship between meteorological condition and atmospheric dispersion involves the wind in the broadest sense. Wind fluctuations over a very wide range of time, accomplish dispersion and strongly influence other processes associated with them.

A temporary meteorological station was installed at project site and monitored continually for study period without break. The station was installed at a height of 4 m above the ground level in such a way that there are no obstructions facilitating flow of wind, wind speed, wind direction, humidity and temperature are recorded on hourly basis. A weather data was collected from IMD, Tiruppur agro for the month of Mar2025 – May2025 to correlate with site data and found not much of change in the parameters.

FIGURE 4.1: AERMOD TERRAIN MAP

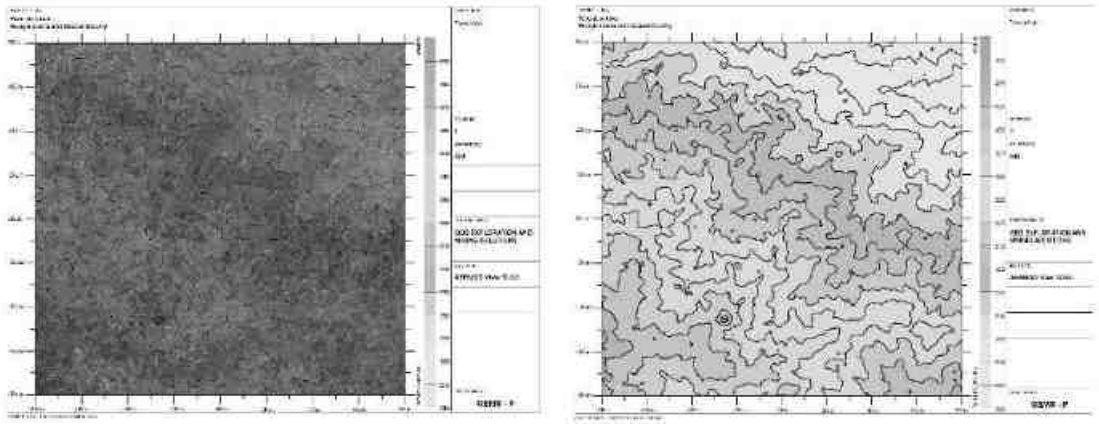


FIGURE 4.2: PREDICTED INCREMENTAL CONCENTRATION OF PM_{10}

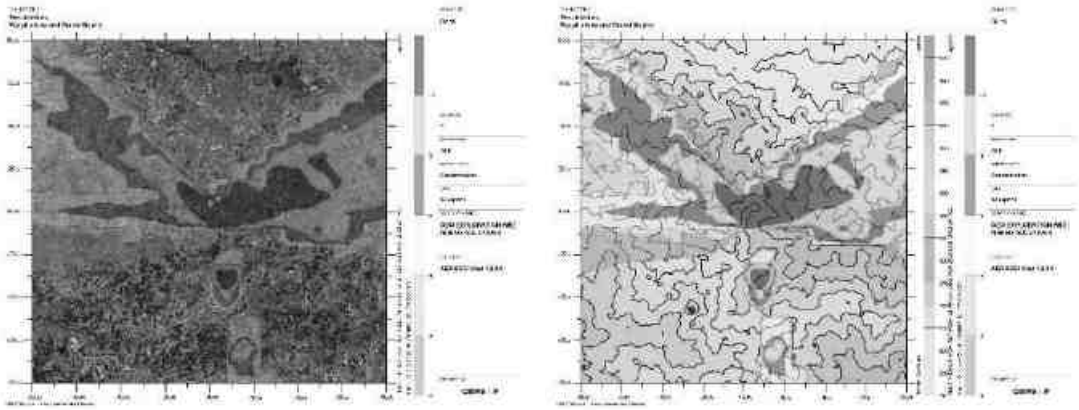


FIGURE 4.3: PREDICTED INCREMENTAL CONCENTRATION OF $PM_{2.5}$

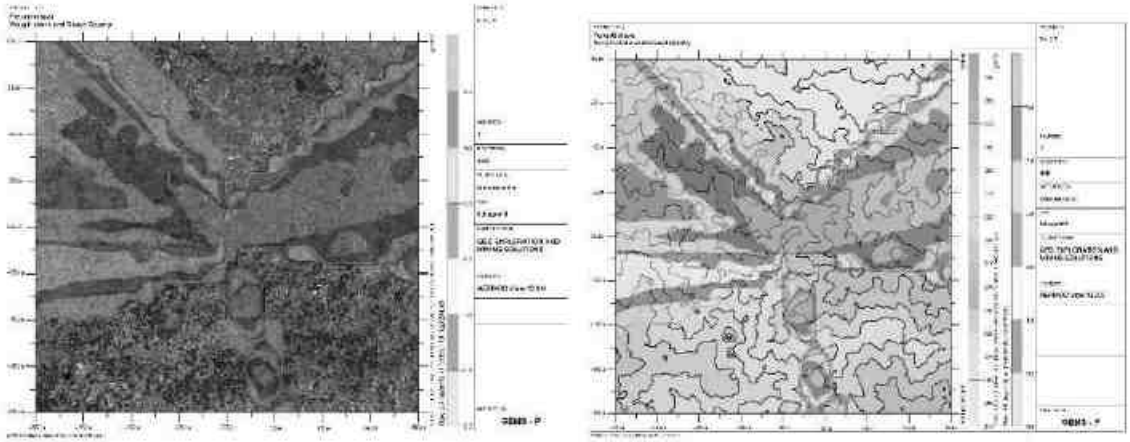


FIGURE 4.4: PREDICTED INCREMENTAL CONCENTRATION OF SO_2

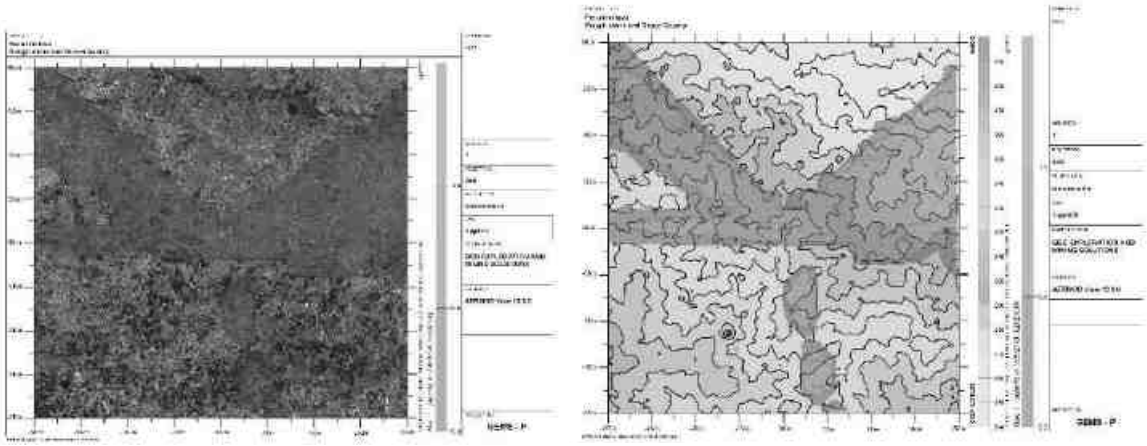


FIGURE 4.5: PREDICTED INCREMENTAL CONCENTRATION OF NO_x

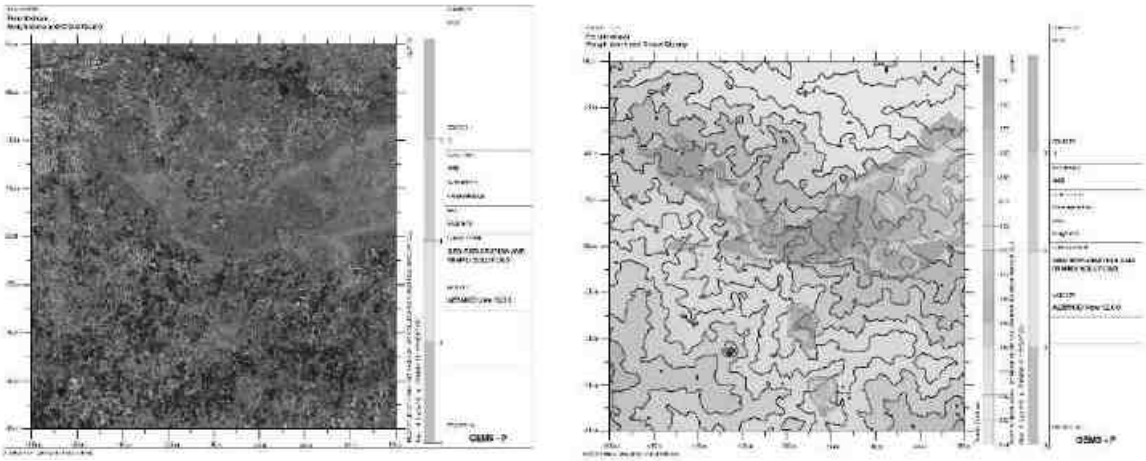
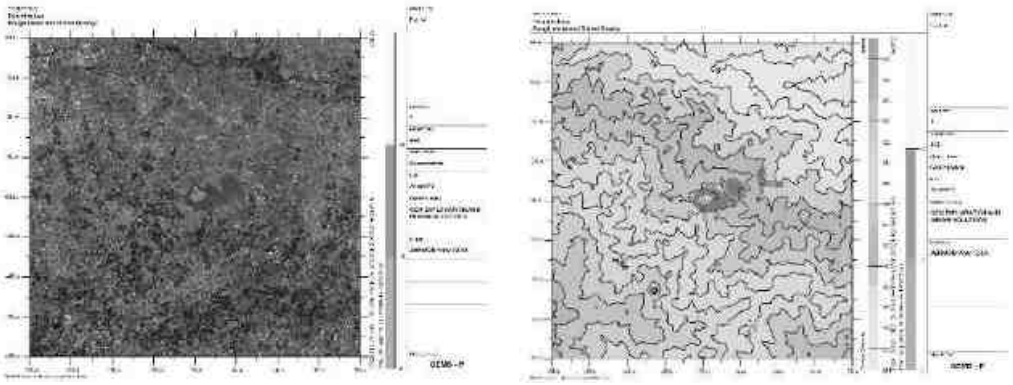


FIGURE 4.6: PREDICTED INCREMENTAL CONCENTRATION OF FUGITIVE DUST



4.3.2.1 Model Results

The post project Resultant Concentrations of PM10, PM2.5, SO2& NOX (GLC) is given in Table below:

TABLE 4.3: INCREMENTAL & RESULTANT GLC OF PM_{10}

Station Code	Location	X Coordinate (m)	Y Coordinate (m)	Average Baseline PM_{10} (µg/m^3)	Incremental value of PM_{10} due to mining (µg/m^3)	Total PM_{10} (µg/m^3) (5+6)
AAQ1	11° 3'20.98"N 77°27'44.34"E	49	48	39.4	12.68	52.08
AAQ2	11° 3'28.09"N 77°27'55.56"E	393	276	39.7	12.23	51.93
AAQ3	11° 2'47.89"N 77°26'3.81"E	-3030	-976	41.8	3.80	45.6
AAQ4	11° 5'15.92"N 77°31'2.36"E	6111	3610	42.7	11.00	53.7
AAQ5	11° 1'20.49"N 77°29'16.88"E	2888	-3681	43.0	0	43.0
AAQ6	11° 6'0.73"N 77°26'23.30"E	-2434	5000	42.9	0	42.9
AAQ7	11° 0'29.65"N 77°26'29.32"E	-2247	-5254	43.3	0	43.3

TABLE 4.4: INCREMENTAL & RESULTANT GLC OF $PM_{2.5}$

Station Code	Location	X Coordinate (m)	Y Coordinate (m)	Average Baseline $PM_{2.5}$ (µg/m^3)	Incremental value of $PM_{2.5}$ due to mining (µg/m^3)	Total $PM_{2.5}$ (µg/m^3) (5+6)
AAQ1	11° 3'20.98"N 77°27'44.34"E	49	48	18.9	5.71	24.61
AAQ2	11°3'28.09"N 77°27'55.56"E	393	276	19.6	5.34	24.94
AAQ3	11° 2'47.89"N 77°26'3.81"E	-3030	-976	21.1	2.40	23.5
AAQ4	11° 5'15.92"N 77°31'2.36"E	6111	3610	21.7	4.79	26.49
AAQ5	11° 1'20.49"N 77°29'16.88"E	2888	-3681	22.0	0	22.0
AAQ6	11° 6'0.73"N 77°26'23.30"E	-2434	5000	22.0	0.26	22.26
AAQ7	11° 0'29.65"N 77°26'29.32"E	-2247	-5254	22.3	0	22.3

TABLE 4.5: INCREMENTAL & RESULTANT GLC OF SO_2

Station Code	Location	X Coordinate (m)	Y Coordinate (m)	Average Baseline So_2 ($\mu g/m^3$)	Incremental value of So_2 due to mining ($\mu g/m^3$)	Total So_2 ($\mu g/m^3$) (5+6)
AAQ1	11° 3'20.98"N 77°27'44.34"E	49	48	3.8	1.09	4.89
AAQ2	11° 3'28.09"N 77°27'55.56"E	393	276	4.3	1.06	5.36
AAQ3	11° 2'47.89"N 77°26'3.81"E	-3030	-976	4.1	0	4.1
AAQ4	11° 5'15.92"N 77°31'2.36"E	6111	3610	4.1	1.03	5.13
AAQ5	11° 1'20.49"N 77°29'16.88"E	2888	-3681	4.1	0	4.1
AAQ6	11° 6'0.73"N 77°26'23.30"E	-2434	5000	4.5	0	4.5
AAQ7	11° 0'29.65"N 77°26'29.32"E	-2247	-5254	4.3	0	4.3

TABLE 4.6: INCREMENTAL & RESULTANT GLC OF NO_X

Station Code	Location	X Coordinate (m)	Y Coordinate (m)	Average Baseline Nox ($\mu g/m^3$)	Incremental value of Nox due to mining ($\mu g/m^3$)	Total Nox ($\mu g/m^3$) (5+6)
AAQ1	11° 3'20.98"N 77°27'44.34"E	49	48	18.7	6.47	25.17
AAQ2	11° 3'28.09"N 77°27'55.56"E	393	276	18.6	6.09	24.69
AAQ3	11° 2'47.89"N 77°26'3.81"E	-3030	-976	18.0	0	18
AAQ4	11° 5'15.92"N 77°31'2.36"E	6111	3610	17.9	3.00	20.9
AAQ5	11° 1'20.49"N 77°29'16.88"E	2888	-3681	18.0	0	18.0
AAQ6	11° 6'0.73"N 77°26'23.30"E	-2434	5000	18.0	0	18.0
AAQ7	11° 0'29.65"N 77°26'29.32"E	-2247	-5254	18.2	0	18.2

From the resultant of cumulative concentration i.e., Backgr

ound + Incremental Concentration of pollutant in all the receptor locations without effective mitigation measures are still within the prescribed NAAQ limits of 100, 80 & 80 µg/m3 for PM10, SO2 & NOX respectively. By adopting suitable mitigation measures, the pollutant levels in the atmosphere can be further being controlled.

4.3.4. Common Mitigation Measures for Respective Individual Proposed Projects

Drilling – To control dust at source, wet drilling will be practiced. Where there is a scarcity of water, suitably designed dust extractor will be provided for dry drilling along with dust hood at the mouth of the drill-hole collar.

Advantages of Wet Drilling: -

- In this system dust gets suppressed close to its formation. Dust suppression become very effective and the work environment will be improved from the point of occupational comfort and health.
- Due to dust free atmosphere, the life of engine, compressor etc., will be increased.
- The life of drill bit will be increased.
- The rate of penetration of drill will be increased.
- Due to the dust free atmosphere visibility will be improved resulting in safer working conditions.

Blasting –

- Establish time of blasting to suit the local conditions and water sprinkling on blasting face
- Avoid blasting i.e., when temperature inversion is likely to occur and strong wind blows towards residential areas
- Controlled blasting includes Adoption of suitable explosive charge and short delay detonators, adequate stemming of holes at collar zone and restricting blasting to a particular time of the day i.e., at the time lunch hours, controlled charge per hole as well as charge per round of hole

- Before loading of material water will be sprayed on blasted material
- Dust mask will be provided to the workers and their use will be strictly monitored

Haul Road & Transportation –

- Water will be sprinkled on haul roads twice a day to avoid dust generation during transportation.
- Transportation of material will be carried out during day time and material will be covered with taurpaulin.
- The speed of tippers plying on the haul road will be limited below 20 km/hr to avoid generation of dust.
- Water sprinkling on haul roads & loading points will be carried out twice a day.
- Main source of gaseous pollution will be from vehicle used for transportation of mineral; therefore, weekly maintenance of machines improves combustion process & makes reduction in the pollution.
- The un-metalled haul roads will be compacted weekly before being put into use.
- Over loading of tippers will be avoided to prevent spillage.
- It will be ensured that all transportation vehicles carry a valid PUC certificate.
- Grading of haul roads and service roads to clear accumulation of loose materials.

Green Belt –

- Planting of trees all along main mine haul roads and regular grading of haul roads will be practiced to prevent the generation of dust due to movement of dumpers/trucks
- Green belt of adequate width will be developed around the project areas

Occupational Health

- Dust mask will be provided to the workers and their use will be strictly monitored
- Annual medical checkups, trainings and campaigns will be arranged to ensure awareness about importance of wearing dust masks among all mine workers & tipper drivers
- Ambient Air Quality Monitoring will be conducted six months once to assess effectiveness of mitigation measures proposed

4.4 Noise Environment (Impact & Mitigation Measures)

Noise pollution is mainly due to operation like drilling & blasting and plying of trucks & HEMM. These activities will not cause any problem to the inhabitants of this area because there is no human settlement in close proximity to the project area. Noise modelling has been carried out considering blasting and compressor operation (drilling) and transportation activities.

Predictions have been carried out to compute the noise level at various distances around the working pit due to these major noise-generating sources. Noise modelling has been carried out to assess the impact on surrounding ambient noise levels. Basic phenomenon of the model is the geometric attenuation of sound. Noise at a point generates spherical waves, which are propagated outwards from the source through the air at a speed of 1,100 ft/sec, with the first wave making an ever-increasing sphere with time. As the wave spreads the intensity of noise diminishes as the fixed amount of energy is spread over an increasing surface area of the sphere. The assumption of the model is based on point source relationship i.e., for every doubling of the distance the noise levels are decreased by 6 dB (A).

For hemispherical sound wave propagation through homogeneous loss free medium, one can estimate noise levels at various locations at different sources using model based on first principle.

$$Lp_2 = Lp_1 - 20 \log (r_2/r_1) - Ae_{1,2}$$

Where:

Lp_1 & Lp_2 are sound levels at points located at distances r_1 & r_2 from the source.

$Ae_{1,2}$ is the excess attenuation due to environmental conditions. Combined effect of all sources can be determined at various locations by logarithmic addition.

$$Lp_{total} = 10 \log \{10^{(Lp1/10)} + 10^{(Lp2/10)} + 10^{(Lp3/10)} + \ldots\ldots\}$$

4.4.1 Anticipated Impact

Attenuation due to Green Belt has been taken to be 4.9 dB (A). The inputs required for the model are:

- Source data
- Receptor data
- Attenuation factor

Source data has been computed taking into account of all the machinery and activities used in the mining process. Same has been listed in Table 4-8.

TABLE 4.7: ACTIVITY AND NOISE LEVEL PRODUCED BY MACHINERY

Sl.No.	Machinery / Activity	Impact on Environment?	Noise Produced in dB(A) at 50 ft from source*
1	Blasting	Yes	94
2	Jack Hammer	Yes	88
3	Compressor	No	81
4	Excavator	No	85
5	Tipper	No	84
Total Noise Produced			95.8

*50 feet from source = 15.24 meters

Source: U.S. Department of Transportation (Federal Highway Administration) – Construction Noise Handbook

The total noise to be produced by mining activity is calculated to be 95.8 dB (A). Generally, most mining operations produce noise between 100-109 dB (A). We have considered equipment and operation noise levels (max) to be approx. 109 dB (A) for nose prediction modelling.

TABLE 4.8: PREDICTED NOISE INCREMENTAL VALUES

Location ID	**N1**	**N2**	**N3**	**N4**	**N5**	**N6**	**N7**
Maximum Monitored Value (Day) dB(A)	44.2	44.5	47.9	47.4	45.2	47.2	48.5
Incremental Value dB(A)	60.1	56.6	29.2	23.6	27.2	25.1	24.8
Total Predicted Noise level dB(A)	60.2	56.8	48.0	47.4	45.3	47.2	48.5
NAAQ Standards	**Industrial** **Day Time- 75 dB (A)** **Night Time- 70 dB (A)** **Residential** **Day Time– 55 dB (A)** **Night Time- 45 dB (A)**						

4.4.2 Common Mitigation Measures for Respective Individual Proposed Projects

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

- Time intervals for each quarry during blasting.
- 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 equipment's.
- The noise generated by the machinery will be reduced by proper lubrication of the machinery and other equipment's.
- Speed of trucks entering or leaving the quarry will be limited to moderate speed to prevent undue noise from empty vehicles...
- Noise levels will be controlled by using optimum explosive charge, proper delay detonators and proper stemming to prevent blow out of holes (occasionally).
- 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 quarry site to attenuate noise.
- Regular medical check–up and proper training to personnel to create awareness about adverse noise level effects.

4.4.3 Ground Vibrations

Ground vibrations due to the proposed mining activities are anticipated due to operation of Mining Machines like Excavators, drilling and blasting, transportation vehicles, etc., However, the major source of ground vibration from the quarry is blasting. The major impact of the ground vibrations is observed on the domestic houses located in the villages nearby the mine lease area. The kuchha houses are more prone to cracks and damage due to the vibrations

induced by blasting whereas RCC framed structures can withstand more ground vibrations. Apart from this, the ground vibrations may develop a fear factor in the nearby settlements.

Another impact due to blasting activities is fly rocks. These may fall on the houses or agricultural fields nearby the mining lease area and may cause injury to persons or damage to the structures. Nearest habitation from the project area is located 760m SW in Peruntholuvu village. The ground vibrations due to the blasting in proposed mine are calculated using the empirical equation.

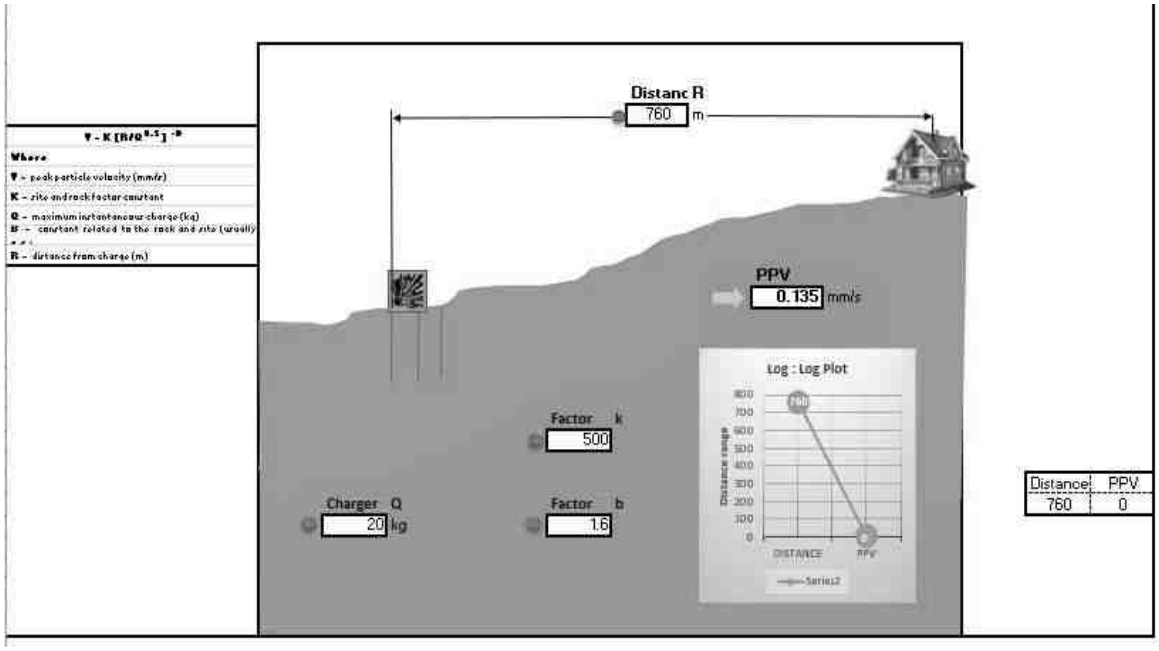
The empirical equation for assessment of peak particle velocity (PPV) is:

$$V = K [R/Q^{0.5}]^{-B}$$

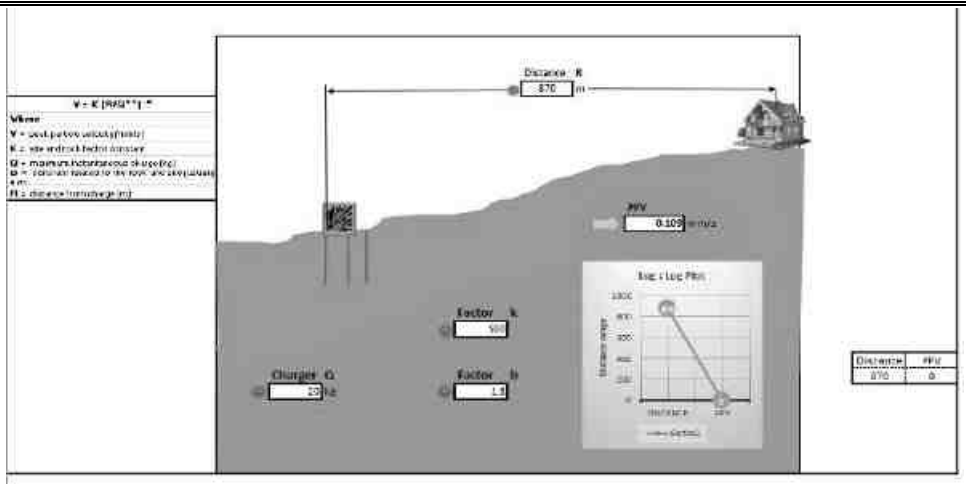
Where –
V = peak particle velocity (mm/s)
K = site and rock factor constant
Q = maximum instantaneous charge (kg)
B = constant related to the rock and site (usually 1.6)
R = distance from charge (m)

TABLE 4.9: PREDICTED PPV VALUES DUE TO BLASTING

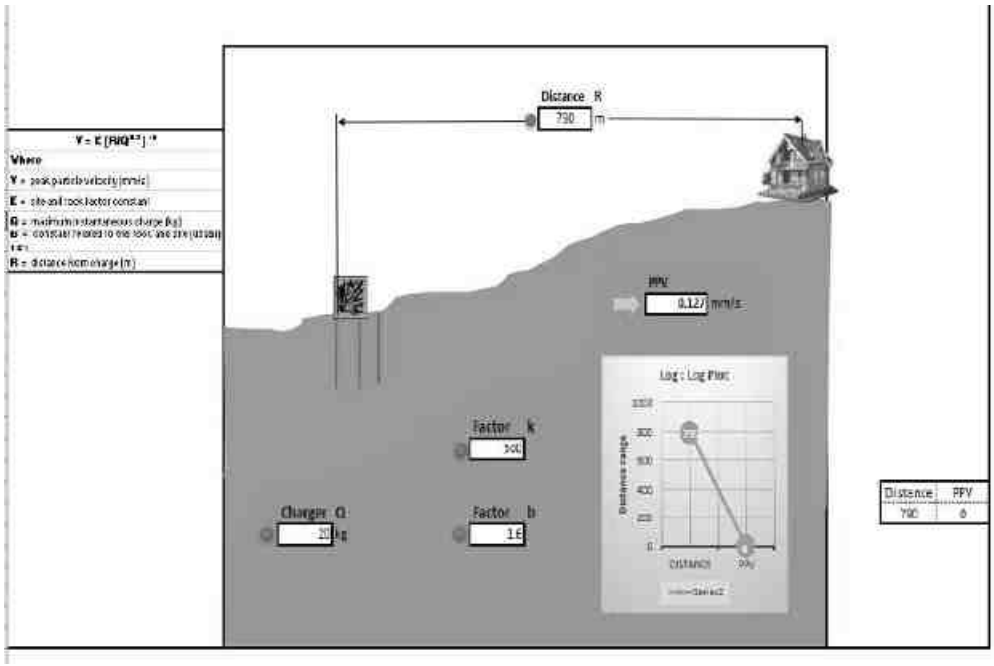
Location ID	Maximum Charge in kgs	Nearest Habitation in m	PPV in m/ms
P1	20	760m-SW	0.135
P2	20	870m-SW	0.109
P3	20	790m-SE	0.127



P1



P2



P3

From the above, the charge per blast of Maximum 20Kg is well below the Peak Particle Velocity of 8 mm/s as per Directorate General of Mines Safety for safe level criteria through Circular No. 7 dated 29/8/1997. It should be ensured that the explosives used for blasting at one blast should not exceed more than 2 Kg at any point of time. However, as per statutory requirement control measures will be adopted to avoid the impacts due to ground vibrations and fly rocks due to blasting.

4.4.3.1 Common Mitigation Measures for Respective Individual Proposed Projects

- The blasting operations in the cluster quarries are carried out without deep hole drilling and blasting using delay detonators, which reduces the ground vibrations;
- Proper quantity of explosive, suitable stemming materials and appropriate delay system will be adopted to avoid overcharging and for safe blasting;
- Adequate safe distance from blasting will be maintained as per DGMS guidelines;
- Blasting shelter will be provided as per DGMS guidelines;
- Blasting operations will be carried out only during day time;

- The charge per delay will be minimized and preferably a greater number of delays will be used per blasts;
- During blasting, other activities in the immediate vicinity will be temporarily stopped;
- Drilling parameters like depth, diameter and spacing will be properly designed to give proper blast;
- A fully trained explosives blast man (Mining Mate, Mines Foreman, 2nd Class Mines Manager/ 1st Class Mines Manager) will be appointed.
- A set of shot firing rules will be drawn up and blasting shall commence outlining the detailed operating procedures that will be followed to ensure that shot firing operations on site take place without endangering the workforce or public.
- Sufficient angular stemming material will be used to confine the explosive force and minimise environmental disturbance caused by venting / misfire.
- The detonators will be connected in a predetermined sequence to ensure that only one charge is detonated at any one time and a NONEL or similar type initiation system will be used.
- The detonation delay sequence shall be designed so as to ensure that firing of the holes is in the direction of free faces so as to minimise vibration effects.
- Appropriate blasting techniques shall be adopted such that the predicted peak particle velocity shall not exceed 8 Hz.
- Vibration monitoring will be carried out every 6 months to check the efficacy of blasting practices

4.5 Ecology and Biodiversity

Environmental impact studies are required for systematic identification, qualification, and interpretation of the anticipated changes. The main environmental problems associated with mining activities are deforestation, land degradation (change in topography, soil erosion), visual intrusion, disturbance to the hydrological system, and water, air, and noise pollution which ultimately impact the floral and faunal status of the project area. However, the occurrence and magnitude of these impacts entirely depend on project location, mode of operation, and adoption of the latest technologies.

4.5.1. Impact Identification and Evaluation

In general, impact prediction methods argue that the foremost step in impact appraisal must consider and identify project actions that are likely to bring significant changes in the project environment. The present study determined to predict the likely impacts of the Proposed Rough stone and Gravel quarry, mining Project in the surrounding environment with a specific focus on biological attributes covering habitats/ecosystems and associated biodiversity. Likely impacts identified were categorized into different levels like direct or primary and indirect or secondary impacts based on the influence of sources of impacts.

4.5.2. Impact on Flora

The proposed mine lease area exhibits undulated topography and it is not fit for cultivation. It is mostly devoid of any considerable vegetation. The proposed mine lease area (core zone) does not encompass any designated forest land within it. The vegetation is very sparse and scanty. So, there will be no impact on flora from the mining operation. There will not be much contamination of soil or any other materials from the mining operation. No threatened plant species were reported in the core and buffer study area during the field survey.

4.5.2.1. Anticipated Impact of mining activity on local flora, fauna and agricultural land

1. Mining of rough stone involves clearing the flora and fauna in core zone. This can lead to habitat destruction for plant species and removal of trees from the site. However, the core zone contains

widely occurring herbs, shrubs and trees. This must be compensated with suitable green belt development practices.

2. The excavation process can remove topsoil, which is crucial for plant growth. In some cases, this can lead to erosion, loss of soil fertility, and changes in soil structure, making it difficult for native plant species to thrive.
3. Mining activity can they destroy the natural habitats of various animal species. However, the proposed area is very small and the animals can migrate to buffer zone.
4. During the loading of the truck, dust generation will be likely to occur. This shall be a temporary effect and not anticipated to affect the surrounding vegetation significantly.

4.5.3 Mitigation Measures

4.5.3.1. General Guidelines for Green Belt Development

Drone survey was covered the green belt and fencing as per the terms of references. The green belt and plantation purposes in and around the proposed mine lease area native species, fruit-bearing trees, medicinal plants, and dense canopy trees should be selected. These species should be tolerant to pollution levels as per Bio- Geography zones of India.

After the operation of mining production capacity, Green belt and Plantation species should be in accordance with the Terms and Conditions of the Environmental Clearance Green belt is created not only for the purpose of protecting sensitive areas or maintaining the ecological balance but because they also act as efficient biological filters or sinks for particulate and gaseous emissions, generated by vehicular movements and various industrial and mining activities. Optimally designed green belts can be effective in reducing the impact of fugitive emissions and pollutants accidentally or otherwise released at ground levels.

4.5.3.2. Proposed Green Belt

Extensive green belt development will be started during the construction phase, which will continue till the operation of the plant. About 500 trees will be planted per hectare all around the quarry safety barrier, approach roads, and township premises. Locally available types of trees that are resistant to pollutants will be planted. In addition to the above, all open spaces available within the premises will be developed as nurseries, parks, gardens, and other forms of greenery. 5 m wide greenbelt will be developed along the plant premises, as per land available.

4.5.3.3. Guidelines & Techniques for Green Belt Development

An extensive survey of the project area was undertaken to observe the structure and composition of vegetation. Hence a combination of plants is selected depending upon the topographical suitability and species selected as per the SPCB Guideline and ToR. The soil characteristics were kept in mind. Based on this survey and environmental conditions suitable native plant species have been proposed for the green belt development plan.

4.5.3.4. Development of Green Belt

The plantation matrix adopted for the green belt development includes pit of 0.3 m x 0.3 m in size with a spacing of 2 m x 2 m. In addition, earth filling and manure may also be required for the proper nutritional balance and nourishment of the sapling. It is also recommended that the plantation has to be

taken up randomly and the landscaping aspects could be taken into consideration. Multi-layered plantations comprising of medium height trees (7 m to 10 m) and shrubs (5 m height) are proposed for the green belt.

A greenbelt is a set of rows of trees planted in such a fashion, to create an effective barrier between the project and its surroundings. The greenbelt helps to capture fugitive emissions, attenuate the noise levels in the existing project, and simultaneously improve aesthetics of the surroundings.

4.5.3.5. Design of Green Belt,

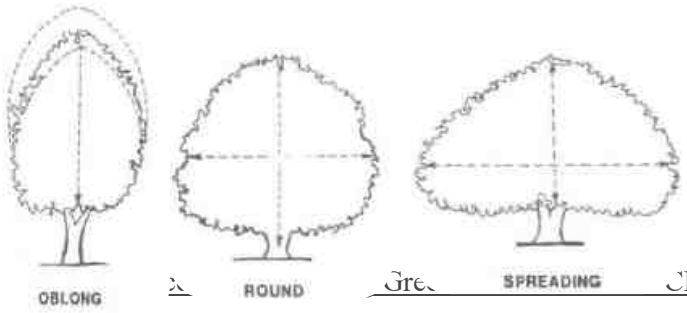
The present plan comprises the details of field investigations. Plant species for greenbelt development are selected as per CPCB guidelines. The green belt will be developed along the periphery of the Proposed Rough stone quarry. The greenbelt development plan has been formulated considering the parameters such as climate, soil types, topography, etc.

a. Characteristic features of plants to be used for Absorption of pollutant gases

- Plant species should be perennial and evergreen with thick canopy cover.
- The crown of the tree (mass of foliage/leaves and branches growing outward from the trunk of the tree) should be either Oblong, Round, or Spreading for effective absorption of pollutant gases.
- Plant should have foliage of longer duration.
- The foliage should be freely exposed through: Adequate height of crown, Openness of foliage/leaves in canopy, Big leaves (long and broad laminar surfaces).

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 was planted as given in the table No 4.1 & 4.2 in consulted with the DFO. The plant species with dense/moderate canopy of native origin was chosen are given below. Species of small/ medium/tall trees alternating with shrubs was planted.

- Plants that grow fast will be preferred.
- Preference for high canopy covers plants with local varieties.
- Perennial and evergreen plants will be preferred.
- The development of the Green Belt is an important aspect for any plant because:
    - **a.** It improves the ambient air quality by controlling Suspended Particulate Matter (SPM) in the air.
    - **b.** It helps in noise abatement for the surrounding area.
    - **c.** It helps in the settlement of new birds and insects within itself.
    - **d.** It maintains the ecological balance.
    - **e.** It increases the aesthetic value of the site.



(*[illegible] Gre[illegible] CB 2000)

. List of plant species proposed for Greenbelt development

S. No	Scientific name	Tamil Name
1	*Aegle marmelos*	Vilva maram
2	*Albizia lebbeck*	Vaagai maram
3	*Cassia fistula*	Konrai tree
4	*Lannea coromandelica*	Othiyam
5	*Limonia acidissima*	Vila maram
6	*Syzygium cumini*	Naval maram
8	*Ficus hispida*	Aththi maram
9	*Borassus flabellifer*	Panai-maram
10	*Madhuca longifolia*	Illupai maram
11	*Pongamia pinnata*	Pongamaram
12	*Cassisa roxburghi*	Sengondrai

(*Source: Term of Reference-ToR)

Species suitable for abatement of noise and dust pollution

S. No	Botanical name	Common name
1	*Azadirachta indica*	Vembhu maram
2	*Ficus religiosa*	Arasan maram
3	*Ficus hispida*	Aththi maram
4	*Bombax ceiba*	Mul Elavu
5	*Syzygium cumini*	Naval maram
6	*Tamarindus indica*	Puliyamaram
7	*Mangifera indica*	Manga maram
8	*Harwickia binata*	Anjan maram
9	*Delonix regia*	Neruppu Kondrai
10	*Cassia fistula*	Sara Kondrai

(*Source: Guidance for Developing Green belts Manual, CPCB 2000)

The above-suggested list covers species with thick canopy cover, perennial green nature, native origin, and a large leaf area index. The proposed species will help in forming an effective barrier between the mine site area and the surroundings.

These species need to be planted along the periphery of the lease area for absorb fugitive emissions and noise levels which is generated during mining activities. All the open spaces, where tree plantation may not be possible, should be covered with shrubs and grass to prevent erosion of topsoil.

Some of the important aspects to be considered are:

- ✓ Planting of trees in each row will be in staggered orientation.
- ✓ In the front row, shrubs will be grown.
- ✓ Since the trunks of the tall trees are generally devoid of foliage, it will be useful to have shrubs in front of the trees so as to give coverage to this portion.
- ✓ The spacing between the trees will be maintained slightly less than the normal spaces, so that the trees may grow vertically and slightly increase the effective height of the green belt.

4.5.4. Anticipated Impact on Fauna

- Since the terrestrial fauna in the study area are distributed away from the mine site, the impacts of project are likely to be much low on terrestrial fauna of the region. The proposed mining lease area is devoid of any significant vegetation, it is not suitable for permanent habitat for any specific wildlife.
- Habitat degradation and disturbance to faunal group due to ground vibration and increase in noise level will be minimize or resolved by modern technologies. So, from above facts it is revealed that there will be no impact on fauna. No threatened fauna species reported in the core and buffer study area.

4.5.4.1. Measures for protection and conservation of wildlife species

- Topsoil has a large number of seeds of native plant species in the mining area.
- Topsoil will be used for restoration and suitable surfaces for planted seedlings.
- Checks and controls the movement of vehicles in and out of the mine.
- Undertaking mitigative measures for a conducive environment to the flora and fauna in consultation with Forest Department.
- A dust suppression system will be installed within the mine and periphery of the mine.
- Plantation around the mine area will help in creating habitats for small faunal species and create a better environment for various fauna. Creating and developing awareness for nature and wildlife in the adjoining villages.

4.5.3. Impact on Aquatic Biodiversity

Mining activities will not disturb the aquatic ecology as there is no effluent discharge proposed Rough stone quarry. There is no natural perennial surface water body within the mine lease area, like wetlands, rivers streams, lakes, and farmer sites. There is no impact on fish habitats and the food WEB/ food chain in the water body and Reservoir. Kindly refer the clause no 3.6.3. Aquatic biodiversity is observed in the study area.

4.5.4. Impacts on Bird Fauna:

The project does not involve any tree felling or removal of vegetation. Therefore, there may not be loss of nesting and roosting habitat of avian fauna.

4.5.5. Impacts on wildlife

There is no National Park, Biosphere Reserve, Wildlife corridors, and Tiger/Elephant Reserve found within 10 km radius of the project site.

. Overall Ecological impact assessments of Perunthuoluvu Village, Rough stone and Gravel quarry, Tiruppur South Taluk, Tiruppur District and Tamil Nadu.

S.No	Attributes	Assessment
1	Impact of mining activity on agricultural land nearby the proposed project site.	Agricultural land is located away from the proposed project site mainly Cocus nucifera is planted 170m on South western side of the area. There are no impacts on the agricultural land & Horticulture. Kindly refer to the conclusion.
	Activities of the project affect the breeding/nesting sites of birds and animals	No breeding and nesting site was identified in the mining lease site. The fauna sighted mostly migrated from the buffer area.
2	Located near an area populated by rare or endangered species	No Endangered, Critically Endangered, or vulnerable species were sighted in the core mining lease area.
3	Proximity to national park/wildlife sanctuary/reserve forest /mangroves/ coastline/estuary/sea	'No 'national park/wildlife sanctuary/ reserve forest within the radius of 10km.
4	The proposed project restricts access to waterholes for wildlife	'No '
5	Proposed mining project impact surface water quality that also provides water to wildlife	'No 'scheduled or threatened wildlife animals are sighted regularly core in the core area.
6	Proposed mining project increase siltation that would affect nearby biodiversity areas.	Surface runoff management such as drains is constructed properly so there will be no siltation effect in the nearby mining area.
7	Risk of fall/slip or cause death to wild animals due to project activities.	'No'
8	The project release effluents into a water body that also supplies water to a wildlife.	No water body near to core zone so the chances of water becoming polluted is low.

9	Mining projects affect the forest-based livelihood/ any specific forest product on which local livelihood depended.	'No'
10	The project likely to affect migration routes.	'No 'migration route was observed during the monitoring period.
11	The project is likely to affect the flora of an area, which have medicinal value	'No'
12	Forestland is to be diverted, has carbon high sequestration.	'No 'There was no forest land diverted.
13	The project is likely to affect wetlands, Fish breeding grounds, and marine ecology.	'No'. Wetland was not present in the near core Mining lease area. No breeding and nesting ground is present in the core mining area.

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

TABLE 4.10: GREENBELT DEVELOPMENT PLAN

PROPOSAL – P1				
Year	**No. of trees proposed to be planted**	**Survial %**	**Area to be covered**	**Name of the species**
I	850	80	Near 7.5m safety distance, panchayat road and village road	Neem, Panai , Vilvam, Ashokha etc.
PROPOSAL – P2				
Year	**No. of trees proposed to be planted**	**Survial %**	**Area to be covered sq.m**	**Name of the species**
I	1500	80%	Near 7.5m safety distance, panchayat road and village road	Neem, Panai , Vilvam, Ashokha etc.
PROPOSAL – P3				
Year	**No. of trees proposed to be planted**	**Survial %**	**Area to be covered sq.m**	**Name of the species**
I	2250	80%	Near 7.5m safety distance, panchayat road and village road	Neem, Panai , Vilvam, Ashokha etc.

TABLE 4.11: BUDGET FOR GREEBELT DEVELOPMENT PLAN-P1

ACTIVITY		**YEAR**					**RATE**	**AMOUNT (INR)**
		I	**II**	**III**	**IV**	**V**		
Plantations	Nos.	850					@200 Rs Per sapling	Rs.1,70,000/-
	Cost	1,70,000						
Wire Fencing (In Mtrs) 520		1,56,000					@300 Rs Per Meter	Rs.1,56,000/-

Garland drain (In Mtrs) 470	1,41,000	@300 Rs Per Meter	Rs.1,41,000/-
TOTAL			**Rs. 4,67,000/-**

TABLE 4.12: BUDGET FOR GREEBELT DEVELOPMENT PLAN-P2

ACTIVITY		YEAR					RATE	AMOUNT (INR)
		I	II	III	IV	V		
Plantations	Nos.	1500					@200 Rs Per sapling	Rs. 3,00,000/-
	Cost	3,00,000						
Wire Fencing (In Mtrs) 950		2,85,000					@300 Rs Per Meter	Rs.2,85,000/-
Garland drain (In Mtrs) 900		2,70,000					@300 Rs Per Meter	Rs.2,70,000/-
TOTAL								**Rs. 8,55,000/-**

TABLE 4.13: BUDGET FOR GREEBELT DEVELOPMENT PLAN-P3

ACTIVITY		YEAR					RATE	AMOUNT (INR)
		I	II	III	IV	V		
Plantations	Nos.	2250					@200 Rs Per sapling	Rs. 4,50,000/-
	Cost	4,50,000						
Wire Fencing (In Mtrs) 950		2,85,000					@300 Rs Per Meter	Rs.2,55,000/-
Garland drain (In Mtrs) 900		2,70,000					@300 Rs Per Meter	Rs.2,40,000/-
TOTAL								**Rs. 9,45,000/-**

After complete extraction of mineral, the excavated pits will be allowed to collect rainwater and seepage water to serve as a reservoir to charge the nearby wells. Fish culture will also be attempted. A bund will be constructed around the pits. In order to minimize the impact of mining on the vegetation outside the mine lease area, it is recommended that adequate protection measures must be implemented. As mining involves movement of vehicles and increased anthropogenic activities, some of the areas can be fenced by involving local people and educating them about increased benefits of such activities.

4.6 Socio Economic

4.6.1 Anticipated Impact from all Proposed Projects

- Dust generation from mining activity can have negative impact on the health of the workers and people in the nearby area.
- Approach roads can be damaged by the movement of tippers
- Increase in Employment opportunities both direct and indirect thereby increasing economic status of people of the region

4.6.2 Common Mitigation Measures for Respective Individual Proposed Projects

- Good maintenance practices will be adopted for all 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.
- Air pollution control measure will be taken 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 will be provided as per mines act and rules.
- Benefit to the State and the Central governments through financial revenues by way of royalty, tax, duties, etc.., from this project directly and indirectly.
- From above details, the quarry operations will have highly beneficial positive impact in the area

4.7 Occupational Health and Safety

Occupational health and safety hazards occur during the operational phase of mining and primarily include the following:

- Respiratory hazards
- Noise
- Physical hazards
- Explosive storage and handling

4.7.1 Respiratory Hazards

Long-term exposure to silica dust may cause silicosis the following measures are proposed:

- Cabins of excavators and tippers will be enclosed with AC and sound proof
- Use of personal dust masks will be made compulsory

4.7.2 Noise

Workers are likely to get exposed to excessive noise levels during mining activities. The following measures are proposed for implementation

- No employee will be exposed to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection
- The use of hearing protection will be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110 dB(A)
- Ear muffs provided will be capable of reducing sound levels at the ear to at least 85 dB(A)
- Periodic medical hearing checks will be performed on workers exposed to high noise levels

4.7.3 Physical Hazards

The following measures are proposed for control of physical hazards

- Specific personnel training on work-site safety management will be taken up;
- Work site assessment will be done by rock scaling of each surface exposed to workers to prevent accidental rock falling and / or landslide, especially after blasting activities;
- Natural barriers, temporary railing, or specific danger signals will be provided along rock benches or other pit areas where work is performed at heights more than 2m from ground level;
- Maintenance of yards, roads and footpaths, providing sufficient water drainage and preventing slippery surfaces with an all-weather surface, such as coarse gravel will be taken up

4.7.4 Occupational Health Survey

All the persons will undergo pre-employment and periodic medical examination. Employees will be monitored for occupational diseases by conducting the following tests

- General physical tests
- Audiometric tests
- Full chest, X-ray, Lung function tests, Spirometric tests

- Periodic medical examination – yearly
- Lung function test – yearly, those who are exposed to dust
- Eye test

Essential medicines will be provided at the site. The medicines and other test facilities will be provided at free of cost. The first aid box will be made available at the mine for immediate treatment.

First aid training will be imparted to the selected employees regularly. The lists of first aid trained members shall be displayed at strategic places.

4.8 Mine Waste Management

No waste is anticipated from any of the proposed quarries.

4.9 Mine Closure

Mine closure plan is the most important environmental requirement in mining projects. The mine closure plan should cover technical, environmental, social, legal and financial aspects dealing with progressive and post closure activities. The closure operation is a continuous series of activities starting from the decommissioning of the project. Therefore, progressive mine closure plan should be specifically dealt with in the mining plan and is to be reviewed along with mining plan. As progressive mine closure is a continuous series of activities, it is obvious that the proposals of scientific mining have included most of the activities to be included in the closure plan. While formulating the closure objectives for the site, it is important to consider the existing or the pre-mining land use of the site; and how the operation will affect this activity.

The primary aim is to ensure that the following broad objectives along with the abandonment of the mine can be successfully achieved:

- To create a productive and sustainable after-use for the site, acceptable to mine owners, regulatory agencies, and the public
- To protect public health and safety of the surrounding habitation
- To minimize environmental damage
- To conserve valuable attributes and aesthetics
- To overcome adverse socio-economic impacts.

4.9.1 Mine Closure Criteria

The criteria involved in mine closure are discussed below:

4.9.1.1 Physical Stability

All anthropogenic structures, which include mine workings, buildings, rest shelters etc., remaining after mine decommissioning should be physically stable. They should present no hazard to public health and safety as a result of failure or physical deterioration and they should continue to perform the functions for which they were designed. The design periods and factors of safety proposed should take full account of extreme events such as floods, hurricane, winds or earthquakes, etc. and other natural perpetual forces like erosion, etc.,

4.9.1.2 Chemical Stability

The solid wastes on the mine site should be chemically stable. This means that the consequences of chemical changes or conditions leading to leaching of metals, salts or organic compounds should not endanger public health and safety nor result in the deterioration of environmental attributes. If the pollutant discharge likely to cause adverse impacts is predicted in advance, appropriate mitigation measures like settling of suspended solids or passive treatment to improve water quality as well as quant ity, etc., could be planned. Monitoring should demonstrate that there is no adverse effect of pollutant concentrations exceeding the statutory limits for the water, soil and air qualities in the area around the closed mine.

4.9.1.3 Biological Stability

The stability of the surrounding environment is primarily dependent upon the physical and chemical characteristics of the site, whereas the biological stability of the mine site itself is closely related to rehabilitation and final

land use. Nevertheless, biological stability can significantly influence physical or chemical stability by stabilizing soil cover, prevention of erosion/wash off, leaching, etc.,

A vegetation cover over the disturbed site is usually one of the main objectives of the rehabilitation programme, as vegetation cover is the best long-term method of stabilizing the site. When the major earthwork components of the rehabilitation programme have been completed, the process of establishing a stable vegetation community begins. For re-vegetation, management of soil nutrient levels is an important consideration. Additions of nutrients are useful under three situations.

- Where the nutrient level of spread topsoil is lower than material in-situ e.g. for development of social forestry
- Where it is intended to grow plants with a higher nutrient requirement than those occurring naturally e.g. planning for agriculture
- Where it is desirable to get a quick growth response from the native flora during those times when moisture is not a limiting factor e.g. development of green barriers

The Mine closure plan should be as per the approved mining plan. The mine closure is a part of approved mine plan and activities of closure shall be carried out as per the process described in mine closure plan.

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

5.0 Introduction:

Consideration of alternatives to a project proposal is a requirement of EIA process. This quarry is site specific. The site has been selected based on geological investigation and exploration and from the Existing quarry pits around the project site. Drilling, Blasting, Excavation, Loading & Transportation will be carried out in this quarrying operation.

- This area denotes the indicative of flow pattern of the rock mass in $N30^0E$ to $S30^0W$ with dipping $SE60^0$.
- Transportation facility for materials & manpower.
- Overall impact on environment and mitigation feasibility.
- Socio – economic background.

Enough infrastructure exists and lesser resources are required to be deployed. Since, any major construction for infrastructure is not required and hence does not affect the environment considerably.

5.1 Factors Behind the Selection of Project Site

Rough Stone and Gravel Cluster Quarry Projects at Peruntholuvu Village are a site specific. The proposed mining lease area has following advantages: -

- The mineral deposit occurs in a non-forest area.
- There is no habitation within the project area; hence no R & R issues exist.
- There is no river, stream, nallah and water bodies in the applied mine lease area.
- Availability of skilled, semi-skilled and unskilled workers in this region.
- All the basic amenities such as medical, firefighting, education, transportation, communication and infrastructural facilities are well connected and accessible.
- The mining operations will not intersect the ground water level. Hence, no impact on ground water environment.
- Study area falls in seismic zone – II, there is no major history of landslides, earthquake, subsidence etc., recorded in the past history.

5.2 Analysis of Alternative Site

The mineral deposits are site specific in nature; hence, question of seeking alternate site does not arise for this project.

5.3 Factors Behind Selection of Proposed Technology

Mechanized open cast mining operation with drilling and blasting method will be used to extract Rough Stone and Gravel in the area. The quarry areas fall in the clusters has following advantages –

- As the mineral deposition is homogeneous and batholith formation, therefore opencast method of working out deposit is preferred over underground method.
- The material will be loaded after sprinkling with water with the help of excavators into dumpers / trippers and transported to the needy customers.
- Blasting and availability of drills along with controlled blasting technology gives desired fragmentation so that the mineral is handled safely and used without secondary blasting.

Semi skilled labours fit for quarrying operations are easily available around the nearby villages.

5.4 Analysis of Alternative Technology

Open cast mechanized method has been selected for this project. This technology is having least gestation period, economically viable, safest and less labour intensive. The method has inbuilt flexibility for increasing or decreasing the production as per market condition.

CHAPTER – 6: ENVIRONMENTAL MONITORING PROGRAMME

6.0 General

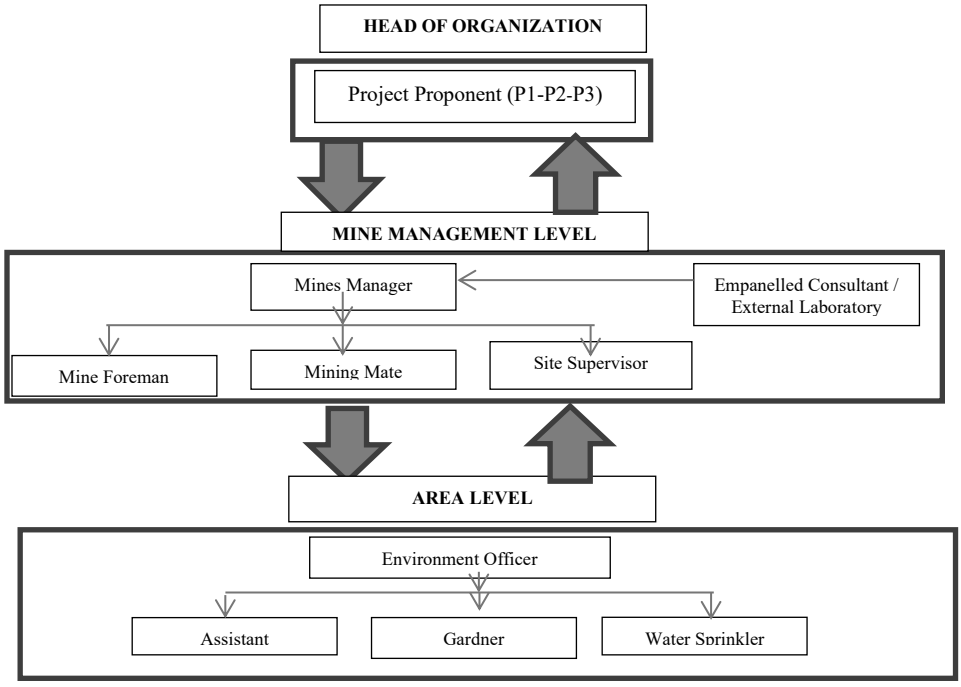
Environmental Monitoring will be taken up for various environmental components as per conditions stipulated in Environmental Clearance Letter issued by MoEF & Consent to Operate issued by the State Pollution Control Board. Monitoring reports will be submitted to regulator as per statutory requirements. The entire monitoring work will be carried out by MoEF & CC / NABL recognized laboratories.

The monitoring and evaluation of environmental parameters indicates potential changes occurring in the environment, which paves way for implementation of rectifying measures wherever required to maintain the status of the natural environment. Evaluation is also a very effective tool to judge the effectiveness or deficiency of the measures adopted and provides insight for future corrections.

6.1 Methodology of Monitoring Mechanism

Implementation of EMP and periodic monitoring will be carried out by the proponents and respective quarry owners in the cluster quarries. A comprehensive monitoring mechanism has been devised for monitoring of impacts due to proposed project; Mine Management Level environmental protection measures like dust suppression, treatment and recycling of waste water, control of noise due to blasting and Ground vibration, maintenance of machinery and vehicles, housekeeping in the mine premises, plantation, implementation of other hand, implementation of area level protection measures like plantation and green Environmental Management Plan and environmental clearance conditions will be monitored by the proponent. On the belt development, environmental quality monitoring etc., An environment monitoring cell (EMC) will be constituted at the quarry consisting of following members to monitor the implementation of EMP and other environmental protection measures.

FIGURE 6.1 ENVIRONMENTAL MONITORING CELL



The responsibilities of this cell will be:

- Implementation of pollution control measures
- Monitoring programme implementation
- Post-plantation care
- To check the efficiency of pollution control measures taken
- Any other activity as may be related to environment
- Seeking expert's advice when needed

The environmental monitoring cell will co-ordinate all monitoring programs at site and data thus generated will be regularly furnished to the State regulatory agencies. The sampling and analysis report of the monitored environmental attributes will be submitted to the Tamil Nadu Pollution Control Board (TNPCB) at a frequency of monthly, half-yearly and yearly. The half-yearly reports will be submitted to Ministry of Environment and Forest, Regional Office and SEIAA as well.

The sampling and analysis of the environmental attributes will be as per the guidelines of Central Pollution Control Board (CPCB)/Ministry of Environment, Forest and Climate Change (MoEF & CC).

6.2 Implementation Schedule of Mitigation Measures

The mitigation measures proposed in Chapter-4 will be implemented so as to reduce the impact on the environment due to the operations of the proposed project. Implementation schedule of mitigation measures is given in Table 6.1.

TABLE 6.1 IMPLEMENTATION SCHEDULE

Sl No.	Recommendations	Time Period	Schedule
1	Land Environment Control Measures	Before commissioning of the project	Immediately after the commencement of the project
2	Soil Quality Control Measures	Before commissioning of the project	Immediately after the commencement of the project
3	Water Pollution Control Measures	Before commissioning of the project and along with mining operation	Immediately and as project progress
4	Air Pollution Control Measures	Before commissioning of the project and along with mining operation	Immediately and as project progress
5	Noise Pollution Control Measures	Before commissioning of the project and along with mining operation	Immediately and as project progress
6	Ecological Environment	Phase wise implementation every year along with mine operations	Immediately and as project progress

6.3 Monitoring Schedule and Frequency

The environmental monitoring will be conducted in the mine operations as follows:

- Air quality;
- Water and wastewater quality;
- Noise levels;
- Soil Quality; and
- Greenbelt Development

The details of monitoring are detailed in Table 6.2

TABLE 6.2: PROPOSED MONITORING SCHEDULE POST EC FOR P1 TO P3

		Location	**Monitoring**	**Parameters**

S. No.	Environment Attributes		Duration	Frequency	
1	Air Quality	2 Locations (1 Core & 1 Buffer)	24 hours	Once in 6 months	Fugitive Dust, $PM_{2.5}$, PM_{10}, SO_2 and NO_x.
2	Meteorology	At mine site before start of Air Quality Monitoring & IMD Secondary Data	Hourly / Daily	Continuous online monitoring	Wind speed, Wind direction, Temperature, Relative humidity and Rainfall
3	Water Quality Monitoring	2 Locations (1SW & 1 GW)	-	Once in 6 months	Parameters specified under IS:10500, 1993 & CPCB Norms
4	Hydrology	Water level in open wells in buffer zone around 1 km at specific wells	-	Once in 6 months	Depth in bgl
5	Noise	2 Locations (1 Core & 1 Buffer)	Hourly – 1 Day	Once in 6 months	Leq, Lmax, Lmin, Leq Day & Leq Night
6	Vibration	At the nearest habitation (in case of reporting)	–	During blasting Operation	Peak Particle Velocity
7	Soil	2 Locations (1 Core & 1 Buffer)	–	Once in six months	Physical and Chemical Characteristics
8	Greenbelt	Within the Project Area	Daily	Monthly	Maintenance

Source: Guidance of manual for mining of minerals, February 2010

6.4 Environmental Policy of the Proponents

The project proponents in the proposed quarries are committed to ensure that:

- Protect the environment by control and prevention of pollution and promote green environment.
- To operate the quarry with an objective of no injuries and accidents at the work place and provide a safe work place for our employees, contractors and others who perform their duties.
- Adequate health care will be taken to all the employees and create process to reduce the adverse effect of the operations on Health of the employees.
- Provide safety appliance and continuous training in safety to employees to ensure safe production and achieve the target of zero accidents.
- Develop safe working methods and practices, remove unsafe work conditions and consider all the aspects at the early stages of process development to provide safe working atmosphere.
- Communicate Safety, Health and Environmental Policy to all employees for better understanding and practice.

6.5 Budgetary Provision for Environmental Monitoring Programme

The cost in respect of monitoring of environmental attributes, parameter to be monitored, sampling/monitoring locations with frequency and cost provision against each proposal is shown in Table 6.3. Monitoring work will be outsourced to external laboratory approved by NABL / MoEF.

The proposed total cost for Environmental Monitoring Programme for three proposed quarries in cluster for the mining plan period is Rs 11,40,000/-

TABLE 6.3 ENVIRONMENT MONITORING BUDGET P1-P2-P3

Parameter	Sl. Nos	Capital Cost
Air Quality, Meteorology, Water Quality, Hydrology, Soil Quality Noise Quality, Vibration Study Greenbelt	P1	Rs.3,80,000/-
	P2	Rs.3,80,000/-
	P3	Rs.3,80,000/-
	Total	**Rs. 11,40,000/-**

Source: Approved Mining Plan

6.6 Reporting Schedules of Monitored Data

The monitored data on Air quality, Water quality, Noise levels and other environmental attributes will be periodically examined by the proponent with Environmental Monitoring cell and necessary corrective measures will be carried out. The monitoring data will be submitted to Tamil Nadu State Pollution Control Board in the Compliance to CTO Conditions & environmental audit statements every year to MoEF & CC and Half-Yearly Compliance Monitoring Reports to MoEF & CC Regional Office and SEIAA.

Periodical reports to be submitted to: -

- MoEF & CC – Half yearly status report
- TNPCB - Half yearly status report
- Department of Geology and Mining: quarterly, half yearly annual reports
- SEIAA, Chennai, Tamil Nadu

Besides the Mines Manager/Agent will submit the periodical reports to –

- Director of mines safety,
- Labour enforcement officer,
- Controller of explosives as per the norms stipulated by the department.

CHAPTER – 7: ADDITIONAL STUDIES

7.0 General

The following Additional Studies were done as per items identified by project proponent and items identified by regulatory authority. Items identified by public and other stakeholders will be incorporated after Public Hearing.

- Public Consultation
- Risk Assessment
- Disaster Management Plan
- Cumulative Impact Study
- Plastic Waste Management

7.1. Public Consultation:

Application to The Member Secretary of the Tamil Nadu Pollution Control Board (TNPCB) to conduct Public Hearing in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site or in its close proximity in the district is submitted along with this Draft EIA / EMP Report and the outcome of public hearing proceedings will be detailed in the Final EIA/EMP Report.

7.2 Risk Assessment

The methodology for the risk assessment has been based on the specific risk assessment guidance issued by the Directorate General of Mine Safety (DGMS), Dhanbad, vide Circular No.13 of 2002, dated 31st December, 2002. The DGMS risk assessment process is intended to identify existing and probable hazards in the work environment and all operations and assess the risk levels of those hazards in order to prioritize those that need immediate attention. Further, mechanisms responsible for these hazards are identified and their control measures, set to timetable are recorded along with pinpointed responsibilities.

The cluster quarry operation will be carried out under the direction of a Qualified Competent Mine manager holding certificate of competency to manage a metalliferous mine granted by the DGMS, Dhanbad. Risk Assessment is all about prevention of accidents and to take necessary steps to prevent it from happening.

Factors of risks involved due to human induced activities in connection with mining & allied activities with detailed analysis of causes and control measures for the mine is given in below Table 7.1.

TABLE 7.1 RISK ASSESSMENT & CONTROL MEASURES

S. No	Risk factors	Causes of risk	Control measures
1	Accidents due to explosives and heavy mining machineries	Improper handling and unsafe working practice	▪ All safety precautions and provisions of Mine Act, 1952, Metalliferrous Mines Regulation, 1961 and Mines Rules, 1955 will be strictly followed during all mining operations; ▪ Entry of unauthorized persons will be prohibited; ▪ Fire fighting and first-aid provisions in the mine office complex and mining area; ▪ Provisions of all the safety appliances such as safety boot, helmets, goggles etc. will be made available to the employees and regular check for their use. ▪ Working of quarry, as per approved plans and regularly updating the mine plans; ▪ Cleaning of mine faces shall be daily done in order to avoid any overhang or undercut; ▪ Handling of explosives, charging and firing shall be carried out by competent persons only under the supervision of a Mine Manager;

			▪ Maintenance and testing of all mining equipment as per manufacturer 's guidelines.
2	Drilling& Blasting	Due to improper and unsafe practices Due to high pressure of compressed air, hoses may burst Drill Rod may break	▪ Safe operating procedure established for drilling (SOP) will be strictly followed. ▪ Only trained operators will be deployed. ▪ No drilling shall be commenced in an area where shots have been fired until the blaster/blasting foreman has made a thorough Examination of all places. ▪ Drilling shall not be carried on simultaneously on the benches at places directly one above the other. ▪ Periodical preventive maintenance and replacement of worn-out accessories in the compressor and drill equipment as per operator manual. ▪ All drills unit shall be provided with wet drilling shall be maintained in efficient working in condition. ▪ Operator shall regularly use all the personal protective equipment.
3	Blasting	Fly rock, ground vibration, Noise and dust. Improper charging, stemming & Blasting/ fining of blast holes Vibration due to movement of vehicles.	▪ The maximum charge per delay and by optimum blast hole pattern, vibrations will be controlled within the permissible limit and blast can be conducted safely. ▪ SOP for Charging, Stemming & Blasting/Firing of Blast Holes will be followed by blasting crew during initial stage of operation. ▪ Shots are fired during daytime only. ▪ All holes charged on any one day shall be fired on the same day. ▪ The danger zone is and will be distinctly demarcated (by means of red flags)
4	Transportation	Potential hazards and unsafe workings contributing to accident and injuries overloading of material While reversal & overtaking of vehicle Operator of truck leaving his cabin when it is loaded.	▪ Before commencing work, drivers personally check the dumper/truck/tipper for oil(s), fuel and water levels, tyre inflation, general cleanliness and inspect the brakes, steering system, warning devices including automatically operated audio-visual reversing alarm, rear view mirrors, side indicator lights etc., are in good condition. ▪ Not allow any unauthorized person to ride on the vehicle nor allow any unauthorized person to operate the vehicle. ▪ Concave 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 ▪ Periodical maintenance of vehicles as per operator manual
5	Natural calamities	Unexpected happenings	▪ Escape Routes will be provided to prevent inundation of storm water ▪ Fire Extinguishers & Sand Buckets
6	Failure of Mine Benches and Pit Slope	Slope geometry, Geological structure	▪ Ultimate or over all pit slope shall be below 60° and each bench height shall be 5m height.

7.3 Disaster Management Plan

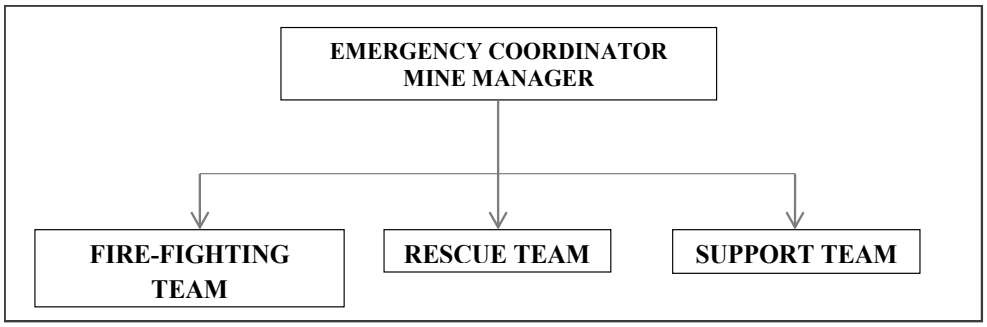
Natural disasters like Earthquake, Land slides has not been recorded in the past history as the terrain is categorized under seismic zone II. The area is far away from the sea hence the disaster due to heavy floods and tsunamis are not anticipated. The Disaster Management Plan is aimed to ensure safety of life, protection of environment, protection of installation, restoration of production and salvage operations in this same order of priorities.

The objective of the Disaster Management Plan is to make use of the combined resources of the mine and the outside services to achieve the following:

- Rescue and medical treatment of casualties;
- Safeguard other people;
- Minimize damage to property and the environment;
- Initially contain and ultimately bring the incident under control;
- Secure the safe rehabilitation of affected area; and
- Preserve relevant records and equipment for the subsequent inquiry into the cause and circumstances of the emergency.

In case a disaster takes place, despite preventive actions, disaster management will have to be done in line with the descriptions below. There is an organization proposed for dealing with the emergency situations and the coordination among key personnel and their team has been shown in Fig 7.1.

FIGURE 7.1: DISASTER MANAGEMENT TEAM LAYOUT FOR P1,P2,P3



The emergency organization shall be headed by emergency coordinator who will be qualified competent mine manager. There would be three teams for taking care of emergency situations – Fire-Fighting Team, Rescue Team and Support Team. The proposed composition of the teams is given in Table 7.2.

TABLE 7.2: PROPOSED TEAMS TO DEAL WITH EMERGENCY SITUATION

DESIGNATION	QUALIFICATION
FIRE-FIGHTING TEAM	
Team Leader/ Emergency Coordinator (EC)	Mines Manager
Team Member	Mines Foreman

Team Member	Mining Mate
RESCUE TEAM	
Team Leader/ Emergency Coordinator (EC)	Mines Manager
Team Member/ Incident Controller (IC)	Environment Officer
Team Member	Mining Foreman
SUPPORT TEAM	
Team Leader/ Emergency Coordinator (EC)	Mines Manager
Assistant Team Leader	Environment Officer
Team Member	Mining Mate
Security Team Leader/ Emergency Security Controller	Mines Foreman

Once the mine becomes operational, the above table along with names of personnel will be prepared and made easily available to workers. A mobile communication network and wireless shall connect Mine Emergency Control Room (MECR) to control various departments of the mine, fire station and neighbouring industrial units/mines.

Roles and responsibilities of emergency team –

(a) Emergency coordinator (EC)

The emergency coordinator shall assume absolute control of site

(b) Incident controller (IC)

Incident controller shall be a person who shall go to the scene of emergency and supervise the action plan to overcome or contain the emergency. Shift supervisor or Environmental Officer shall assume the charge of IC.

(c) Communication and advisory team

The advisory and communication team shall consist of heads of Mining Departments i.e., Mines Manager

(d) Roll call coordinator

The Mine Foreman shall be Roll Call Coordinator. The roll call coordinator will conduct the roll call and will evacuate the mine personnel to assembly point. His prime function shall be to account for all personnel on duty.

(e) Search and rescue team

There shall be a group of people trained and equipped to carryout rescue operation of trapped personnel. The people trained in first aid and fire-fighting shall be included in search and rescue team

(f) Emergency security controller

Emergency Security Controller shall be senior most security person located at main gate office and directing the outside agencies e.g., fire brigade, police, doctor and media men etc.,

Emergency control procedure –

The onset of emergency, will in all probability, commence with a major fire or explosion or collapse of wall along excavation and shall be detected by various safety devices and also by members of operational staff on duty. If located by a staff member on duty, he (as per site emergency procedure of which he is adequately briefed) will go to nearest alarm call point, break glass and trigger off the alarms. He will also try his best to inform about location and nature of accident to the emergency control room. In accordance with work emergency procedure the following key activities will immediately take place to interpret and take control of emergency.

- On site fire crew led by a fireman will arrive at the site of incident with fire foam tenders and necessary equipment.
- Emergency security controller will commence his role from main gate office

- Incident controller shall rush to the site of emergency and with the help of rescue team and will start handling the emergency.
- Site main controller will arrive at MECR with members of his advisory and communication team and will assume absolute control of the site.
    - He will receive information continuously from incident controller and give decisions and directions to:
        - Incident controller
        - Mine control rooms
        - Emergency security controller

Proposed fire extinguishers at different locations

The following type of fire extinguishers is proposed at strategic locations within the quarry.

Location	Type of Fire Extinguishers
Electrical Equipment's	CO_2 type, foam type, dry chemical powder type
Fuel Storage Area	CO_2 type, foam type, dry chemical powder type, Sand bucket
Office Area	Dry chemical type, foam type

Alarm system to be followed during disaster –

On receiving the message of disaster from Site Controller, fire-fighting team, the mine control room attendant will sound siren wailing for 5 minutes. Incident controller will arrange to broadcast disaster message through public address system.

On receiving the message of "Emergency Over" from Incident Controller the emergency control room attendant will give "All Clear Signal", by sounding alarm straight for 2 minutes.

The features of alarm system will be explained to one and all to avoid panic or misunderstanding during disaster.

In order to prevent or take care of hazard / disasters if any the following control measures have been adopted.

- All safety precautions and provisions of Metalliferous Mines Regulations (MMR), 1961 is strictly followed during all mining operations
- Fire fighting and first-aid provisions in the mines office complex and mining area will be provided.
- Provisions of all the safety appliances such as safety boot, helmets, goggles, dust masks, ear plugs and ear muffs etc. are made available to the employees and the use of same is strictly adhered to through regular monitoring
- Training and refresher courses for all the employees working in the quarry in phase manner
- Cleaning of mine faces will be carried out regularly
- Provision of high-capacity standby pumps with generator sets with enough quantity of diesel for emergency pumping especially during monsoon.
- A blasting SIREN will be used at the time of blasting for audio signal.
- Checking of blasting area for any un-blasted hole or material.
- Warning notice boards indicating the time of blasting and NOT TO TRESPASS will be displayed at prominent places

7.4 CUMULATIVE IMPACT STUDY

There are Three (3) proposed and One (1) existing quarries falls in the cluster. The list of quarries is as below –

TABLE 7.3: LIST OF QUARRIES WITHIN 500 METER RADIUS FROM THIS PROPOSAL

*PROPOSED QUARRIES				
CODE	**Name of the Proponent and Address**	**S.F. Nos & Village**	**Extent in Ha**	**Status**
P1	**M/s. VKP Engineering Ind Pvt., Ltd.,** Thiru. P. Jagadeesan, Director No. 11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District – 638 052**.**	543/2 & Peruntholuvu Village	1.64.38Ha	Obtained ToR vide, File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated:03.06.2025
P2		538/2A, 538/2B and 539/2 (P) & Peruntholuvu Village	2.90.0 Ha	Obtained ToR vide, File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated:03.06.2025
P3		536, 537/1, 537/2 & 537/3 & Peruntholuvu Village	4.51.0 Ha	Obtained ToR vide, File No. 11961 TOR Identification No. TO25B0108TN5609691N Dated:15.06.2025
	Total		**9.05.38 Ha**	
***EXISTING QUARRIES**				
CODE	**Name of the Proponent and Address**	**S.F.Nos , Village & Taluk**	**Extent in Ha**	**Lease Period**
E-1	**M/s. VKP Engineering Ind Pvt., Ltd.,**	538/1(P),539/1(P) & 539/2(P)	4.94.95	19.06.2020 to 18.06.2030
		Total	**4.94.95 Ha**	
ABANDONED/EXPIRED QURRIES				
CODE	**Name of the Proponent and Address**	**S.F. Nos, Village & Taluk**	**Extent in Ha**	**Lease Period**
	Nil			
***TOTAL CLUSTER EXTENT**			**14.00.33 Ha**	

Note: -

- **Cluster area is calculated as per MoEF & CC Notification – S.O. 2269 (E) Dated: 01.07.2016**

As per above notification S.O.2269(E) dated : 01.07.2016 in para (b) in Appendix XI,- (ii)(5): The lease not operative for three years or more and leases which have got environmental clearance as on 15th January, 2016 shall not be counted for calculating the area of cluster, but shall be included in the Environment Management Plan and the Regional Environmental Management Plan"

TABLE 7.4: SALIENT FEATURES OF THE PROPOSED PROJECTS IN CLUSTER

SALIENT FEATURES OF PROPOSAL "P1"			
Name of the Mine	M/s. VKP Engineering Ind Pvt Ltd Rough Stone & Gravel Quarry		
Land type & details	**It is a Patta land** classified as punjai (Barren land) It is a Patta land, registered in the name of applicant Tmt. P. Sivakami & Tmt N. Sarojini vide patta no.2844		
S.F. Nos	543/2		
Extent	1.64.38 Ha		
Geological Reserves	Rough Stone	Weathered Rock	Gravel
	5,75,435m^3	**1,50,725m^3**	**32,882m^3**
Mineable Reserves	Rough Stone	Weathered Rock	Gravel
	1,23,550m^3	**99,800 m^3**	**23,868m^3**
Proposed Quantity of Reserves/Production for mining Period	**1,23,550m^3**	**99,800 m^3**	**23,868m^3**
Mining Plan Period / Lease Period	5 Years/10 years		
Ultimate Pit Dimension	117m (L) x 102m (W) x 47m (D) Max		
Proposed Depth of mining for first five years	37m		
Toposheet No	58 E/08		
Latitude	11°03'17.1620"N to 11°03'21.4317"N		
Longitude	77°27'40.3163"E to 77°27'45.1877"E		

Elevation	327-324m Amsl.	
Water table depth	The Ground water occurrence in this area is 93-96m depth below the ground level.	
Machinery proposed	Jack Hammer	4
	Compressor	1
	Excavator with Bucket and Rock Breaker	2
	Tipper	4
	Water Sprinkler Tanker	1
Blasting	Usage of Slurry Explosive with MSD detonators	
Water Bodies	Odai	2.7km SE
	Canal	5.3km SE
	Noyyal River	6.2km North
	Manikapuram Lake	7km NW
	Orathupalayam Reservoir	8.2km NE
Water requirement & source	Total water requirement for 2.2 KLD from from existing, bore wells and drinking water will be sourced from Approved water vendors.	
Manpower Deployment	31 Nos	
Total Project Cost	Operational Cost	Rs. 1,21,77,000/-
	EMP Cost	Rs. 17,01,000/-
	Total	Rs. 1,38,78,000/-
CER cost	Rs.3,00,000/-	
Nearest Habitation	760m-SW	

Source: Approved Mining Plan of the respective proposals

SALIENT FEATURES OF PROPOSAL "P2"			
Name of the Mine	M/s. VKP Engineering Ind Pvt., Ltd Rough Stone & Gravel Quarry		
Land type & details	It is a Patta land. S.F. Nos 538/2A registered in the name of Tmt.Sarojini, vide patta No.2848, S.F.No.538/2B registered in the name of Tmt.Sivagami vide patta No.2849 & 539/2(P) registered in the name of Thiru P. Jagadeesan Director (M/s. VKP Engineering Ind Pvt., Ltd), Thiru Mahendran, Tmt.Bhuvaneshwari & Gnanasundari vide patta No.2136. The Company has obtained consent from the the pattadars.		
S.F. Nos	538/2A, 538/2B and 539/2 (P)		
Extent	2.90.0 Ha		
Geological Reserves	Rough Stone	Weathered Rock	Gravel
	20,44,880m^3	**2,75,320m^3**	**55,064m^3**
Mineable Reserves	Rough Stone	Weathered Rock	Gravel
	1,50,770m^3	**1,73,090 m^3**	**42,192m^3**
Proposed Quantity	**1,50,770m^3**	**1,73,090 m^3**	**42,192m^3**
Mining Plan Period / Lease Period	5 Years/ 10 years		
Ultimate Pit Dimension	XY-AB-146m (L) x 93m (W) x 42m (D) Max X1Y1-CD-179m (L) x 42m (W) x 17m (D) Max		
Proposed Depth of mining	42m		
Toposheet No	58 E/08		
Latitude	11°03'21.1292"N to 11°03'25.9847"N		
Longitude	77°27'43.0986"E to 77°27'55.1858"E		
Elevation	327 to 324m Amsl.		
Water table depth	The Ground water occurrence in this area is 93-96m depth below the ground level.		
Machinery proposed	Jack Hammer		4
	Compressor		1
	Wagon Drill Machine		1
	Excavator with Bucket and Rock Breaker		5
	Tipper		10
	Water Sprinkled Tanker		1

Blasting	Usage of Slurry Explosive with MSD detonators	
Water Bodies	Odai	2.9km SE
	Canal	5.4km SE
	Noyyal River	6.3km North
	Manikapuram Lake	7km NW
	Orathupalayam Reservoir	8.5km NE
Water requirement & source	Total water requirement for 3.0 KLD from from existing, bore wells and drinking water will be sourced from Approved water vendors.	
Manpower Deployment	45 Nos	
Total Project Cost	Operational Cost	Rs. 1,60,85,000/-
	EMP Cost	Rs. 24,90,000/-
	Total	Rs. 1,85,75,000/-
CER cost	Rs.3,00,000/-	
Nearest Habitation	870m-SW	

Source: Approved Mining Plan of the respective proposals

SALIENT FEATURES OF PROPOSAL "P3"			
Name of the Mine	M/s. VKP Engineering Ind Pvt., Ltd Rough Stone & Gravel Quarry		
Land type & details	It is a Patta land, S.F.No.536 & 537/2 Jointly registered in the name of Thiru. Palanisamy Tmt. Bhuvaneshwari and Thiru. Gnanasundari vide patta no. 2138 and S.F.No. 537/1, 537/3 registered in the name of the applicant, Thiru.P. Jagadeesan, Thiru. Mahendran, Tmt. Bhuvaneswari. Thiru. Gnanasundari vide patta no. 2136		
S.F. Nos	536, 537/2, 537/1, 537/3		
Extent	4.51.0 Ha		
Geological Reserves	Rough Stone	Weathered Rock	Gravel
	27,37,500 m^3	4,22,845 m^3	91,250 m^3
Mineable Reserves	Rough Stone	Weathered Rock	Gravel
	8,33,355 m^3	3,05,978 m^3	75,408 m^3
Production for mining Period for first five year	4,17,670 m^3	3,05,978 m^3	75,408 m^3
Production for mining Period for Second five year	4,15,685 m^3	-	-
Mining Plan Period / Lease Period	10 Years		
Ultimate Pit Dimension	Pit1: 250m (L) x 155m (W) x 72m Bgl (D) (12m AGL + 60m BGL)		
Proposed Depth of mining	72m (12m AGL + 60m BGL) [2m Gravel+5m Weathered Rock+65m Rough Stone]		
Toposheet No	58 E/08		
Latitude	11°03'21.3662"N to 11°03'28.4846"N		
Longitude	77°27'54.6440"E to 77°28'03.4751"E		
Elevation	327 to 324m Amsl.		
Water table depth	The Ground water occurrence in this area is 93-96m depth below the ground level.		
Machinery proposed	Crawler mounted drill machine	2	
	Jack Hammer	4	
	Compressor	1	
	Excavator with Bucket and Rock Breaker	1	
	Tipper	3	
	Water Sprinkling Tanker	1	
Blasting	Usage of Slurry Explosive with MSD detonators		
Water Bodies	Odai	3.0km SE	
	Canal	5.3km SE	
	Noyyal River	6.4km North	
	Manikapuram Lake	7.1km NW	

	Orathupalayam Reservoir	8.8km NE
Water requirement & source	Total water requirement for 2.4 KLD from from existing, bore wells and drinking water will be sourced from Approved water vendors.	
Manpower Deployment	38 Nos	
Total Project Cost	Operational Cost	Rs.5,87,84,000/-
	EMP Cost	Rs.3,80,000/-
CER cost	Rs.5,00,000/-	
Nearest Habitation	790m-SE	

Source: Approved Mining Plan of the respective proposals

SALIENT FEATURES OF EXISTING "E1"		
Name of the Quarry	M/s.V.K.P. Engineering Ind Pvt., Ltd Rough Stone & Gravel Quarry	
S.F. Nos	538/1(P), 539/1(P), 539/2(P)	
Extent	4.94.95 Ha	
Toposheet No	58-E/08	
Latitude between	11°03'23.17"N to 11°03'29.91"N	
Longitude between	77°27'43.21"E to 77°27'54.85"E	
Highest Elevation	328 m AMSL	
Proposed Depth of Mining	42 m bgl (2 m Gravel + 40 m Rough Stone)	
Geological Resources	Rough Stone in m^3	Gravel m^3
	19,33,240	96,662
Mineable Reserves	Rough Stone in m^3	Gravel m^3
	9,59,700	79,776
Ultimate Pit Dimension	314 m (L) * 180 m (W) * 42 m (D)	
Water Level in the surrounds area	50 - 55 m bgl	
Method of Mining	Opencast Mechanized Mining Method involving drilling and blasting	
Topography	The lease applied area is exhibits plain terrain. The area has gentle sloping towards northern side. The altitude of the area is 328 m (max) above mean sea level. The area is covered by 2 m thickness of Gravel Formation. Massive Charnockite is found after 2 m (Gravel Formation) which is clearly inferred from the nearby existing quarrying pit.	
Machinery proposed	Jack Hammer	12 Nos
	Compressor	3 Nos
	Hydraulic Excavator	3 Nos
	Tippers	6 Nos
Blasting Method	Controlled Blasting Method by shot hole drilling and small dia of 25mm slurry explosive are proposed to be used for shattering and heaving effect for removal and winning of Rough Stone. No deep hole drilling is proposed.	
Proposed Manpower Deployment	46 Nos	
Project Cost	Rs. 1,80,07,300/-	
CER Cost @ 2% of Project Cost	Rs. 3,67,700/-	

The Cumulative Impact is mainly anticipated due to drilling & blasting, excavation and transportation activities in all the quarries (proposed and existing) within the cluster and major impact anticipated is on Air & Noise Environment and Ground Vibrations due to blasting.

Impact on Air Environment –

Calculating the Cumulative Load of Mining within the cluster is as shown in table 7.5 & 7.6

TABLE 7.5 CUMULATIVE PRODUCTION LOAD OF ROUGH STONE IN CLUSTER

Quarry	Production for Ten/Five-year plan period	Per Year Production in m^3	Per Day Production in m^3	Number of Lorry Load Per Day @ 12m^3 per load
P1	1,23,550	12,355	41	3
P2	1,50,770	15,077	50	4
P3	8,33,355	83,335	277	23
Total	**11,07,675**	**1,10,767**	**368**	**30**

E-1	9,59,700	1,91,940	639	**53**
Total	**9,59,700**	**1,91,940**	**639**	**53**
G. Total	**20,67,375**	**3,02,707**	**1,007**	**83**

TABLE 7.6: CUMULATIVE PRODUCTION OF GRAVEL IN CLUSTER

Quarry	Mineable Reserves in m^3	Per Year Production in m^3	Per Day in m^3	Number of Lorry Load @ $12m^3$ per load
P1	23,868	7,956	26	2
P2	42,192	14,064	46	4
P3	75,408	25,136	83	7
Total	**1,41,468**	**47,156**	**155**	**13**
E-1	79,776	26,592	88	7
Total	79,776	26,592	88	7
G.Total	**2,21,244**	**73,748**	**243**	**20**

TABLE 7.6A CUMULATIVE PRODUCTION LOAD OF WEATHERED ROCK IN CLUSTER

Quarry	**Production for Three/Five-year plan period**	**Per Year Production in m^3**	**Per Day Production in m^3**	**Number of Lorry Load Per Day @ $12m^3$ per load**
P1	99,800	19,960	66	5
P2	1,73,090	57,696	192	16
P3	3,05,978	1,01,992	339	28
Total	**5,78,868**	**1,79,648**	**597**	**49**
E-1	-	-	-	**-**
Total	-	-	-	**-**
G. Total	**5,78,868**	**1,79,648**	**597**	**49**

Source: Approved Mining plans of the respective projects (Blue color shade is Proposed quarries)

Based on the above production quantities the emissions due to various activities in all the 3-proposal quarry various activities like ground preparation, excavation, handling and transport of mineral. These activities have been analysed systematically basing on USEPA-Emission Estimation Technique Manual, for Mining AP-42, to arrive at possible emissions to the atmosphere and estimated emissions are given in Table 7.7.

TABLE 7.7: EMISSION ESTIMATION FROM CLUSTER

EMISSION ESTIMATION FOR QUARRY "P1"				
	Activity	**Source type**	**Value**	**Unit**
Estimated Emission Rate for PM_{10}	Drilling	Point Source	0.110094853	g/s
	Blasting	Point Source	0.003912457	g/s
	Mineral Loading	Point Source	0.046141471	g/s
	Haul Road	Line Source	0.002505038	g/s/m
	Overall Mine	Area Source	0.050540511	g/s
Estimated Emission Rate for SO_2	Overall Mine	Area Source	0.001466521	g/s
Estimated Emission Rate for NOx	Overall Mine	Area Source	0.000057719	g/s
EMISSION ESTIMATION FOR QUARRY "P2"				
	Activity	**Source type**	**Value**	**Unit**
Estimated Emission Rate for PM_{10}	Drilling	Point Source	0.116871514	g/s
	Blasting	Point Source	0.005274215	g/s
	Mineral Loading	Point Source	0.047400570	g/s
	Haul Road	Line Source	0.002512106	g/s/m
	Overall Mine	Area Source	0.064949043	g/s
Estimated Emission Rate for SO_2	Overall Mine	Area Source	0.001976274	g/s
Estimated Emission Rate for NOx	Overall Mine	Area Source	0.000131724	g/s
EMISSION ESTIMATION FOR QUARRY "P3"				

Estimated Emission Rate for PM_{10}	**Activity**	**Source type**	0.195192534	**Unit**
	Drilling	Point Source	0.068537850	g/s
	Blasting	Point Source	0.055345390	g/s
	Mineral Loading	Point Source	0.002623197	g/s
	Haul Road	Line Source	0.108293613	g/s/m
	Overall Mine	Area Source	0.007897684	g/s
Estimated Emission Rate for SO_2	Overall Mine	Area Source	0.000992146	g/s
Estimated Emission Rate for NOx	Overall Mine	Area Source	0.195192534	g/s

Source: Emission Formula

TABLE 7.8: INCREMENTAL & RESULTANT GLC WITHIN CLUSTER

PM_{10} in $\mu g/m^3$	
Location	AAQ1 – CORE
Background (average)	39.4
Highest Incremental	12.68
Resultant	52.08
NAAQ Norms	100 $\mu g/m^3$
PM2.5 in $\mu g/m^3$	
Background (average)	18.9
Highest Incremental	5.71
Resultant	24.61
NAAQ Norms	60 $\mu g/m^3$
SO_2 in $\mu g/m^3$	
Location	AAQ1 – CORE
Background (average)	3.8
Highest Incremental	1.09
Resultant	4.89
NAAQ Norms	80 $\mu g/m^3$
NO_x in $\mu g/m^3$	
Location	AAQ1 – CORE
Background (average)	18.7
Incremental	6.47
Resultant	25.17
NAAQ Norms	80 $\mu g/m^3$

Noise Environment –

Noise pollution is mainly due to operation like drilling & blasting and plying of trucks & HEMM. Cumulative Noise modelling has been carried out considering blasting and compressor operation (drilling) and transportation activities. Predictions have been carried out to compute the noise level at various distances around the different quarries within the 500 m radius.

For hemispherical sound wave propagation through homogeneous loss free medium, one can estimate noise levels at various locations at different sources using model based on first principle.

$$\mathbf{Lp_2 = Lp_1 - 20 \log (r_2/r_1) - Ae_{1,2}}$$

Where:

Lp_1 & Lp_2 are sound levels at points located at distances r_1 & r_2 from the source.

$Ae_{1,2}$ is the excess attenuation due to environmental conditions. Combined effect of all sources can be determined at various locations by logarithmic addition.

$$\mathbf{Lp_{total} = 10 \log \{10^{(Lp1/10)} + 10^{(Lp2/10)} + 10^{(Lp3/10)} + \ldots\ldots\}}$$

Attenuation due to Green Belt has been taken to be 4.9 dB (A). The inputs required for the model are:

Source data has been computed taking into account of all the machinery and activities used in the mining process.

TABLE 7.9: PREDICTED NOISE INCREMENTAL VALUES FROM MINES

Location ID	**N1**	**N2**	**N3**	**N4**	**N5**	**N6**	**N7**
Maximum Monitored Value (Day) dB(A)	44.2	44.5	47.9	47.4	45.2	47.2	48.5
Incremental Value dB(A)	60.1	56.6	29.2	23.6	27.2	25.1	24.8
Total Predicted Noise level dB(A)	60.2	56.8	48.0	47.4	45.3	47.2	48.5
NAAQ Standards	**Industrial**	**Day Time- 75 dB (A)**		**Night Time- 70 dB (A)**			

	Residential	**Day Time– 55 dB (A)**	**Night Time- 45 dB (A)**

Source: Lab Monitoring Data

The incremental noise level is found within the range of 23.6 – 29.2 dB (A) in Buffer zone. The noise level at different receptors in buffer zone is lower due to the distance involved and other topographical features adding to the noise attenuation. The resultant Noise level due to monitored values and calculated values at the receptors are based on the mathematical formula considering attenuation due to Green Belt as 4.9 dB (A) the barrier effect. From the above table, it can be seen that the ambient noise levels at all the locations near habitations are within permissible limits of Residential Area (buffer zone) as per The Noise Pollution (Regulation And Control) Rules, 2000 (The Principal Rules were published in the Gazette of India, vide S.O. 123(E), dated 14.2.2000 and subsequently amended vide S.O. 1046(E), dated 22.11.2000, S.O. 1088(E), dated 11.10.2002, S.O. 1569 (E), dated 19.09.2006 and S.O. 50 (E) dated 11.01.2010 under the Environment (Protection) Act, 1986.).

Ground Vibrations

Ground vibrations due to mining activities in the all the 3-proposal quarry within cluster are anticipated due to operation of Mining Machines like Excavators, drilling and blasting, transportation vehicles, etc. However, the major source of ground vibration from the all the 3 proposal quarries is blasting. The major impact of the ground vibrations is observed on the domestic houses located in the villages nearby the mine lease area. The kuchha houses are more prone to cracks and damage due to the vibrations induced by blasting whereas RCC framed structures can withstand more ground vibrations. Apart from this, the ground vibrations may develop a fear factor in the nearby settlements.

Another impact due to blasting activities is fly rocks. These may fall on the houses or agricultural fields nearby the mining areas and may cause injury to persons or damage to the structures. Nearest Habitations from 8mines respectively are as in below Table 7.9

TABLE 7.10: NEAREST HABITATION FROM EACH MINE

Location ID	Distance in Meters
Habitation Near P1	760m- SW
Habitation Near P2	870m-SW
Habitation Near P3	790m-SE
Habitation Near E1	990 m SW

Source: Satellite Imagery and Field Data

The ground vibrations due to the blasting in all the mines are calculated using the empirical equation for assessment of peak particle velocity (PPV) is:

$$V = K\,[R/Q^{0.5}]^{-B}$$

Where –
V = peak particle velocity (mm/s)
K = site and rock factor constant
Q = maximum instantaneous charge (kg)
B = constant related to the rock and site (usually 1.6)
R = distance from charge (m)

TABLE 7.11: GROUND VIBRATIONS AT 3 MINES

Location ID	Maximum Charge in kgs	Nearest Habitation in m	PPV in m/ms
P1	20	760m-SW	0.135
P2	20	870m-SW	0.109
P3	20	790m-SE	0.127

Source: PPV Calculation

From the above table, the charge per blast is considered as maximum in each mine and the resultant PPV is well below the Peak Particle Velocity of 8 mm/s as per Directorate General of Mines Safety for safe level criteria through Circular No. 7 dated 29/8/1997.

Socio Economic Environment –

The cluster mines shall provide employment and revenue will be created to government

TABLE 7.12: SOCIO ECONOMIC BENEFITS FROM 4MINES

Location Code	Employment	Project Cost	CER
P1	31	Rs. 1,21,77,000/-	Rs.3,00,000
P2	45	Rs. 1,60,85,000/-	Rs.3,00,000
P3	38	Rs.5,87,84,000/-	Rs.5,00,000
E1	46	Rs. 1,80,07,300/-	Rs.3,67,700/-
Total	**160**	**Rs. 10,50,53,300/-**	Rs. 14,67,700/-

A total of 160 people will get employment due to 4 mines Proposal and Existing in cluster. Allocation for Corporate Environment Responsibility (CER) shall be made as per Government of India, MoEF & CC Office Memorandum F.No.22-65/2017-IA.III, Dated: 01.05.2018 by all the mines.

As per para 6 (II) of the office memorandum, all the mines being a green field project & Capital Investment is ≤ 100 crores, they shall contribute 2% of Capital Investment towards CER as per directions of EAC/SEAC.

- 3 mines Proposed projects shall fund towards CER – **Rs 11,00,000/-**

TABLE 7.13: GREENBELT DEVELOPMENT BENEFITS FROM CLUSTER MINES

CODE	No of Trees proposed to be planted	Area Covered Sq.m	Name of the Species
P1	850	Near 7.5m safety distance, panchayat road and village road	Neem, Vilvam, Ashokha, Panai, etc.,
P2	1500		
P3	2250		
Total	**4600**		
E1	2250		
Total	**2250**		
G. Total	**6850**		

Based on the Proposed Mining Plans it's anticipated that there shall growth of native species of Neem, Vilvam, Panai, Ashokha etc in the Cluster at a rate of 6850Trees Planted over a period of 5 Years with Survival Rate of 80%

7.5 PLASTIC WASTE MANAGEMENT PLAN FOR P1, P2 & P3

All the Project Proponent shall comply with Tamil Nadu Government Order (Ms) No. 84 Environment and Forest (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.

Objective –

- To investigate the actual supply chain network of plastic waste.
- To identify and propose a sustainable plastic waste management by installing bins for collection of recyclables with all the plastic waste
- Preparation of a system design layout, and necessary modalities for implementation and monitoring.

TABLE 7.14: ACTION PLAN TO MANAGE PLASTIC WASTE

Sl.No.	Activity	Responsibility
1	Framing of Layout Design by incorporating provision of the Rules, user fee to be charged from waste generators for plastic waste management, penalties/fines for littering, burning plastic waste or committing any other acts of public nuisance	Mines Manager

2	Enforcing waste generators to practice segregation of bio-degradable, recyclable and domestic hazardous waste	Mines Manager
3	Collection of plastic waste	Mines Foreman
4	Setting up of Material Recovery Facilities	Mines Manager
5	Segregation of Recyclable and Non-Recyclable plastic waste at Material Recovery Facilities	Mines Foreman
6	Channelization of Recyclable Plastic Waste to registered recyclers	Mines Foreman
7	Channelization of Non-Recyclable Plastic Waste for use either in Cement kilns, in Road Construction	Mines Foreman
8	Creating awareness among all the stakeholders about their responsibility	Mines Manager
9	Surprise checking's of littering, open burning of plastic waste or committing any other acts of public nuisance	Mine Owner

Source: Proposed by FAE's and EC

7.6 CLUSTER MANAGEMENT COMMITTEE

The cluster management committee is proposed to form including of 3 Proposed quarries and 1 existing quarries total extent of the cluster is 21.64.52 Ha

In the cluster management committee, the following Environmental Management plan will be followed the activities such as

- Transportation of Minerals and blasting activities with the coordination between the individual quarry owners.
- Sprinkling of water regularly thrice a day in the mutual understanding with the quarry owners
- Carrying out blasting operation as specified times by the Mines Managers and as per the EIA report
- Usage of Haul roads in a time specified by the Cluster Management Committee
- Following Safe operating procedure prescribed by the Mines Manager during natural calamities
- Planting Trees in the Government Land, School and within the project site
- Celebrating Safety month, Environmental Month along with the Mines Managers in every six months once
- Regularly follow the health of the workers and take medical examination as per the DGMS norms under the guidance of Mines Manager
- Meet at Association Hall monthly once to review the Environmental Management and Safety activities prescribed by the Cluster Management Committee
- We have read and understood all the above steps and we ensure to follow these specific steps Quarry owners in the Cluster management committee

Quarries in the Cluster Management Committee

***PROPOSED QUARRIES**				
CODE	**Name of the Proponent and Address**	**S.F. Nos & Village**	**Extent in Ha**	**Status**
P1	**M/s. VKP Engineering Ind Pvt., Ltd.,** Thiru. P. Jagadeesan, Director No. 11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District – 638 052**.**	543/2 & Peruntholuvu Village	1.64.38Ha	Obtained ToR vide, File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated:03.06.2025
P2		538/2A, 538/2B and 539/2 (P) & Peruntholuvu Village	2.90.0 Ha	Obtained ToR vide, File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated:03.06.2025

P3		536, 537/1, 537/2 & 537/3 & Peruntholuvu Village	4.51.0 Ha	Obtained ToR vide, File No. 11961 TOR Identification No. TO25B0108TN5609691N Dated:15.06.2025
	Total		**9.05.38 Ha**	
***EXISTING QUARRIES**				
CODE	**Name of the Proponent and Address**	**S.F.Nos , Village & Taluk**	**Extent in Ha**	**Lease Period**
E-1	**M/s. VKP Engineering Ind Pvt., Ltd.,**	538/1(P),539/1(P) & 539/2(P)	4.94.95	19.06.2020 to 18.06.2030
		Total	**4.94.95 Ha**	
ABANDONED/EXPIRED QURRIES				
CODE	**Name of the Proponent and Address**	**S.F. Nos, Village & Taluk**	**Extent in Ha**	**Lease Period**
	Nil			
***TOTAL CLUSTER EXTENT**			**14.00.33 Ha**	

STANDARD OPERATING PROCEDURE FOR PERUNTHOLUVU CLUSTER MANAGEMENT COMMITTEE

1. Maintenance of Haul Roads and Village Roads:

- Water will be sprinkled on haul roads twice a day to avoid dust generation during transportation
- Transportation of material will be carried out during day time and material will be covered with tarpaulin
- The speed of tippers plying on the haul road will be limited below 20 km/hr to avoid generation of dust.
- Water sprinkling on haul roads & loading points will be carried out twice a day
- Main source of gaseous pollution will be from vehicle used for transportation of mineral; therefore, weekly maintenance of machines improves combustion process & makes reduction in the pollution.
- The un-metaled haul roads will be compacted weekly before being put into use.
- Over loading of tippers will be avoided to prevent spillage.
- It will be ensured that all transportation vehicles carry a valid PUC certificate
- Grading of haul roads and service roads to clear accumulation of loose materials

2. Maintenance of Drilling Activities

- In this system dust gets suppressed close to its formation. Dust suppression become very effective and the work environment will be improved from the point of occupational comfort and health.
- Due to dust free atmosphere, the life of engine, compressor etc., will be increased.
- The life of drill bit will be increased.
- The rate of penetration of drill will be increased.
- Due to the dust free atmosphere visibility will be improved resulting in safer working conditions.
- Usage of sharp drill bits while drilling which will help in reducing noise;
- Secondary blasting will be totally avoided and hydraulic rock breaker will be used for breaking boulders;
- Controlled blasting with proper spacing, burden, stemming and optimum charge/delay will be maintained;
- The blasting will be carried out during favourable atmospheric condition and less human activity timings by using nonelectrical initiation system;
- Proper maintenance, oiling and greasing of machines will be done every week to reduce generation of noise;
- Provision of sound insulated chambers for the workers working on machines (HEMM) producing higher levels of noise;
- Silencers / mufflers will be installed in all machineries;
- Green Belt/Plantation will be developed around the project area and along the haul roads. The plantation minimizes propagation of noise;
- Personal Protective Equipment (PPE) like ear muffs/ear plugs will be provided to the operators of HEMM and persons working near HEMM and their use will be ensured though training and awareness.
- Regular medical check–up and proper training to personnel to create awareness about adverse noise level effects

3. Maintenance of Blasting Activities

- Establish time of blasting to suit the local conditions and water sprinkling on blasting face
- Avoid blasting i.e., when temperature inversion is likely to occur and strong wind blows towards residential areas
- Controlled blasting includes Adoption of suitable explosive charge and short delay detonators, adequate stemming of holes at collar zone and restricting blasting to a particular time of the day i.e., at the time lunch hours (1.00 PM to 2.00 PM), controlled charge per hole as well as charge per round of hole
- Before loading of material water will be sprayed on blasted material
- Dust mask will be provided to the workers and their use will be strictly monitored
- The blasting operations in the cluster quarries are carried out without deep hole drilling and blasting using delay detonators, which reduces the ground vibrations;
- Proper quantity of explosive, suitable stemming materials and appropriate delay system will be adopted to avoid overcharging and for safe blasting;
- Adequate safe distance from blasting will be maintained as per DGMS guidelines;
- Blasting shelter will be provided as per DGMS guidelines;
- Blasting operations will be carried out only during day time;
- The charge per delay will be minimized and preferably a greater number of delays will be used per blasts;
- During blasting, other activities in the immediate vicinity will be temporarily stopped;
- Drilling parameters like depth, diameter and spacing will be properly designed to give proper blast;
- A fully trained explosives blast man (Mining Mate, Mines Foreman, 2nd Class Mines Manager/ 1st Class Mines Manager) will be appointed.
- A set of shot firing rules will be drawn up and blasting shall commence outlining the detailed operating procedures that will be followed to ensure that shot firing operations on site take place without endangering the workforce or public.
- Sufficient angular stemming material will be used to confine the explosive force and minimise environmental disturbance caused by venting / misfire.
- The detonators will be connected in a predetermined sequence to ensure that only one charge is detonated at any one time and a NONEL or similar type initiation system will be used.
- The detonation delay sequence shall be designed so as to ensure that firing of the holes is in the direction of free faces so as to minimise vibration effects.
- Appropriate blasting techniques shall be adopted such that the predicted peak particle velocity shall not exceed 8 Hz.
- Vibration monitoring will be carried out every 6 months to check the efficacy of blasting practices

4. Maintenance of Greenbelt Activities

- Planting of trees all along main mine haul roads and regular grading of haul roads will be practiced to prevent the generation of dust due to movement of dumpers/trucks
- Green belt of adequate width will be developed around the project areas
- Suitable plan for conservation of Schedule-I Species have prepared and necessary fund for implement for the same will be made.
- All the preventive measures will be taken for growth & development of fauna.
- Creating and development awareness for nature and wildlife in the adjoin villages.
- The workers shall be trained to not harm any wildlife, should it come near the project site. No work shall be carried out after 6.00 pm

5. Maintenance of Occupational Health

- Dust mask will be provided to the workers and their use will be strictly monitored
- Annual medical checkups, trainings and campaigns will be arranged to ensure awareness about importance of wearing dust masks among all mine workers & tipper drivers
- Ambient Air Quality Monitoring will be conducted six months once to assess effectiveness of mitigation measures proposed
- Specific personnel training on work-site safety management will be taken up;
- Work site assessment will be done by rock scaling of each surface exposed to workers to prevent accidental rock falling and / or landslide, especially after blasting activities;
- Natural barriers, temporary railing, or specific danger signals will be provided along rock benches or other pit areas where work is performed at heights more than 2m from ground level;
- Maintenance of yards, roads and footpaths, providing sufficient water drainage and preventing slippery surfaces with an all-weather surface, such as coarse gravel will be taken up

Occupational health and safety hazards occur during the operational phase of mining and primarily include the following:

- Respiratory hazards
- Noise
- Physical hazards
- Explosive storage and handling

All the persons will undergo pre-employment and periodic medical examination. Employees will be monitored for occupational diseases by conducting the following tests

- General physical tests
- Audiometric tests
- Full chest, X-ray, Lung function tests, Spirometric tests
- Periodic medical examination – yearly
- Lung function test – yearly, those who are exposed to dust
- Eye test

Essential medicines will be provided at the site. The medicines and other test facilities will be provided at free of cost. The first aid box will be made available at the mine for immediate treatment.

First aid training will be imparted to the selected employees regularly. The lists of first aid trained members shall be displayed at strategic places.

6. Cluster Management Committee Policy

- Meet the requirements of all laws, acts, regulations, and standards relevant to its operations and activities
- Implement a program to train employees in general environmental issues and individual workplace environmental responsibilities
- Allocate necessary resources to ensure the implementation of the environmental policy
- Ensure that an effective closure strategy is in place at all stages of project development and that progressive reclamation is undertaken as early as possible to reduce potential long-term environmental and community impacts
- Implement monitoring programme to provide early warning of any deficiency or unanticipated performance in environmental safeguards
- Conduct periodic reviews to verify environmental performance and to continuously strive towards improvement

- Monitoring of the water/ waste water quality, air quality and solid waste generated
- Analysis of the water and air samples collected through external laboratory
- Implementation and monitoring of the pollution control and protective measures/ devices which shall include financial estimation, ordering, installation of air pollution control equipment, waste water treatment plant, etc.
- Co-ordination of the environment related activities within the project as well as with outside agencies
- Collection of health statistics of the workers and population of the surrounding villages
- Green belt development
- Monitoring the progress of implementation of the environmental monitoring programme

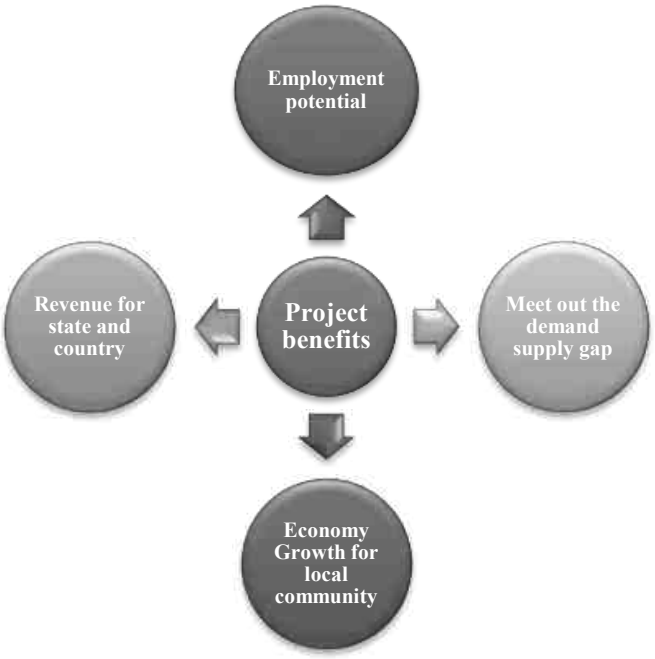
Compliance to statutory provisions, norms of State Pollution Control Board, Ministry of Environment and Forests and the conditions of the environmental clearance as well as the consents to establish and consents to operate.

CHAPTER – 8: PROJECT BENEFITS

8.0 General

The three Proposed Projects for Quarrying Rough Stone and Gravel at Peruntholuvu Village aims to produce cumulatively 11,07,675 m^3 Rough Stone over a period of 10 Years & 5,78,868 m^3 of Weathered Rock over a period of 3-5 Years & 1,41,468 m^3 of Gravel over a period of 3 Years This will enhance the socio-economic activities in the adjoining areas and will result in the following benefits

- Increase in Employment Potential
- Improvement in Socio-Economic Welfare
- Improvement in Physical Infrastructure
- Improvement in Social infrastructure



8.1 Employment Potential

It is proposed to provide employment to about 114 persons for carrying out mining operations and give preference to the local people in providing employment. In addition, there will be opportunity for indirect employment to many people in the form of contractual jobs, business opportunities, service facilities etc. the economic status of the local people will be enhanced due to mining project.

8.2 Socio-Economic Welfare Measures Proposed

The impact of mining activity in the area will be more positive than negative on the socio-economic environment in the immediate project impact area. The employment opportunities both direct and indirect will contribute to enhanced money incomes to job seekers with minimal skill sets especially among the local communities.

8.3 Improvement in Physical Infrastructure

The proposed project site is located in Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District of Tamil Nadu and area have communications, roads and other facilities already well established. The following physical infrastructure facilities will further improve due to the cluster quarry projects.

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

8.4 Improvement in Social Infrastructure

The quarry projects in the region will have positive impact on the social economic condition of the area by way of providing employment to the local peoples; thereby increasing the per capita income, housing, education, medical and transportation facilities, economic status, health and agriculture.

- Social welfare program like medical camps, educational facilities to the poverty level students, providing water supply from the quarries during drought seasons will be taken from the project proponent's
- Supplementing Govt. efforts in health monitoring camps, social welfare and various Awareness programs among the rural population.

8.5 Other Tangible Benefits

The proposed quarry project is likely to have other tangible benefits as given below.

- Indirect employment opportunities to local people in contractual works like construction of infrastructural facilities, transportation, sanitation, for supply of goods and services to the quarry site and other community services.
- Additional housing demand for rental accommodation will increase.
- Cultural, recreation and aesthetic facilities will also improve.
- Improvement in communication, transport, education, community development and medical facilities and overall change in employment and income opportunity.
- The State Government will also benefit directly from the proposed mine, through increased revenue from royalties, cess, DMF, GST etc.,

CORPORATE SOCIAL RESPONSIBILITY

Individual Project Proponents will take responsibility to develop awareness among all levels of their staff about CSR activities and the integration of social processes with business processes. Those involved with the undertaking of CSR activities will be provided with adequate training and re-orientation.

Under this programme, the project proponents will take-up following programmes for social and economic development of villages within 10 km of the project site. For this purpose, separate budget will be provided every year. For finalization of these schemes, proponent will interact with LSG. The schemes will be selected from the following broad areas –

- Health Services
- Social Development
- Infrastructure Development
- Education & Sports
- Self-Employment

CSR Cost Estimation

- CSR activities will be taken up in the Peruntholuvu village 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.

CORPORATE ENVIRONMENT RESPONSIBILITY–

Allocation for Corporate Environment Responsibility (CER) shall be made as per Government of India, MoEF & CC Office Memorandum F.No.22-65/2017-IA.III, Dated: 01.05.2018.

As per para 6 (II) of the office memorandum, all the mines being a green field project & Capital Investment is ≤ 100 crores, they shall contribute 2% of Capital Investment towards CER as per directions of EAC/SEAC and the total CER amount from the 3 proposed mines is Rs. 11,00,000/-.

TABLE 8.1 CER – ACTION PLAN

Code	CER
P1	Rs 3,00,000/-
P2	Rs 3,00,000/-
P3	Rs 5,00,000/-
Total	**Rs.11,00,000/-**

Source: Field survey conducted by FAE, consultation with project proponents

CHAPTER – 9: ENVIRONMENTAL COST BENEFIT ANALYSIS

Not Applicable, Since Environmental Cost Benefit Analysis not recommended at the Scoping stage.

CHAPTER - 10: ENVIRONMENTAL MANAGEMENT PLAN – P1

10.0 General

Environment Management Plan (EMP) aims at the preservation of ecological system by considering in-built pollution abatement facilities at the proposed site. Good practices of Environmental Management plan will ensure to keep all the environmental parameters of the project in respect of Ambient Air quality, Water quality, Socio – economic improvement standards.

Mitigation measures at the source level and an overall environment management plan at the study area are elicited so as to improve the supportive capacity of the receiving bodies. The EMP presented in this chapter discusses the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored after approval of the EIA.

10.1 Environmental Policy

The Project Proponent is committed to conduct all its operations and activities in an environmentally responsible manner and to continually improve environmental performance.

The Proponent **M/s. VKP Engineering Ind Pvt., Ltd - 1.64.38 Ha** will –

- Meet the requirements of all laws, acts, regulations, and standards relevant to its operations and activities
- Allocate necessary resources to ensure the implementation of the environmental policy
- Ensure that an effective closure strategy is in place at all stages of project development and that progressive reclamation is undertaken as early as possible to reduce potential long-term environmental and community impacts
- Implement a program to train employees in general environmental issues and individual workplace environmental responsibilities
- Implement monitoring programmes to provide early warning of any deficiency or unanticipated performance in environmental safeguards
- Conduct periodic reviews to verify environmental performance and to continuously strive towards improvement

Description of the Administration and Technical Setup –

The Environment Monitoring Cell discussed under Chapter 6 will ensure effective implementation of environment management plan and to ensure compliance of environmental statutory guidelines through Mine Management Level of each Proposed Quarry.

The said team will be responsible for:

- Monitoring of the water/ waste water quality, air quality and solid waste generated
- Analysis of the water and air samples collected through external laboratory
- Implementation and monitoring of the pollution control and protective measures/ devices which shall include financial estimation, ordering, installation of air pollution control equipment, waste water treatment plant, etc.
- Co-ordination of the environment related activities within the project as well as with outside agencies
- Collection of health statistics of the workers and population of the surrounding villages
- Green belt development
- Monitoring the progress of implementation of the environmental monitoring programme

- Compliance to statutory provisions, norms of State Pollution Control Board, Ministry of Environment and Forests and the conditions of the environmental clearance as well as the consents to establish and consents to operate.

10.2 Land Environment Management –

Land degradation is one of the major adverse impacts of opencast mining in the form of excavated voids and contamination of soil affects the viability of the soil resource.

Soil contamination then has a number of flow-on effects like, Inhibition of plant growth, and death of existing plants in contaminated areas and contamination of soil also has potential to impact on a surface water quality and groundwater resources.

TABLE 10.1: PROPOSED CONTROLS FOR LAND ENVIRONMENT

CONTROL	RESPONSIBILITY
Designing vehicle wash-down system so that all washed water is captured and passed through grease and oil separators.	Mines Manager
Re fueling will be carried out in a safe location, away from vehicle movement pathways	Mine Foreman & Mining Mate
Greenbelt development and its maintenance	Environment Officer
Garland drains with catch pits to be provided all around the project area to prevent run off affecting the surrounding lands.	Environment Officer
The periphery of Project area will be planted with thick plantation to arrest the fugitive dust, which will also act as acoustic barrier.	Mines Manager
Thick plantation using native flora spices will be carried out on the top benches.	Mines Manager
There will be formation of a small surface water body in the mined-out area, which can be used for watering the greenbelt at the conceptual stages.	Environment Officer

Source: Proposed by FAE's & EIA Coordinator

10.3 Soil Management

Top Soil Management –

- There is no topsoil for this project site.

Overburden / Waste and Side Burden Management –

- The overburden in the form of Gravel formation, the Gravel will be directly loaded into tippers for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fees to the Government.

TABLE 10.2: PROPOSED CONTROLS FOR SOIL MANAGEMENT

CONTROL	RESPONSIBILITY
Garland drains are to be paved around the quarry pit area to arrest possible wash off in the rainy seasons	Mines Manager
Surface run-off from the surface water via garland drains will be diverted to the mine pits	Mine Foreman & Mining Mate
Design haul roads and other access roads with drainage systems to minimize concentration of flow and erosion risk	Environment Officer
keeping records of mitigation of erosion events, to improve on management techniques	Environment Officer
A monitoring map with information including their GPS coordinates, erosion type, intensity, and the extent of the affected area, as well as existing control measures and assessment of their performance	Environment Officer
Empty sediment from sediment traps Maintain, repair or upgrade garland drain system	Environment Officer

Test soils for pH, EC, chloride, exchangeable cations, particle size and water holding capacity	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.4 Water Management

In the proposed quarrying project, no process is involved for the effluent generation, only oil & grease from the machinery wash is anticipated and domestic sewage from mine office.

The quarrying operation is proposed upto a depth of 47 m BGL(9m Agl + 38m Bgl), the water table in the area is 93-96 m below ground level, hence the proposed projects will not intersect the Ground water table during entire quarry period.

TABLE 10.3: PROPOSED CONTROLS FOR WATER ENVIRONMENT

CONTROL	RESPONSIBILITY
To maximize the reuse of pit water for water supply	Mines Foreman
Temporary and permanent garland drain will be constructed to contain the catchments of the mining area and to divert runoff from undisturbed areas through the mining areas	Mines Manager
Natural drains/nallahs/brooklets outside the project area should not be disturbed at any point of mining operations	Mines Manager
Ensure there is no process effluent generation or discharge from the project area into water bodies	Mines Foreman
Domestic sewage generated from the project area will be disposed in septic tank and soak pit system	Mines Foreman
Monthly or after rainfall, inspection for performance of water management structures and systems	Mines Manager
Conduct ground water and surface water monitoring for parameters specified by CPCB	Manager Mines

Source: Proposed by FAE's & EIA Coordinator

10.5 Air Quality Management

The existing and proposed mining activities would result in the increase of particulate matter concentrations due to fugitive dust. Water sprinkling twice per day on the haul roads, approach roads in the vicinity would be undertaken and will be continued as there is possibility for dust generation due to truck mobility. It will be ensured that vehicles are properly maintained to comply with exhaust emission requirements.

TABLE 10.4: PROPOSED CONTROLS FOR AIR ENVIRONMENT

CONTROL	RESPONSIBILITY
Generation of dust during excavation is minimized by daily (twice) water sprinkling on working face and daily (twice) water sprinkling on haul road	Mines Manager
Wet drilling procedure /drills with dust extractor system to control dust generation during drilling at source itself is implemented	Mines Manager
Maintenance as per operator manual of the equipment and machinery in the mines to minimizing air pollution	Mines Manager
Ambient Air Quality Monitoring carried out in the project area and in surrounding villages to access the impact due to the mining activities and the efficacy of the adopted air pollution control measures	Mines Manager
Provision of Dust Mask to all workers	Mines Manager
Greenbelt development all along the periphery of the project area	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.6 Noise Management

There will be intermittent noise levels due to vehicular movement, trucks loading, drilling and blasting and other allied activities. No mining activities are planned during night time.

TABLE 10.5: PROPOSED CONTROLS FOR NOISE ENVIRONMENT

CONTROL	RESPONSIBILITY
Development of thick greenbelt all along the Buffer Zone (7.5 Meters) of the project area to attenuate the noise and the same will be maintained	Mines Manager
Preventive maintenance of mining machinery and replacement of worn-out accessories to control noise generation	Mines Foreman
Deployment of mining equipment with an inbuilt mechanism to reduce noise	Mines Manager
Provision of earmuff / ear plugs to workers working in noise prone zones in the mines	Mining Mate
Provision of effective silencers for mining machinery and transport vehicles	Mines Manager
Provision of sound proof AC operator cabins to HEMM	Mines Manager
Sharp drill bits are used to minimize noise from drilling	Mines Foreman
Controlled blasting technologies are adopted by using delay detonators to minimize noise from blasting	Mines Manager
Annual ambient noise level monitoring shall be carried out in the project area and in surrounding villages to access the impact due to the mining activities and the efficacy of the adopted noise control measures. Additional noise control measures will be adopted if required as per the observations during monitoring	Mines Manager
Reduce maximum instantaneous charge using delays while blasting	Mining Mate
Change the burden and spacing by altering the drilling pattern and/or delay layout, or altering the hole inclination	Mines Manager
Undertake noise or vibration monitoring	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.7 Ground Vibration and Fly Rock Control

TABLE 10.6: PROPOSED CONTROLS FOR GROUND VIBRATIONS & FLY ROCK

CONTROL	RESPONSIBILITY
Controlled blasting using delay detonators will be carried out to maintain the PPV value (below 8Hz) well within the prescribed standards of DGMS	Mines Manager
Drilling and blasting will be carried under the supervision of qualified persons	Mines Manager
Proper stemming of holes should be carried out with statutory competent qualified blaster under the supervision of statutory mines manager to avoid any anomalies during blasting	Mines Manager
Suitable spacing and burden will be maintained to avoid misfire / fly rocks	Manager Mines
Number of blast holes will be restricted to control ground vibrations	Manager Mines
Blasting will be carried out only during noon time	Mining Mate
Undertake noise or vibration monitoring	Mines Manager
ensure blast holes are adequately stemmed for the depth of the hole and stemmed with suitable angular material	Mines Foreman

Source: Proposed by FAE's & EIA Coordinator

10.8 Biological Environment Management

The proponent will take all necessary steps to avoid the impact on the ecology of the area by adopting suitable management measures in the planning and implementation stage. During mining, thick plantation will be carried out around the project periphery, on safety barrier zone, on top benches of quarried out area etc.,

Following control measures are proposed for its management and will be the responsibility of the Mines Manager.

- Greenbelt development all along the safety barrier of the project area
- It is also proposed to implement the greenbelt development programme and post plantation status will be regularly checked for every season.

- The main attributes that retard the survival of sapling is fugitive dust, this fugitive dust can be controlled by water sprinkling on the haul roads and installing a sprinkler unit near the newly planted area.
- Year wise greenbelt development will be recorded and monitored
    - Based on the area of plantation.
    - Period of plantation
    - Type of plantation
    - Spacing between the plants
    - Type of manuring and fertilizers and its periods
    - Lopping period, interval of watering
    - Survival rate
    - Density of plantation
- The ultimate reclamation planned leaves a congenial environment for development of flora & immigration of small fauna through green belt and water reservoir. The green belt and water reservoir developed within the Project at the end of mine life will attract the birds and animals towards the project area in the post mining period.

10.8.1 Green Belt Development Plan

About 850 nos. of saplings is proposed to be planted for the Mining plan period in safety barrier of applied mine lease area with survival rate 80%. The greenbelt development plan has been prepared keeping in view the land use changes that will occur due to mining operation in the area.

TABLE 10.7 PROPOSED GREENBELT ACTIVITIES FOR 5 YEAR PLAN PERIOD – P1

PROPOSAL – P1			
Year	No. of trees proposed to be planted	Area to be covered	Name of the species
I	850	Near 7.5m safety distance, panchayat road and village road	Neem, Vilvam,Ashokha, Panai etc.,

Source: Conceptual Plan of Approved Mining plan& proposed by FAE's & EIA Coordinator

The objectives of the greenbelt development plan are –

- Provide a green belt around the periphery of the quarry area to combat the dispersal of dust in the adjoining areas,
- Protect the erosion of the soil, Conserve moisture for increasing ground water recharging,
- Restore the ecology of the area, restore aesthetic beauty of the locality and meet the requirement of fodder, fuel and timber of the local community.

A well-planned Green Belt with multi rows (three tiers) preferably with long canopy leaves shall be developed with dense plantations around the boundary and haul roads to prevent air, dust noise propagation to undesired places and efforts will be taken for the enhancement of survival rate.

10.8.2 Species Recommended for Plantation

Following points have been considered while recommending the species for plantation:

- Creating of bio-diversity.
- Fast growing, thick canopy cover, perennial and evergreen large leaf area,
- Efficient in absorbing pollutants without major effects on natural growth

TABLE 10.8: RECOMMENDED SPECIES TO PLANT IN THE GREENBELT – P1

S. No	Botanical Name	Local Name	Importance
1.	Azadirachta indica	Neem, Vembu	Neem oil & neem products
2.	Tamarindus indica	Tamarind	Edible & Medicinal and other Uses
3.	Polyalthia longifolia	Nettilinkam	Tall and evergreen tree
4.	Borassus Flabellifer	Palmyra Palm	Tall Wind breaker tree and its fruits are edible

Source: Proposed by FAE's & EIA Coordinator

10.9 Occupational Safety & Health Management

Occupational safety and health are very closely related to productivity and good employer-employee relationship. The main factors of occupational health impact in quarries are fugitive dust and noise. Safety of employees during quarrying operation and maintenance of mining equipment will be taken care as per Mines Act 1952 and Rule 29 of Mines Rules 1955. To avoid any adverse effect on the health of workers due to dust, noise and vibration sufficient measures have been provided.

10.9.1 Medical Surveillance and Examinations –

- Identifying workers with conditions that may be aggravated by exposure to dust & noise and establishing baseline measures for determining changes in health.
- Evaluating the effect of noise on workers
- Enabling corrective actions to be taken when necessary
- Providing health education

The health status of workers in the mine shall be regularly monitored under an occupational surveillance program. Under this program, all the employees are subjected to a detail medical examination at the time of employment. The medical examination covers the following tests under mines act 1952.

- General Physical Examination and Blood Pressure
- X-ray Chest and ECG
- Sputum test
- Detailed Routine Blood and Urine examination

The medical histories of all employees will be maintained in a standard format annually. Thereafter, the employees will be subject to medical examination annually. The below tests keep upgrading the database of medical history of the employees.

TABLE 10.9: MEDICAL EXAMINATION SCHEDULE – P1

Sl.No	Activities	1st Year	2nd Year	3rd Year	4th Year	5th Year
1	Initial Medical Examination (Mine Workers)					
A	Physical Check-up					
B	Psychological Test					
C	Audiometric Test					
D	Respiratory Test					
2	Periodical Medical Examination (Mine Workers)					
A	Physical Check – up					
B	Audiometric Test					
C	Eye Check – up					
D	Respiratory Test					
3	Medical Camp (Mine Workers & Nearby Villagers)					
4	Training (Mine Workers)					

Medical Follow ups:- Work force will be divided into three targeted groups age wise as follows:-		
Age Group	**PME as per Mines Rules 1955**	**Special Examination**
Less than 25 years	Once in a Three Years	In case of emergencies
Between 25 to 40 Years	Once in a Three Years	In case of emergencies
Above 40 Years	Once in a Three Years	In case of emergencies
Medical help on top priority immediately after diagnosis/ accident is the essence of preventive aspects.		

10.9.2 Proposed Occupational Health and Safety Measures –

- The mine site will have adequate drinking water supply so that workers do not get dehydrated.
- Lightweight and loose-fitting clothes having light colours will be preferred to wear.
- Noise exposure measurements will be taken to determine the need for noise control strategies.
- The personal protective equipment will be provided for mine workers.

- Supervisor will be instructed for reporting any problems with hearing protectors or noise control equipment.
- At noisy working activity, exposure time will be minimized.
- Dust generating sources will be identified and proper control measure will be adopted.
- Periodic medical examinations will be provided for all workers.
- Strict observance of the provisions of DGMS Acts, Rules and Regulations in respect of safety both by management and the workers.
- The width of road will be maintained more than thrice the width of the vehicle. A code of traffic rules will be implemented.
- In respect of contract work, safety code for contractors and workers will be implemented. They will be allowed to work under strict supervision of statutory person/officials only after they will impart training at vocational training centres. All personal protective equipment's will be provided to them.
- A safety committee meeting every month will be organized to discuss the safety of the mines and the persons employed.
- Celebration of annual mines safety week and environmental week in order to develop safety awareness and harmony amongst employees and co quarry owners.

FIGURE 10.1: PERSONAL PROTECTIVE EQUIPMENT TO THE MINE WORKERS – P1



10.9.3 Health and Safety Training Programme

The Proponents will provide special induction program along with machinery manufacturers for the operators and co-operators to run and maintain the machinery effectively and efficiently. The training program for the supervisors and office staffs will be arranged in the Group Vocational Training Centres in the State and engage Environmental Consultants to provide periodical training to all the employees to carry out the mining operation in and eco-friendly manner.

TABLE 10.10: LIST OF PERIODICAL TRAININGS PROPOSED FOR EMPLOYEES – P1

Course	Personnel	Frequency	Duration	Instruction
New-Employee Training	All new employees exposed to mine hazards	Once	One week	Employee rights Supervisor responsibilities Self-rescue Respiratory devices Transportation controls Communication systems Escape and emergency evacuation

				Ground control hazards Occupational health hazards Electrical hazards First aid Explosives
Task Training Like Drilling, Blasting, Stemming, safety, Slope stability, Dewatering, Haul road maintenance,	Employees assigned to new work tasks	Before new Assignments	Variable	Task-specific health &safety procedures and SOP for various mining activity. Supervised practice in assigned work tasks.
Refresher Training	All employees who received new-hire training	Yearly	One week	Required health and safety standards Transportation controls Communication systems Escape ways, emergency evacuations Fire warning Ground control hazards First aid Electrical hazards Accident prevention Explosives Respirator devices
Hazard Training	All employees exposed to mine hazards	Once	Variable	Hazard recognition and avoidance Emergency evacuation procedures Health standards Safety rules Respiratory devices

Source: Proposed by FAE's & EIA Coordinator as per DGMS Norms

10.9.4 Budgetary Provision for Environmental Management –

Adequate budgetary provision has been made by the Company for execution of Environmental Management Plan. The Table 10.11 gives overall investment on the environmental safeguards and recurring expenditure for successful monitoring and implementation of control measures.

TABLE 10.11: EMP BUDGET FOR PROPOSED PROJECT – P1

Activities	Mitigation Measure	Provision for Implementation	Capital	Recurring
Air Environment	Haul road maintenance & Water sprinkling	Lump sum fund allocation for daily maintenance of haul roads and thrice a day water sprinkling by fixed sprinklers or water tankers	0	50000
	Muffle blasting – To control fly rocks during blasting	Lump sum fund allocation Blasting face will be covered with sand bags / steel mesh / old tyres / used conveyor belts	0	5000
	Wet drilling procedure	Lump sum fund allocation for ensuring wet drilling by covering drill holes with wet gunny bags and spraying water while drilling	0	10000
	No overloading of trucks/tippers/tractors	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Stone carrying trucks will be covered by tarpaulin	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Enforcing speed limits of 20 km/hr within ML area	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Regular monitoring of exhaust fumes as per RTO norms	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Installing wheel wash system near gate of quarry	Installation + Maintenance + Supervision	50000	5000
	Haul road maintenance & Water sprinkling	Lump sum fund allocation for daily maintenance of haul roads and thrice a day water sprinkling by fixed sprinklers or water tankers	0	50000
Noise Environment	Source of noise will be during operation of transportation vehicles, HEMM for this proper maintenance will be done at regular intervals.	Provision made in Operating Cost	0	0

	Oiling & greasing of Transport vehicles and HEMM at regular interval will be done	Provision made in Operating Cost	0	0
	Adequate silencers will be provided in all the diesel engines of vehicles.	Provision made in Operating Cost	0	0
	It will be ensured that all transportation vehicles carry a fitness certificate.	Provision made in Operating Cost	0	0
	Safety tools and implements that are required will be kept adequately near blasting site at the time of charging.	Provision made in OHS part	0	0
	Line Drilling all along the boundary to reduce the PPV from blasting activity and implementing controlled blasting.	Provision made in Operating Cost	0	0
	Proper warning system before blasting will be adopted and clearance of the area before blasting will be ensured.	Blowing Whistle by Mining Mate / Blaster / Competent Person	0	0
	Provision for Portable blaster shed	Installation of Portable blasting shelter	50000	2000
	NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30/- per 6 Tonnes of Blasted Material	0	0
Waste Management	Waste management (Spent Oil, Grease etc.,)	Provision for domestic waste collection and disposal through authorized agency	5000	20000
		Installation of dust bins	5000	2000
	Bio toilets will be made available outside mine lease on the land of owner itself	Provision made in Operating Cost	0	0
Mine Closure	1. Progressive Closure Activity - Surface Runoff management	Provision for garland drain @ Rs. 10,000/- per Hectare	5000	1000
	2. Progressive Closure Activity Barbed Wire Fencing to quarry area will be provisioned.	Provision made in Operating Cost	0	0

	3. Greenbelt development under safety zone during the mining plan period	Provision made in Operating Cost	0	0
Implementation of EC, Mining Plan & DGMS Condition	Size 6' X 5' with blue background and white letters as mentioned in MoM Appendix II by the SEAC TN	Fixed Display Board at the Quarry Entrance as permanent structure mentioning Environmental Conditions	10000	1000
	Air, Water, Noise and Soil Quality Sampling every 6 Months for Compliance Report of EC Conditions	Submission of 2 Half Yearly Compliance - Lab Monitoring Report as per CPCB norms	0	100000
	Workers will be provided with Personal Protective Equipment's	Lumpsum fund allocation	50000	15000
	Health checkup for workers will be provisioned	IME & PME Health checkup for all the employees will be covered batch wise.	0	50000
	First aid facility will be provided	Lumpsum fund allocation	0	5000
	Mine will have safety precaution signages, boards.	Provision for signages and boards made	10000	2000
	No parking will be provided on the transport routes. Separate provision on the south side of the hill will be made for vehicles /HEMMs. Flaggers will be deployed for traffic management	Lumpsum fund allocation	50000	10000

	Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos, DVR, Monitor with internet facility	30000	5000
	Appointment of Competent person for ensuring the safety operation	Provision made in operational cost	0	0
CER	As per MoEF &CC OM 22-65/2017-IA.III Dated 25.02.2021	Lumpsum fund allocation	300000	0
TOTAL			**5,65,000**	**3,03,000**

In order to implement the environmental protection measures, an amount of Rs.5.65 lakhs as capital cost and recurring cost as Rs. 3.03 lakhs as recurring cost is proposed considering present market price considering present market scenario for the proposed project.

10.10 CONCLUSION

Various aspects of mining activities were considered and related impacts were evaluated. Considering all the possible ways to mitigate the environmental concerns Environmental Management Plan was prepared and fund has been allocated for the same. The EMP is dynamic, flexible and subjected to periodic review. For project where the major environmental impacts are associated, EMP will be under regular review. Senior Management responsible for the project will conduct a review of EMP and its implementation to ensure that the EMP remains effective and appropriate. Thus, the proper steps will be taken to accomplish all the goals mentioned in the EMP and the project will bring the positive impact in the study area.

CHAPTER - 10: ENVIRONMENTAL MANAGEMENT PLAN – P2

10.1 General

Environment Management Plan (EMP) aims at the preservation of ecological system by considering in-built pollution abatement facilities at the proposed site. Good practices of Environmental Management plan will ensure to keep all the environmental parameters of the project in respect of Ambient Air quality, Water quality, Socio – economic improvement standards.

Mitigation measures at the source level and an overall environment management plan at the study area are elicited so as to improve the supportive capacity of the receiving bodies. The EMP presented in this chapter discusses the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored after approval of the EIA.

10.2 Environmental Policy

The Project Proponent is committed to conduct all its operations and activities in an environmentally responsible manner and to continually improve environmental performance.

The Proponent **M/s. VKP Engineering Ind Pvt., Ltd., - 2.90.0 Ha** will –

- Allocate necessary resources to ensure the implementation of the environmental policy
- Meet the requirements of all laws, acts, regulations, and standards relevant to its operations and activities
- Implement a program to train employees in general environmental issues and individual workplace environmental responsibilities
- Ensure that an effective closure strategy is in place at all stages of project development and that progressive reclamation is undertaken as early as possible to reduce potential long-term environmental and community impacts
- Implement monitoring programmes to provide early warning of any deficiency or unanticipated performance in environmental safeguards
- Conduct periodic reviews to verify environmental performance and to continuously strive towards improvement

Description of the Administration and Technical Setup –

The Environment Monitoring Cell discussed under Chapter 6 will ensure effective implementation of environment management plan and to ensure compliance of environmental statutory guidelines through Mine Management Level of each Proposed Quarry.

The said team will be responsible for:

- Monitoring of the water/ waste water quality, air quality and solid waste generated
- Analysis of the water and air samples collected through external laboratory
- Implementation and monitoring of the pollution control and protective measures/ devices which shall include financial estimation, ordering, installation of air pollution control equipment, waste water treatment plant, etc.
- Co-ordination of the environment related activities within the project as well as with outside agencies
- Collection of health statistics of the workers and population of the surrounding villages
- Green belt development
- Monitoring the progress of implementation of the environmental monitoring programme

- Compliance to statutory provisions, norms of State Pollution Control Board, Ministry of Environment and Forests and the conditions of the environmental clearance as well as the consents to establish and consents to operate.

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Land degradation is one of the major adverse impacts of opencast mining in the form of excavated voids and contamination of soil affects the viability of the soil resource.

Soil contamination then has a number of flow-on effects like, Inhabitation of plant growth, and death of existing plants in contaminated areas and contamination of soil also has potential to impact on a surface water quality and groundwater resources.

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Thick plantation using native flora spices will be carried out on the top benches.	Mines Manager
There will be formation of a small surface water body in the mined-out area, which can be used for watering the greenbelt at the conceptual stages.	Environment Officer

Source: Proposed by FAE's & EIA Coordinator

10.4 Soil Management

Top Soil Management –

- There is nil topsoil for this project site.

Overburden / Waste and Side Burden Management –

- The overburden in the form of topsoil formation, the topsoil will be directly loaded into tippers for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fees to the Government.

TABLE 10.2: PROPOSED CONTROLS FOR SOIL MANAGEMENT

CONTROL	RESPONSIBILITY
Garland drains are to be paved around the quarry pit area to arrest possible wash off in the rainy seasons	Mines Manager
Surface run-off from the surface water via garland drains will be diverted to the mine pits	Mine Foreman & Mining Mate
Design haul roads and other access roads with drainage systems to minimize concentration of flow and erosion risk	Environment Officer
keeping records of mitigation of erosion events, to improve on management techniques	Environment Officer
A monitoring map with information including their GPS coordinates, erosion type, intensity, and the extent of the affected area, as well as existing control measures and assessment of their performance	Environment Officer
Empty sediment from sediment traps Maintain, repair or upgrade garland drain system	Environment Officer
Test soils for pH, EC, chloride, exchangeable cations, particle size and water holding capacity	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.5 Water Management

In the proposed quarrying project, no process is involved for the effluent generation, only oil & grease from the machinery wash is anticipated and domestic sewage from mine office.

The quarrying operation is restricted upto a depth of 42m (9m AGL + 33m BGL) as per the Approved mining plan, the water table in the area is 93-96m below ground level, hence the proposed projects will not intersect the Ground water table during entire quarry period.

TABLE 10.3: PROPOSED CONTROLS FOR WATER ENVIRONMENT

CONTROL	RESPONSIBILITY
To maximize the reuse of pit water for water supply	Mines Foreman
Temporary and permanent garland drain will be constructed to contain the catchments of the mining area and to divert runoff from undisturbed areas through the mining areas	Mines Manager
Natural drains/nallahs/brooklets outside the project area should not be disturbed at any point of mining operations	Mines Manager
Ensure there is no process effluent generation or discharge from the project area into water bodies	Mines Foreman
Domestic sewage generated from the project area will be disposed in septic tank and soak pit system	Mines Foreman
Monthly or after rainfall, inspection for performance of water management structures and systems	Mines Manager
Conduct ground water and surface water monitoring for parameters specified by CPCB	Manager Mines

Source: Proposed by FAE's & EIA Coordinator

10.6 Air Quality Management

The existing and proposed mining activities would result in the increase of particulate matter concentrations due to fugitive dust. Water sprinkling twice per day on the haul roads, approach roads in the vicinity would be undertaken and will be continued as there is possibility for dust generation due to truck mobility. It will be ensured that vehicles are properly maintained to comply with exhaust emission requirements.

TABLE 10.4: PROPOSED CONTROLS FOR AIR ENVIRONMENT

CONTROL	RESPONSIBILITY
Generation of dust during excavation is minimized by daily (twice) water sprinkling on working face and daily (twice) water sprinkling on haul road	Mines Manager
Wet drilling procedure /drills with dust extractor system to control dust generation during drilling at source itself is implemented	Mines Manager
Maintenance as per operator manual of the equipment and machinery in the mines to minimizing air pollution	Mines Manager
Ambient Air Quality Monitoring carried out in the project area and in surrounding villages to access the impact due to the mining activities and the efficacy of the adopted air pollution control measures	Mines Manager
Provision of Dust Mask to all workers	Mines Manager
Greenbelt development all along the periphery of the project area	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.7 Noise Management

There will be intermittent noise levels due to vehicular movement, trucks loading, drilling and blasting and other allied activities. No mining activities are planned during night time.

TABLE 10.5: PROPOSED CONTROLS FOR NOISE ENVIRONMENT

CONTROL	RESPONSIBILITY
Development of thick greenbelt all along the Buffer Zone (7.5 Meters) of the project area to attenuate the noise and the same will be maintained	Mines Manager
Preventive maintenance of mining machinery and replacement of worn-out accessories to control noise generation	Mines Foreman
Deployment of mining equipment with an inbuilt mechanism to reduce noise	Mines Manager
Provision of earmuff / ear plugs to workers working in noise prone zones in the mines	Mining Mate
Provision of effective silencers for mining machinery and transport vehicles	Mines Manager
Provision of sound proof AC operator cabins to HEMM	Mines Manager
Sharp drill bits are used to minimize noise from drilling	Mines Foreman
Controlled blasting technologies are adopted by using delay detonators to minimize noise from blasting	Mines Manager
Annual ambient noise level monitoring shall be carried out in the project area and in surrounding villages to access the impact due to the mining activities and the efficacy of the adopted noise control measures. Additional noise control measures will be adopted if required as per the observations during monitoring	Mines Manager
Reduce maximum instantaneous charge using delays while blasting	Mining Mate
Change the burden and spacing by altering the drilling pattern and/or delay layout, or altering the hole inclination	Mines Manager
Undertake noise or vibration monitoring	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.8 Ground Vibration and Fly Rock Control

TABLE 10.6: PROPOSED CONTROLS FOR GROUND VIBRATIONS & FLY ROCK

CONTROL	RESPONSIBILITY
Controlled blasting using delay detonators will be carried out to maintain the PPV value (below 8Hz) well within the prescribed standards of DGMS	Mines Manager
Drilling and blasting will be carried under the supervision of qualified persons	Mines Manager
Proper stemming of holes should be carried out with statutory competent qualified blaster under the supervision of statutory mines manager to avoid any anomalies during blasting	Mines Manager
Suitable spacing and burden will be maintained to avoid misfire / fly rocks	Manager Mines
Number of blast holes will be restricted to control ground vibrations	Manager Mines
Blasting will be carried out only during noon time	Mining Mate
Undertake noise or vibration monitoring	Mines Manager
ensure blast holes are adequately stemmed for the depth of the hole and stemmed with suitable angular material	Mines Foreman

Source: Proposed by FAE's & EIA Coordinator

10.8 Biological Environment Management

The proponent will take all necessary steps to avoid the impact on the ecology of the area by adopting suitable management measures in the planning and implementation stage. During mining, thick plantation will be carried out around the project periphery, on safety barrier zone, on top benches of quarried out area etc.,

Following control measures are proposed for its management and will be the responsibility of the Mines Manager.

- Greenbelt development all along the safety barrier of the project area
- It is also proposed to implement the greenbelt development programme and post plantation status will be regularly checked for every season.
- The main attributes that retard the survival of sapling is fugitive dust, this fugitive dust can be controlled by water sprinkling on the haul roads and installing a sprinkler unit near the newly planted area.
- Year wise greenbelt development will be recorded and monitored
    - Based on the area of plantation.
    - Period of plantation
    - Type of plantation
    - Spacing between the plants
    - Type of manuring and fertilizers and its periods
    - Lopping period, interval of watering
    - Survival rate
    - Density of plantation
- The ultimate reclamation planned leaves a congenial environment for development of flora & immigration of small fauna through green belt and water reservoir. The green belt and water reservoir developed within the Project at the end of mine life will attract the birds and animals towards the project area in the post mining period.

10.8.1 Green Belt Development Plan

About 645 nos. of saplings is proposed to be planted for the Mining plan period in safety barrier of applied mine lease area with survival rate 80%. The greenbelt development plan has been prepared keeping in view the land use changes that will occur due to mining operation in the area.

TABLE 10.7 PROPOSED GREENBELT ACTIVITIES FOR 5 YEAR PLAN PERIOD – P2

PROPOSAL – P2			
Year	No. of trees proposed to be planted	Area to be covered sq.m	Name of the species
I	1500	Near 7.5m safety distance, panchayat road and village road	Neem, Vilvam, Ashokha , Panai etc.,

Source: Conceptual Plan of Approved Mining plan& proposed by FAE's & EIA Coordinator

The objectives of the greenbelt development plan are –

- Provide a green belt around the periphery of the quarry area to combat the dispersal of dust in the adjoining areas,
- Protect the erosion of the soil, Conserve moisture for increasing ground water recharging,
- Restore the ecology of the area, restore aesthetic beauty of the locality and meet the requirement of fodder, fuel and timber of the local community.

A well-planned Green Belt with multi rows (three tiers) preferably with long canopy leaves shall be developed with dense plantations around the boundary and haul roads to prevent air, dust noise propagation to undesired places and efforts will be taken for the enhancement of survival rate.

10.8.2 Species Recommended for Plantation

Following points have been considered while recommending the species for plantation:

- Creating of bio-diversity.

- Fast growing, thick canopy cover, perennial and evergreen large leaf area,
- Efficient in absorbing pollutants without major effects on natural growth

TABLE 10.8: RECOMMENDED SPECIES TO PLANT IN THE GREENBELT – P2

S.No	Botanical Name	Local Name	Importance
1	Azadirachta indica	Neem, Vembu	Neem oil & neem products
2	Tamarindus indica	Tamarind	Edible & Medicinal and other Uses
3	Polyalthia longifolia	Nettilinkam	Tall and evergreen tree
4	Borassus Flabellifer	Palmyra Palm	Tall Wind breaker tree and its fruits are edible

Source: Proposed by FAE's & EIA Coordinator

10.9 Occupational Safety & Health Management

Occupational safety and health are very closely related to productivity and good employer-employee relationship. The main factors of occupational health impact in quarries are fugitive dust and noise. Safety of employees during quarrying operation and maintenance of mining equipment will be taken care as per Mines Act 1952 and Rule 29 of Mines Rules 1955. To avoid any adverse effect on the health of workers due to dust, noise and vibration sufficient measures have been provided.

10.9.1 Medical Surveillance and Examinations –

- Identifying workers with conditions that may be aggravated by exposure to dust & noise and establishing baseline measures for determining changes in health.
- Evaluating the effect of noise on workers
- Enabling corrective actions to be taken when necessary
- Providing health education

The health status of workers in the mine shall be regularly monitored under an occupational surveillance program. Under this program, all the employees are subjected to a detail medical examination at the time of employment. The medical examination covers the following tests under mines act 1952.

- General Physical Examination and Blood Pressure
- X-ray Chest and ECG
- Sputum test
- Detailed Routine Blood and Urine examination

The medical histories of all employees will be maintained in a standard format annually. Thereafter, the employees will be subject to medical examination annually. The below tests keep upgrading the database of medical history of the employees.

TABLE 10.9: MEDICAL EXAMINATION SCHEDULE – P2

Sl.No	Activities	1st Year	2nd Year	3rd Year	4th Year	5th Year
1	Initial Medical Examination (Mine Workers)					
A	Physical Check-up					
B	Psychological Test					
C	Audiometric Test					
D	Respiratory Test					
2	Periodical Medical Examination (Mine Workers)					
A	Physical Check – up					
B	Audiometric Test					
C	Eye Check – up					
D	Respiratory Test					
3	Medical Camp (Mine Workers & Nearby Villagers)					
4	Training (Mine Workers)					
Medical Follow ups:- Work force will be divided into three targeted groups age wise as follows:-						
Age Group		**PME as per Mines Rules 1955**		**Special Examination**		
Less than 25 years		Once in a Three Years		In case of emergencies		

Between 25 to 40 Years	Once in a Three Years	In case of emergencies
Above 40 Years	Once in a Three Years	In case of emergencies
Medical help on top priority immediately after diagnosis/ accident is the essence of preventive aspects.		

10.9.2 Proposed Occupational Health and Safety Measures –

- The mine site will have adequate drinking water supply so that workers do not get dehydrated.
- Lightweight and loose-fitting clothes having light colours will be preferred to wear.
- Noise exposure measurements will be taken to determine the need for noise control strategies.
- The personal protective equipment will be provided for mine workers.
- Supervisor will be instructed for reporting any problems with hearing protectors or noise control equipment.
- At noisy working activity, exposure time will be minimized.
- Dust generating sources will be identified and proper control measure will be adopted.
- Periodic medical examinations will be provided for all workers.
- Strict observance of the provisions of DGMS Acts, Rules and Regulations in respect of safety both by management and the workers.
- The width of road will be maintained more than thrice the width of the vehicle. A code of traffic rules will be implemented.
- In respect of contract work, safety code for contractors and workers will be implemented. They will be allowed to work under strict supervision of statutory person/officials only after they will impart training at vocational training centres. All personal protective equipment's will be provided to them.
- A safety committee meeting every month will be organized to discuss the safety of the mines and the persons employed.
- Celebration of annual mines safety week and environmental week in order to develop safety awareness and harmony amongst employees and co quarry owners.

FIGURE 10.1: PERSONAL PROTECTIVE EQUIPMENT TO THE MINE WORKERS – P2



10.9.3 Health and Safety Training Programme

The Proponents will provide special induction program along with machinery manufacturers for the operators and co-operators to run and maintain the machinery effectively and efficiently. The training program for the supervisors and office staffs will be arranged in the Group Vocational Training Centres in the State and engage Environmental Consultants to provide periodical training to all the employees to carry out the mining operation in and eco-friendly manner.

TABLE 10.10: LIST OF PERIODICAL TRAININGS PROPOSED FOR EMPLOYEES – P2

Course	Personnel	Frequency	Duration	Instruction

New-Employee Training	All new employees exposed to mine hazards	Once	One week	Employee rights Supervisor responsibilities Self-rescue Respiratory devices Transportation controls Communication systems Escape and emergency evacuation Ground control hazards Occupational health hazards Electrical hazards First aid Explosives
Task Training Like Drilling, Blasting, Stemming, safety, Slope stability, Dewatering, Haul Road maintenance,	Employees assigned to new work tasks	Before new Assignments	Variable	Task-specific health &safety procedures and SOP for various mining activity. Supervised practice in assigned work tasks.
Refresher Training	All employees who received new-hire training	Yearly	One week	Required health and safety standards Transportation controls Communication systems Escape ways, emergency evacuations Fire warning Ground control hazards First aid Electrical hazards Accident prevention Explosives Respirator devices
Hazard Training	All employees exposed to mine hazards	Once	Variable	Hazard recognition and avoidance Emergency evacuation procedures Health standards Safety rules Respiratory devices

Source: Proposed by FAE's & EIA Coordinator as per DGMS Norms

10.9.4 Budgetary Provision for Environmental Management –

Adequate budgetary provision has been made by the Company for execution of Environmental Management Plan. The Table 10.11 gives overall investment on the environmental safeguards and recurring expenditure for successful monitoring and implementation of control measures.

TABLE 10.11: EMP BUDGET FOR PROPOSED PROJECT – P2

Activities	Mitigation Measure	Provision for Implementation	Capital	Recurring
Air Environment	Haul road maintenance & Water sprinkling	Lump sum fund allocation for daily maintenance of haul roads and thrice a day water sprinkling by fixed sprinklers or water tankers	0	50000
	Muffle blasting – To control fly rocks during blasting	Lump sum fund allocation Blasting face will be covered with sand bags / steel mesh / old tyres / used conveyor belts	0	5000
	Wet drilling procedure	Lump sum fund allocation for ensuring wet drilling by covering drill holes with wet gunny bags and spraying water while drilling	0	10000
	No overloading of trucks/tippers/tractors	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Stone carrying trucks will be covered by tarpaulin	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Enforcing speed limits of 20 km/hr within ML area	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Regular monitoring of exhaust fumes as per RTO norms	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Installing wheel wash system near gate of quarry	Installation + Maintenance + Supervision	50000	5000
	Haul road maintenance & Water sprinkling	Lump sum fund allocation for daily maintenance of haul roads and thrice a day water sprinkling by fixed sprinklers or water tankers	0	50000
Noise Environment	Source of noise will be during operation of transportation vehicles, HEMM for this proper maintenance will be done at regular intervals.	Provision made in Operating Cost	0	0

	Oiling & greasing of Transport vehicles and HEMM at regular interval will be done	Provision made in Operating Cost	0	0
	Adequate silencers will be provided in all the diesel engines of vehicles.	Provision made in Operating Cost	0	0
	It will be ensured that all transportation vehicles carry a fitness certificate.	Provision made in Operating Cost	0	0
	Safety tools and implements that are required will be kept adequately near blasting site at the time of charging.	Provision made in OHS part	0	0
	Line Drilling all along the boundary to reduce the PPV from blasting activity and implementing controlled blasting.	Provision made in Operating Cost	0	0
	Proper warning system before blasting will be adopted and clearance of the area before blasting will be ensured.	Blowing Whistle by Mining Mate / Blaster / Competent Person	0	0
	Provision for Portable blaster shed	Installation of Portable blasting shelter	50000	2000
	NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30/- per 6 Tonnes of Blasted Material	0	0
Waste Management	Waste management (Spent Oil, Grease etc.,)	Provision for domestic waste collection and disposal through authorized agency	5000	20000
		Installation of dust bins	5000	2000
	Bio toilets will be made available outside mine lease on the land of owner itself	Provision made in Operating Cost	0	0
Mine Closure	1. Progressive Closure Activity - Surface Runoff management	Provision for garland drain @ Rs. 10,000/- per Hectare	5000	1000
	2. Progressive Closure Activity Barbed Wire Fencing to quarry area will be provisioned.	Provision made in Operating Cost	0	0

	3. Greenbelt development under safety zone during the mining plan period	Provision made in Operating Cost	0	0
Implementation of EC, Mining Plan & DGMS Condition	Size 6' X 5' with blue background and white letters as mentioned in MoM Appendix II by the SEAC TN	Fixed Display Board at the Quarry Entrance as permanent structure mentioning Environmental Conditions	10000	1000
	Air, Water, Noise and Soil Quality Sampling every 6 Months for Compliance Report of EC Conditions	Submission of 2 Half Yearly Compliance - Lab Monitoring Report as per CPCB norms	0	100000
	Workers will be provided with Personal Protective Equipment's	Lumpsum fund allocation	50000	15000
	Health checkup for workers will be provisioned	IME & PME Health checkup for all the employees will be covered batch wise.	0	50000
	First aid facility will be provided	Lumpsum fund allocation	0	5000
	Mine will have safety precaution signages, boards.	Provision for signages and boards made	10000	2000
	No parking will be provided on the transport routes. Separate provision on the south side of the hill will be made for vehicles /HEMMs. Flaggers will be deployed for traffic management	Lumpsum fund allocation	50000	10000

	Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos, DVR, Monitor with internet facility	30000	5000
	Appointment of Competent person for ensuring the safety operation	Provision made in operational cost	0	0
CER	As per MoEF &CC OM 22-65/2017-IA.III Dated 25.02.2021	Lumpsum fund allocation	300000	0
TOTAL			**5,65,000**	**3,03,000**

In order to implement the environmental protection measures, an amount of Rs.5.65 lakhs as capital cost and recurring cost as Rs. 3.03 lakhs as recurring cost is proposed considering present market price considering present market scenario for the proposed project.

10.10 CONCLUSION –

Various aspects of mining activities were considered and related impacts were evaluated. Considering all the possible ways to mitigate the environmental concerns Environmental Management Plan was prepared and fund has been allocated for the same. The EMP is dynamic, flexible and subjected to periodic review. For project where the major environmental impacts are associated, EMP will be under regular review. Senior Management responsible for the project will conduct a review of EMP and its implementation to ensure that the EMP remains effective and appropriate. Thus, the proper steps will be taken to accomplish all the goals mentioned in the EMP and the project will bring the positive impact in the study area.

CHAPTER - 10: ENVIRONMENTAL MANAGEMENT PLAN – P3

10.1 General

Environment Management Plan (EMP) aims at the preservation of ecological system by considering in-built pollution abatement facilities at the proposed site. Good practices of Environmental Management plan will ensure to keep all the environmental parameters of the project in respect of Ambient Air quality, Water quality, Socio – economic improvement standards.

Mitigation measures at the source level and an overall environment management plan at the study area are elicited so as to improve the supportive capacity of the receiving bodies. The EMP presented in this chapter discusses the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored after approval of the EIA.

10.2 Environmental Policy

The Project Proponent is committed to conduct all its operations and activities in an environmentally responsible manner and to continually improve environmental performance.

The Proponent **M/s. VKP Engineering Ind Pvt., Ltd., - 4.51.0 Ha** will –

- Allocate necessary resources to ensure the implementation of the environmental policy
- Meet the requirements of all laws, acts, regulations, and standards relevant to its operations and activities
- Implement a program to train employees in general environmental issues and individual workplace environmental responsibilities
- Ensure that an effective closure strategy is in place at all stages of project development and that progressive reclamation is undertaken as early as possible to reduce potential long-term environmental and community impacts
- Implement monitoring programmes to provide early warning of any deficiency or unanticipated performance in environmental safeguards
- Conduct periodic reviews to verify environmental performance and to continuously strive towards improvement

Description of the Administration and Technical Setup –

The Environment Monitoring Cell discussed under Chapter 6 will ensure effective implementation of environment management plan and to ensure compliance of environmental statutory guidelines through Mine Management Level of each Proposed Quarry.

The said team will be responsible for:

- Monitoring of the water/ waste water quality, air quality and solid waste generated
- Analysis of the water and air samples collected through external laboratory
- Implementation and monitoring of the pollution control and protective measures/ devices which shall include financial estimation, ordering, installation of air pollution control equipment, waste water treatment plant, etc.
- Co-ordination of the environment related activities within the project as well as with outside agencies
- Collection of health statistics of the workers and population of the surrounding villages
- Green belt development
- Monitoring the progress of implementation of the environmental monitoring programme

- Compliance to statutory provisions, norms of State Pollution Control Board, Ministry of Environment and Forests and the conditions of the environmental clearance as well as the consents to establish and consents to operate.

10.3 Land Environment Management –

Land degradation is one of the major adverse impacts of opencast mining in the form of excavated voids and contamination of soil affects the viability of the soil resource.

Soil contamination then has a number of flow-on effects like, Inhabitation of plant growth, and death of existing plants in contaminated areas and contamination of soil also has potential to impact on a surface water quality and groundwater resources.

TABLE 10.1: PROPOSED CONTROLS FOR LAND ENVIRONMENT

CONTROL	RESPONSIBILITY
Designing vehicle wash-down system so that all washed water is captured and passed through grease and oil separators.	Mines Manager
Re fueling will be carried out in a safe location, away from vehicle movement pathways	Mine Foreman & Mining Mate
Greenbelt development and its maintenance	Environment Officer
Garland drains with catch pits to be provided all around the project area to prevent run off affecting the surrounding lands.	Environment Officer
The periphery of Project area will be planted with thick plantation to arrest the fugitive dust, which will also act as acoustic barrier.	Mines Manager
Thick plantation using native flora spices will be carried out on the top benches.	Mines Manager
There will be formation of a small surface water body in the mined-out area, which can be used for watering the greenbelt at the conceptual stages.	Environment Officer

Source: Proposed by FAE's & EIA Coordinator

10.4 Soil Management

Top Soil Management –

- There is nil topsoil for this project site.

Overburden / Waste and Side Burden Management –

- The overburden in the form of topsoil formation, the topsoil will be directly loaded into tippers for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fees to the Government.

TABLE 10.2: PROPOSED CONTROLS FOR SOIL MANAGEMENT

CONTROL	RESPONSIBILITY
Garland drains are to be paved around the quarry pit area to arrest possible wash off in the rainy seasons	Mines Manager
Surface run-off from the surface water via garland drains will be diverted to the mine pits	Mine Foreman & Mining Mate
Design haul roads and other access roads with drainage systems to minimize concentration of flow and erosion risk	Environment Officer
keeping records of mitigation of erosion events, to improve on management techniques	Environment Officer
A monitoring map with information including their GPS coordinates, erosion type, intensity, and the extent of the affected area, as well as existing control measures and assessment of their performance	Environment Officer
Empty sediment from sediment traps Maintain, repair or upgrade garland drain system	Environment Officer
Test soils for pH, EC, chloride, exchangeable cations, particle size and water holding capacity	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.5 Water Management

In the proposed quarrying project, no process is involved for the effluent generation, only oil & grease from the machinery wash is anticipated and domestic sewage from mine office.

The quarrying operation is restricted upto a depth of 72m (12m AGL + 60m BGL) as per the Approved mining plan, the water table in the area is 96 - 93m below ground level, hence the proposed projects will not intersect the Ground water table during entire quarry period.

TABLE 10.3: PROPOSED CONTROLS FOR WATER ENVIRONMENT

CONTROL	RESPONSIBILITY
To maximize the reuse of pit water for water supply	Mines Foreman
Temporary and permanent garland drain will be constructed to contain the catchments of the mining area and to divert runoff from undisturbed areas through the mining areas	Mines Manager
Natural drains/nallahs/brooklets outside the project area should not be disturbed at any point of mining operations	Mines Manager
Ensure there is no process effluent generation or discharge from the project area into water bodies	Mines Foreman
Domestic sewage generated from the project area will be disposed in septic tank and soak pit system	Mines Foreman
Monthly or after rainfall, inspection for performance of water management structures and systems	Mines Manager
Conduct ground water and surface water monitoring for parameters specified by CPCB	Manager Mines

Source: Proposed by FAE's & EIA Coordinator

10.6 Air Quality Management

The existing and proposed mining activities would result in the increase of particulate matter concentrations due to fugitive dust. Water sprinkling twice per day on the haul roads, approach roads in the vicinity would be undertaken and will be continued as there is possibility for dust generation due to truck mobility. It will be ensured that vehicles are properly maintained to comply with exhaust emission requirements.

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Wet drilling procedure /drills with dust extractor system to control dust generation during drilling at source itself is implemented	Mines Manager
Maintenance as per operator manual of the equipment and machinery in the mines to minimizing air pollution	Mines Manager
Ambient Air Quality Monitoring carried out in the project area and in surrounding villages to access the impact due to the mining activities and the efficacy of the adopted air pollution control measures	Mines Manager
Provision of Dust Mask to all workers	Mines Manager
Greenbelt development all along the periphery of the project area	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.7 Noise Management

There will be intermittent noise levels due to vehicular movement, trucks loading, drilling and blasting and other allied activities. No mining activities are planned during night time.

TABLE 10.5: PROPOSED CONTROLS FOR NOISE ENVIRONMENT

CONTROL	RESPONSIBILITY
Development of thick greenbelt all along the Buffer Zone (7.5 Meters) of the project area to attenuate the noise and the same will be maintained	Mines Manager
Preventive maintenance of mining machinery and replacement of worn-out accessories to control noise generation	Mines Foreman
Deployment of mining equipment with an inbuilt mechanism to reduce noise	Mines Manager
Provision of earmuff / ear plugs to workers working in noise prone zones in the mines	Mining Mate
Provision of effective silencers for mining machinery and transport vehicles	Mines Manager
Provision of sound proof AC operator cabins to HEMM	Mines Manager
Sharp drill bits are used to minimize noise from drilling	Mines Foreman
Controlled blasting technologies are adopted by using delay detonators to minimize noise from blasting	Mines Manager
Annual ambient noise level monitoring shall be carried out in the project area and in surrounding villages to access the impact due to the mining activities and the efficacy of the adopted noise control measures. Additional noise control measures will be adopted if required as per the observations during monitoring	Mines Manager
Reduce maximum instantaneous charge using delays while blasting	Mining Mate
Change the burden and spacing by altering the drilling pattern and/or delay layout, or altering the hole inclination	Mines Manager
Undertake noise or vibration monitoring	Mines Manager

Source: Proposed by FAE's & EIA Coordinator

10.8 Ground Vibration and Fly Rock Control

TABLE 10.6: PROPOSED CONTROLS FOR GROUND VIBRATIONS & FLY ROCK

CONTROL	RESPONSIBILITY
Controlled blasting using delay detonators will be carried out to maintain the PPV value (below 8Hz) well within the prescribed standards of DGMS	Mines Manager
Drilling and blasting will be carried under the supervision of qualified persons	Mines Manager
Proper stemming of holes should be carried out with statutory competent qualified blaster under the supervision of statutory mines manager to avoid any anomalies during blasting	Mines Manager
Suitable spacing and burden will be maintained to avoid misfire / fly rocks	Manager Mines
Number of blast holes will be restricted to control ground vibrations	Manager Mines
Blasting will be carried out only during noon time	Mining Mate
Undertake noise or vibration monitoring	Mines Manager
ensure blast holes are adequately stemmed for the depth of the hole and stemmed with suitable angular material	Mines Foreman

Source: Proposed by FAE's & EIA Coordinator

10.8 Biological Environment Management

The proponent will take all necessary steps to avoid the impact on the ecology of the area by adopting suitable management measures in the planning and implementation stage. During mining, thick plantation will be carried out around the project periphery, on safety barrier zone, on top benches of quarried out area etc.,

Following control measures are proposed for its management and will be the responsibility of the Mines Manager.

- Greenbelt development all along the safety barrier of the project area
- It is also proposed to implement the greenbelt development programme and post plantation status will be regularly checked for every season.
- The main attributes that retard the survival of sapling is fugitive dust, this fugitive dust can be controlled by water sprinkling on the haul roads and installing a sprinkler unit near the newly planted area.
- Year wise greenbelt development will be recorded and monitored
    - Based on the area of plantation.
    - Period of plantation
    - Type of plantation
    - Spacing between the plants
    - Type of manuring and fertilizers and its periods
    - Lopping period, interval of watering
    - Survival rate
    - Density of plantation
- The ultimate reclamation planned leaves a congenial environment for development of flora & immigration of small fauna through green belt and water reservoir. The green belt and water reservoir developed within the Project at the end of mine life will attract the birds and animals towards the project area in the post mining period.

10.8.1 Green Belt Development Plan

About 2250 nos. of saplings is proposed to be planted for the Mining plan period in safety barrier of applied mine lease area with survival rate 80%. The greenbelt development plan has been prepared keeping in view the land use changes that will occur due to mining operation in the area.

TABLE 10.7 PROPOSED GREENBELT ACTIVITIES FOR 5 YEAR PLAN PERIOD – P3

PROPOSAL – P2- Tmt.K. Sangeetha			
Year	No. of trees proposed to be planted	Area to be covered sq.m	Name of the species
I	2250	Near 7.5m safety distance, panchayat road and village road	Neem, vilvam, Ashokha , Panai etc.,

Source: Conceptual Plan of Approved Mining plan& proposed by FAE's & EIA Coordinator

The objectives of the greenbelt development plan are –

- Provide a green belt around the periphery of the quarry area to combat the dispersal of dust in the adjoining areas,
- Protect the erosion of the soil, Conserve moisture for increasing ground water recharging,
- Restore the ecology of the area, restore aesthetic beauty of the locality and meet the requirement of fodder, fuel and timber of the local community.

A well-planned Green Belt with multi rows (three tiers) preferably with long canopy leaves shall be developed with dense plantations around the boundary and haul roads to prevent air, dust noise propagation to undesired places and efforts will be taken for the enhancement of survival rate.

10.8.2 Species Recommended for Plantation

Following points have been considered while recommending the species for plantation:

- Creating of bio-diversity.
- Fast growing, thick canopy cover, perennial and evergreen large leaf area,
- Efficient in absorbing pollutants without major effects on natural growth

TABLE 10.8: RECOMMENDED SPECIES TO PLANT IN THE GREENBELT – P3

S.No	Botanical Name	Local Name	Importance
1	Azadirachta indica	Neem, Vembu	Neem oil & neem products
2	Tamarindus indica	Tamarind	Edible & Medicinal and other Uses
3	Polyalthia longifolia	Nettilinkam	Tall and evergreen tree
4	Borassus Flabellifer	Palmyra Palm	Tall Wind breaker tree and its fruits are edible

Source: Proposed by FAE's & EIA Coordinator

10.9 Occupational Safety & Health Management

Occupational safety and health are very closely related to productivity and good employer-employee relationship. The main factors of occupational health impact in quarries are fugitive dust and noise. Safety of employees during quarrying operation and maintenance of mining equipment will be taken care as per Mines Act 1952 and Rule 29 of Mines Rules 1955. To avoid any adverse effect on the health of workers due to dust, noise and vibration sufficient measures have been provided.

10.9.1 Medical Surveillance and Examinations –

- Identifying workers with conditions that may be aggravated by exposure to dust & noise and establishing baseline measures for determining changes in health.
- Evaluating the effect of noise on workers
- Enabling corrective actions to be taken when necessary
- Providing health education

The health status of workers in the mine shall be regularly monitored under an occupational surveillance program. Under this program, all the employees are subjected to a detail medical examination at the time of employment. The medical examination covers the following tests under mines act 1952.

- General Physical Examination and Blood Pressure
- X-ray Chest and ECG
- Sputum test
- Detailed Routine Blood and Urine examination

The medical histories of all employees will be maintained in a standard format annually. Thereafter, the employees will be subject to medical examination annually. The below tests keep upgrading the database of medical history of the employees.

TABLE 10.9: MEDICAL EXAMINATION SCHEDULE – P3

Sl.No	Activities	1st Year	2nd Year	3rd Year	4th Year	5th Year
1	Initial Medical Examination (Mine Workers)					
A	Physical Check-up					
B	Psychological Test					
C	Audiometric Test					
D	Respiratory Test					
2	Periodical Medical Examination (Mine Workers)					
A	Physical Check – up					
B	Audiometric Test					
C	Eye Check – up					
D	Respiratory Test					
3	Medical Camp (Mine Workers & Nearby Villagers)					
4	Training (Mine Workers)					
Medical Follow ups:- Work force will be divided into three targeted groups age wise as follows:-						
Age Group	**PME as per Mines Rules 1955**		**Special Examination**			

Less than 25 years	Once in a Three Years	In case of emergencies
Between 25 to 40 Years	Once in a Three Years	In case of emergencies
Above 40 Years	Once in a Three Years	In case of emergencies
Medical help on top priority immediately after diagnosis/ accident is the essence of preventive aspects.		

10.9.2 Proposed Occupational Health and Safety Measures –

- The mine site will have adequate drinking water supply so that workers do not get dehydrated.
- Lightweight and loose-fitting clothes having light colours will be preferred to wear.
- Noise exposure measurements will be taken to determine the need for noise control strategies.
- The personal protective equipment will be provided for mine workers.
- Supervisor will be instructed for reporting any problems with hearing protectors or noise control equipment.
- At noisy working activity, exposure time will be minimized.
- Dust generating sources will be identified and proper control measure will be adopted.
- Periodic medical examinations will be provided for all workers.
- Strict observance of the provisions of DGMS Acts, Rules and Regulations in respect of safety both by management and the workers.
- The width of road will be maintained more than thrice the width of the vehicle. A code of traffic rules will be implemented.
- In respect of contract work, safety code for contractors and workers will be implemented. They will be allowed to work under strict supervision of statutory person/officials only after they will impart training at vocational training centres. All personal protective equipment's will be provided to them.
- A safety committee meeting every month will be organized to discuss the safety of the mines and the persons employed.
- Celebration of annual mines safety week and environmental week in order to develop safety awareness and harmony amongst employees and co quarry owners.

FIGURE 10.1: PERSONAL PROTECTIVE EQUIPMENT TO THE MINE WORKERS – P3



10.9.3 Health and Safety Training Programme

The Proponents will provide special induction program along with machinery manufacturers for the operators and co-operators to run and maintain the machinery effectively and efficiently. The training program for the supervisors and office staffs will be arranged in the Group Vocational Training Centres in the State and engage Environmental Consultants to provide periodical training to all the employees to carry out the mining operation in and eco-friendly manner.

TABLE 10.10: LIST OF PERIODICAL TRAININGS PROPOSED FOR EMPLOYEES – P3

Course	Personnel	Frequency	Duration	Instruction
New-Employee Training	All new employees exposed to mine hazards	Once	One week	Employee rights Supervisor responsibilities Self-rescue Respiratory devices Transportation controls Communication systems Escape and emergency evacuation Ground control hazards Occupational health hazards Electrical hazards First aid Explosives
Task Training Like Drilling, Blasting, Stemming, safety, Slope stability, Dewatering, Haul Road maintenance,	Employees assigned to new work tasks	Before new Assignments	Variable	Task-specific health &safety procedures and SOP for various mining activity. Supervised practice in assigned work tasks.
Refresher Training	All employees who received new-hire training	Yearly	One week	Required health and safety standards Transportation controls Communication systems Escape ways, emergency evacuations Fire warning Ground control hazards First aid Electrical hazards Accident prevention Explosives Respirator devices
Hazard Training	All employees exposed to mine hazards	Once	Variable	Hazard recognition and avoidance Emergency evacuation procedures Health standards Safety rules Respiratory devices

Source: Proposed by FAE's & EIA Coordinator as per DGMS Norms

10.9.4 Budgetary Provision for Environmental Management –

Adequate budgetary provision has been made by the Company for execution of Environmental Management Plan. The Table 10.11 gives overall investment on the environmental safeguards and recurring expenditure for successful monitoring and implementation of control measures.

TABLE 10.11: EMP BUDGET FOR PROPOSED PROJECT – P3

Activities	Mitigation Measure	Provision for Implementation	Capital	Recurring
Air Environment	Haul road maintenance & Water sprinkling	Lump sum fund allocation for daily maintenance of haul roads and thrice a day water sprinkling by fixed sprinklers or water tankers	0	50000
	Muffle blasting – To control fly rocks during blasting	Lump sum fund allocation Blasting face will be covered with sand bags / steel mesh / old tyres / used conveyor belts	0	5000
	Wet drilling procedure	Lump sum fund allocation for ensuring wet drilling by covering drill holes with wet gunny bags and spraying water while drilling	0	10000
	No overloading of trucks/tippers/tractors	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Stone carrying trucks will be covered by tarpaulin	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Enforcing speed limits of 20 km/hr within ML area	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Regular monitoring of exhaust fumes as per RTO norms	Lump sum fund allocation Manual Monitoring through Security guard	0	5000
	Installing wheel wash system near gate of quarry	Installation + Maintenance + Supervision	50000	5000
	Haul road maintenance & Water sprinkling	Lump sum fund allocation for daily maintenance of haul roads and thrice a day water sprinkling by fixed sprinklers or water tankers	0	50000
Noise Environment	Source of noise will be during operation of transportation vehicles, HEMM for this proper maintenance will be done at regular intervals.	Provision made in Operating Cost	0	0

	Oiling & greasing of Transport vehicles and HEMM at regular interval will be done	Provision made in Operating Cost	0	0
	Adequate silencers will be provided in all the diesel engines of vehicles.	Provision made in Operating Cost	0	0
	It will be ensured that all transportation vehicles carry a fitness certificate.	Provision made in Operating Cost	0	0
	Safety tools and implements that are required will be kept adequately near blasting site at the time of charging.	Provision made in OHS part	0	0
	Line Drilling all along the boundary to reduce the PPV from blasting activity and implementing controlled blasting.	Provision made in Operating Cost	0	0
	Proper warning system before blasting will be adopted and clearance of the area before blasting will be ensured.	Blowing Whistle by Mining Mate / Blaster / Competent Person	0	0
	Provision for Portable blaster shed	Installation of Portable blasting shelter	50000	2000
	NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30/- per 6 Tonnes of Blasted Material	0	0
Waste Management	Waste management (Spent Oil, Grease etc.,)	Provision for domestic waste collection and disposal through authorized agency	5000	20000
		Installation of dust bins	5000	2000
	Bio toilets will be made available outside mine lease on the land of owner itself	Provision made in Operating Cost	0	0
Mine Closure	1. Progressive Closure Activity - Surface Runoff management	Provision for garland drain @ Rs. 10,000/- per Hectare	5000	1000
	2. Progressive Closure Activity Barbed Wire Fencing to quarry area will be provisioned.	Provision made in Operating Cost	0	0

	3. Greenbelt development under safety zone during the mining plan period	Provision made in Operating Cost	0	0
Implementation of EC, Mining Plan & DGMS Condition	Size 6' X 5' with blue background and white letters as mentioned in MoM Appendix II by the SEAC TN	Fixed Display Board at the Quarry Entrance as permanent structure mentioning Environmental Conditions	10000	1000
	Air, Water, Noise and Soil Quality Sampling every 6 Months for Compliance Report of EC Conditions	Submission of 2 Half Yearly Compliance - Lab Monitoring Report as per CPCB norms	0	100000
	Workers will be provided with Personal Protective Equipment's	Lumpsum fund allocation	50000	15000
	Health checkup for workers will be provisioned	IME & PME Health checkup for all the employees will be covered batch wise.	0	50000
	First aid facility will be provided	Lumpsum fund allocation	0	5000
	Mine will have safety precaution signages, boards.	Provision for signages and boards made	10000	2000
	No parking will be provided on the transport routes. Separate provision on the south side of the hill will be made for vehicles /HEMMs. Flaggers will be deployed for traffic management	Lumpsum fund allocation	50000	10000

	Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos, DVR, Monitor with internet facility	30000	5000
	Appointment of Competent person for ensuring the safety operation	Provision made in operational cost	0	0
CER	As per MoEF &CC OM 22-65/2017-IA.III Dated 25.02.2021	Lumpsum fund allocation	500000	0
TOTAL			**7,65,000**	**3,03,000**

In order to implement the environmental protection measures, an amount of Rs.7.65 lakhs as capital cost and recurring cost as Rs. 3.03 lakhs as recurring cost is proposed considering present market price considering present market scenario for the proposed project.

10.10 CONCLUSION –

Various aspects of mining activities were considered and related impacts were evaluated. Considering all the possible ways to mitigate the environmental concerns Environmental Management Plan was prepared and fund has been allocated for the same. The EMP is dynamic, flexible and subjected to periodic review. For project where the major environmental impacts are associated, EMP will be under regular review. Senior Management responsible for the project will conduct a review of EMP and its implementation to ensure that the EMP remains effective and appropriate. Thus, the proper steps will be taken to accomplish all the goals mentioned in the EMP and the project will bring the positive impact in the study area.

CHAPTER – 11: SUMMARY AND CONCLUSIONS

M/s. VKP Engineering Ind Pvt., Ltd Rough Stone and Gravel Cluster Quarries (Extent: **14.00.33** ha) falls under "B" category as per MoEF & CC Notification (S.O. 3977 (E)).

Now, as per Order Dated: 04.09.2018 & 13.09.2018 passed by Hon'ble National Green Tribunal, New Delhi in O.A. No. 173 of 2018 & O.A. No, 186 of 2016 and MoEF & CC Office Memorandum F. No. L-11011/175/2018-IA-II (M) Dated: 12.12.2018 clarified the requirement for EIA, EMP and therefore, Public Consultation for all areas from 5 to 25 ha falling in Category B-1 and appraised by SEAC/ SEIAA as well as for cluster situation.

A detailed Draft EIA/ EMP Report is prepared for public and other stakeholders' suggestions and a Final EIA/ EMP Report will be prepared based on the outcome of Public Consultation.

Environmental monitoring and audit mechanism have been recommended before and after commencement of the project, where necessary, to verify the accuracy of the EIA predictions and the effectiveness of recommended mitigation measures.

The main scope of the EIA study is to quantify the cumulative impact in the study area due to cluster quarries and formulate the effective mitigation measures for each individual leases. A detailed account of the emission sources, emissions control equipment, background Air quality levels, Meteorological measurements, Dispersion model and all other aspects of pollution like effluent discharge, Dust generation etc., have been discussed in this report. The baseline monitoring study has been carried out during the months Oct to Dec 2024 for various environmental components so as to assess the anticipated impacts of the cluster quarry projects on the environment and suitable mitigation measures for likely adverse impacts due to the proposed project is suggested individually for the respective proposed project under Chapter 10.

The project proponent ensures to obtain necessary clearances and quarrying will be carried out as per rules and regulations. The Mining Activity will be carried out in a phased manner as per the approved mining plan after obtaining EC, CTO from TNPCB, execution of lease deed and obtaining DGMS Permission and working will be carried out under the supervision of Competent Persons employed.

Overall, the EIA report has predicted that the project will comply with all environment standards and legislation after commencement of the project and operational stage mitigation measures are implemented.

Mining operations has positive impact on environment and socio economy such as landscape improvement, water as by-product, economy development and better public services, providing and supply of Rough Stone & Gravel as per market demand.

Sustainable and modern mining leads us to see positive impact of mining operation and providing consistent employment for nearly 55 people directly in the cluster and indirectly around 100people.

As discussed, it is safe to say that the proposed quarries are not likely to cause any significant impact to the ecology of the area, as adequate preventive measures will be adopted to keep the various pollutants within the permissible limits. Green belt development around the area will also be taken up as an effective pollution mitigate technique, as well as to serve as biological indicators for the pollutants released from the M/s. VKP Engineering Ind Pvt., Ltd Rough Stone and Gravel Cluster Quarries (Cluster Extent: **14.00.33** ha).

CHAPTER 12.0: DISCLOSURE OF CONSULTANTS

The Project Proponent's –

1. **M/s. VKP Engineering Ind Pvt., Ltd. - 1.64.38 Ha**
2. **M/s. VKP Engineering Ind Pvt., Ltd. – 2.90.0 Ha**
3. **M/s. VKP Engineering Ind Pvt., Ltd. – 4.51.0 Ha**

have engaged M/s Geo Exploration and Mining Solutions, an Accredited Organization under Quality Council of India – National Accreditation Board for Education & Training, New Delhi, for carrying out the EIA Study as per the ToR Issued.

Name and address of the consultancy:

GEO EXPLORATION AND MINING SOLUTIONS

No 17, Advaitha Ashram Road,

Alagapuram, Salem – 636 004

Tamil Nadu, India

Email: infogeoexploration@gmail.com

Web: **www.gemssalem.com**

Phone: 0427 2431989.

The Accredited Experts and associated members who were engaged for this EIA study as given below –

Sl.No.	Name of the expert	In house/ Empanelled	EIA Coordinator		FAE	
			Sector	Category	Sector	Category
1	**Dr. M. Ifthikhar Ahmed**	**In-house**	**1**	**A**	WP GEO SC	B A A
2	Dr. P. Thangaraju	In-house	-	-	HG GEO	A A
3	Mr. A. Jagannathan	In-house	-	-	AP NV SHW	B A B
4	Mr. N. Senthilkumar	Empanelled	38 28	B B	AQ WP RH	B B A
5	Mrs. Jisha parameswaran	In-house	-	-	SW	B
6	Mr. Govindasamy	In-house	-	-	WP	B
7	Mrs. K. Anitha	In-house	-	-	SE	A
8	Mrs. Amirtham	In-house	-	-	EB	B
9	Mr. Alagappa Moses	Empanelled	-	-	EB	A
10	Mr. A. Allimuthu	In-house	-	-	LU	B
11	Mr. S. Pavel	Empanelled	-	-	RH	B
12	Mr. J. R. Vikram Krishna	Empanelled	-	-	SHW RH	A A

Abbreviations	
EC	EIA Coordinator
AEC	Associate EIA Coordinator
FAE	Functional Area Expert
FAA	Functional Area Associates
TM	Team Member
GEO	Geology
WP	Water pollution monitoring, prevention and control
AP	Air pollution monitoring, prevention and control
LU	Land Use
AQ	Meteorology, air quality modeling, and prediction
EB	Ecology and bio-diversity
NV	Noise and vibration
SE	Socio economics
HG	Hydrology, ground water and water conservation
SC	Soil conservation
RH	Risk assessment and hazard management
SHW	Solid and hazardous wastes
MSW	Municipal Solid Wastes
ISW	Industrial Solid Wastes
HW	Hazardous Wastes

DECLARATION BY EXPERTS CONTRIBUTING TO THE EIA/EMP

Declaration by experts contributing to the EIA/EMP for M/s. VKP Engineering Ind Pvt., Ltd Rough Stone & Gravel Cluster Quarries over an Extent of **14.00.33** ha in Peruntholuvu Village, Tiruppur South Taluk, Tiruppur 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. M. Ifthikhar Ahmed**

Designation**:** **EIA Coordinator**

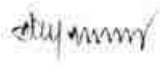
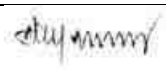
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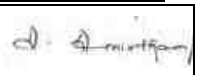
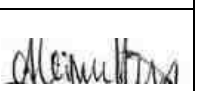
Period of Involvement: **January 2022 to till date**

Associated Team Member with EIA Coordinator:

1. **Mr. S. Nagamani**
2. **Mr. Viswanathan**
3. **Mr. Santhoshkumar**
4. **Mr. S. Ilavarasan**

FUNCTIONAL AREA EXPERTS ENGAGED IN THE PROJECT

Sl. No.	Functional Area	Involvement	Name of the Expert/s	Signature
1	AP	▪ Identification of different sources of air pollution due to the proposed mine activity ▪ Prediction of air pollution and propose mitigation measures / control measures	Mr. A. Jagannathan	
2	WP	▪ Suggesting water treatment systems, drainage facilities ▪ Evaluating probable impacts of effluent/waste water discharges into the receiving environment/water bodies and suggesting control measures.	Dr. M. Ifthikhar Ahmed	
			Mr. N. Senthilkumar	
3	HG	▪ Interpretation of ground water table and predict impact and propose mitigation measures. ▪ Analysis and description of aquifer Characteristics	Dr. P. Thangaraju	
4	GEO	▪ Field Survey for assessing the regional and local geology of the area. ▪ Preparation of mineral and geological maps. ▪ Geology and Geo morphological analysis/description and Stratigraphy/Lithology.	Dr. M. Ifthikhar Ahmed	
			Dr. P. Thangaraju	
5	SE	▪ Revision in secondary data as per Census of India, 2011. ▪ Impact Assessment & Preventive Management Plan ▪ Corporate Environment Responsibility.	Mrs. K. Anitha	

6	EB	▪ Collection of Baseline data of Flora and Fauna. ▪ Identification of species labelled as Rare, Endangered and threatened as per IUCN list. ▪ Impact of the project on flora and fauna. ▪ Suggesting species for greenbelt development.	Mrs. Amirtham	
			Mr. Alagappa Moses	
7	RH	▪ Identification of hazards and hazardous substances ▪ Risks and consequences analysis ▪ Vulnerability assessment ▪ Preparation of Emergency Preparedness Plan ▪ Management plan for safety.	Mr. N. Senthilkumar	
			Mr. S. Pavel	
			Mr. J. R. Vikram Krishna	
8	LU	▪ Construction of Land use Map ▪ Impact of project on surrounding land use ▪ Suggesting post closure sustainable land use and mitigative measures.	Mr. A. Allimuthu	
9	NV	▪ Identify impacts due to noise and vibrations ▪ Suggesting appropriate mitigation measures for EMP.	Mr. A. Jagannathan	
10	AQ	▪ Identifying different source of emissions and propose predictions of incremental GLC using AERMOD. ▪ Recommending mitigations measures for EMP	Mr. N. Senthilkumar	
11	SC	▪ Assessing the impact on soil environment and proposed mitigation measures for soil conservation	Dr. M. Ifthikhar Ahmed	
12	SHW	▪ Identify source of generation of non-hazardous solid waste and hazardous waste. ▪ Suggesting measures for minimization of generation of waste and how it can be reused or recycled.	Mr. A. Jagannathan	
			Mr. J. R. Vikram Krishna	

LIST OF TEAM MEMBERS ENGAGED IN THIS PROJECT

Sl.No.	Name	Functional Area	Involvement	Signature
1	Mr. S. Nagamani	AP; GEO; AQ	▪ Site Visit with FAE ▪ Provide inputs & Assisting FAE with sources of Air Pollution, its impact and suggest control measures ▪ Provide inputs on Geological Aspects ▪ Analyse & provide inputs and assist FAE with meteorological data, emission estimation, AERMOD modelling and suggesting control measures	
2	Mr. Viswanathan	AP; WP; LU	▪ Site Visit with FAE ▪ Provide inputs & Assisting FAE with sources of Air Pollution, its impact and suggest control measures ▪ Assisting FAE on sources of water pollution, its impacts and suggest control measures ▪ Assisting FAE in preparation of land use maps	
3	Mr. Santhoshkumar	GEO; SC	▪ Site Visit with FAE ▪ Provide inputs on Geological Aspects ▪ Assist in Resources & Reserve Calculation and preparation of Production Plan & Conceptual Plan ▪ Provide inputs & Assisting FAE with soil conservation methods and identifying impacts	

4	Mr. Umamahesvaran	GEO	▪ Site Visit with FAE ▪ Provide inputs on Geological Aspects ▪ Assist in Resources & Reserve Calculation and preparation of Production Plan & Conceptual Plan	
5	Mr. A. Allimuthu	SE	▪ Site Visit with FAE ▪ Assist FAE with collection of data's ▪ Provide inputs by analysing primary and secondary data	
6	Mr. S. Ilavarasan	LU; SC	▪ Site Visit with FAE ▪ Assisting FAE in preparation of land use maps ▪ Provide inputs & Assisting FAE with soil conservation methods and identifying impacts	
7	Mr. E. Vadivel	HG	▪ Site Visit with FAE ▪ Assist FAE & provide inputs on aquifer characteristics, ground water level/table ▪ Assist with methods of ground water recharge and conduct pump test, flow rate	
8	Mr. D. Dinesh	NV	▪ Site Visit with FAE ▪ Assist FAE and provide inputs on impacts due to proposed mine activity and suggest mitigation measures ▪ Assist FAE with prediction modelling	
9	Mr. Panneer Selvam	EB	▪ Site Visit with FAE ▪ Assist FAE with collection of baseline data ▪ Provide inputs and assist with labelling of Flora and Fauna	
10	Mrs. Nathiya	EB	▪ Site Visit with FAE ▪ Assist FAE with collection of baseline data ▪ Provide inputs and assist with labelling of Flora and Fauna	

DECLARATION BY THE HEAD OF THE ACCREDITED CONSULTANT ORGANIZATION

I, Dr. M. Ifthikhar Ahmed, Managing Partner, Geo Exploration and Mining Solutions, hereby, confirm that the above-mentioned Functional Area Experts and Team Members prepared the Draft EIA/EMP for Rough Stone & Gravel Cluster Quarries over an Extent of **14.00.33** ha in Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District of Tamil Nadu. It is also certified that information furnished in the EIA study are true and correct to the best of our knowledge.

Signature& Date:



Name:	**Dr. M. Ifthikhar Ahmed**
Designation:	**Managing Partner**
Name of the EIA Consultant Organization:	**M/s. Geo Exploration and Mining Solutions**
NABET Certificate No & Issue Date:	**NABET/EIA/2225/RA 0276 Dated: 20-2-2023**
Validity:	**Valid till 06.08.2025**

ANNEXURE

M/s. VKP ENGINEERING IND PVT LTD
ROUGH STONE AND GRAVEL QUARRY

PROPONENT PROJECT LOCATION		
P1	**P2**	**P3**
S.F. No. 543/2 Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District Extent 1.64.38 Ha.	S.F. No. 538/2A, 538/2B and 539/2 (P), Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District Extent 2.90.0 Ha.	S.F.Nos. 536, 537/1, 537/2 & 537/3, Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District Extent 4.51.0 Ha
PROPONENT ADDRESS		
M/s. VKP Engineering Ind Pvt., Ltd., Thiru. P. Jagadeesan, Director No. 11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District – 638 052.		
ToR obtained vide File No. 11950 TOR Identification No. TO25B0108TN5971334N Dated:03.06.2025-P1 File No. 11957 TOR Identification No. TO25B0108TN5253360N Dated:03.06.2025-P2 File No. 11961 TOR Identification No. TO25B0108TN5609691N Dated:15.06.2025-P3		

LIST OF ANNEXURES

ANNEXURES	DESCRIPTION	PAGE NOS
P1- VKP ENGINEERING- 1.64.38ha	COPY OF TERMS OF REFERENCE	1A-22A
	COPY OF 500M RADIUS QUARRIES DETAILS LETTER	23A-24A
	COPY OF MINING PLAN APPROVED LETTER	25A-28A
	COPY OF APPROVED MINING PLAN WITH PLATES	29A-140A
	COPY OF HYDROGEOLOGICAL REPORT	141A-155A
	COPY OF EXPLOSIVE COPY	156A-160A
	COPY OF 300m LETTER	161A-162A
P2- VKP ENGINEERING-2.90.0ha	COPY OF TERMS OF REFERENCE	163A-184A
	COPY OF 500M RADIUS QUARRIES DETAILS LETTER	185A-186A
	COPY OF MINING PLAN APPROVED LETTER	187A-189A
	COPY OF APPROVED MINING PLAN WITH PLATES	190A-306A
	COPY OF HYDROGEOLOGICAL REPORT	307A-320A
	COPY OF EXPLOSIVE LETTER	321A-325A
	COPY OF 300m LETTER	326A-327A
P3- VKP ENGINEERING-4.51.0ha	COPY OF TERMS OF REFERENCE	328A-350A
	COPY OF 500M RADIUS QUARRIES DETAILS LETTER	351A-352A
	COPY OF MINING PLAN APPROVED LETTER	353A-357A
	COPY OF APPROVED MINING PLAN WITH PLATES	358A-474A

	COPY OF HYDROGEOLOGICAL REPORT	475A-489A
	COPY OF EXPLOSIVE LETTER	490A-494A
	COPY OF 300m LETTER	495A-496A
E1- VKP ENGINEERING- 4.94.5ha	COPY OF ENVIRONMENTAL CLEARANCE	497A-513A
	COPY OF BASE LINE MONITORING DATA	514A-608A
	COPY OF CONSULTANT ACCREDITATION CERTIFICATE	609A

File No: 11950

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Environment Impact Assessment Authority(SEIAA), TAMIL NADU)

***

Dated **03/06/2025**

To,

Thiru.P Jagadeesan
vkp engineering ind private limited
No. 11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District. , Perundurai, ERODE, TAMIL NADU, 638052
vkpeindpvtltd@gmail.com

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

Sir/Madam,

Sub: SEIAA, Tamil Nadu Proposed Rough Stone and Gravel over an extent of 1.64.38Ha in S.F. No. 543/2 Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu by M/s. VKP Engineering Ind Pvt., Ltd., - under project category – "B1" and Schedule S.No.1(a) "Mining of Minerals Projects" of EIA Notification, 2006, as amended – ToR issued along with Public Hearing - preparation of EIA report – Regarding.

Ref:

1. Online proposal No. SIA/TN/MIN/ 529346/2025 Dated 13/03/2025.
2. Your application submitted for Terms of Reference dated: 13.03.2025.
3. Minutes of the 562nd SEAC meeting held on 09.05.2025.
4. Minutes of the 830th SEAC meeting held on 28.05.2025.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO25B0108TN5971334N
(ii) File No.	11950
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	M/s. VKP Engineering Ind Pvt. Ltd., Rough Stone and Gravel Quarry Project
(viii) Name of Company/Organization	vkp engineering ind private limited
(ix) Location of Project (District, State)	TIRUPPUR, TAMIL NADU
(x) Issuing Authority	SEIAA

(xii) Applicability of General Conditions no

(xiii) Applicability of Specific Conditions no

1.In view of the particulars given in the Para 1 above, the project proposal interalia 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 28.05.2025 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 M/s. VKP Engineering Ind Pvt., Ltd 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 Additional Chief Secretary to Government, Environment & Forests Department, Govt. of Tamil Nadu, Fort St. George, Chennai - 9
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032.
4. Monitoring Cell, IA Division, Ministry of Environment, Forests &CC, Paryavaran Bhavan, CGO Complex, New Delhi 110003
5. The District Collector, Tiruppur District.
6. Stock File.

Annexure 1

Specific Terms of Reference for (Mining Of Minerals)

1. Seac Conditions - Site Specific

S. No	Terms of Reference
1.1	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:**

S. No	Terms of Reference
	(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 Boundary pillars to be erected as per the mine rules and the evidence should be submitted along with the EIA report. 3. Since waterbodies are situated nearby, the PP shall carry out the hydrological study including the details of waterflow pattern to determine the impacts of the mining operation in the waterbodies. 4. The details of enumeration of structures including schools, colleges, primary health centres should be submitted along with the EIA report. 5. The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m & 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. 6. 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. 7. The Proponent shall carry out Bio diversity study as a part of EIA study and the same shall be included in the Report. 8. 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. 9. 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. 10. 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. 11. The PP shall install the CCTV camera for the continuous surveillance of mining activity & furnish the photographic/videographic evidence along with the EIA report.

2. Seac Standard Conditions

S. No	Terms of Reference
2.1	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

S. No	Terms of Reference
	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, 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,

S. No	Terms of Reference
	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

S. No	Terms of Reference
	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.

3. Seiaa Specific Conditions:

S. No	Terms of Reference
3.1	**<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

S. No	Terms of Reference
	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. **Agriculture & Agro-Biodiversity** 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. **Forests** 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. **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 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.

S. No	Terms of Reference
	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: 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. **Energy** 28. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy 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. 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. **Mine Closure Plan** 32. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued. **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. 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. **Risk Assessment** 35. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining. **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. **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.
3.2	**SEIAA SPECIFIC CONDITIONS:** The authority noted that the subject was placed in the 562nd SEAC-II meeting held on 09.05.2025. After detailed discussions, the Authority accepts the recommendation of SEAC-II and decided to grant Terms of Reference (ToR) along with Public Hearing for the quantity of 1,23,550m^3 of Rough

S. No	Terms of Reference
	Stone & 23,868m³ of Gravel upto the depth of 47m (9m AGL + 38m BGL) 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-II & normal conditions & the conditions mentioned.

Standard Terms of Reference for (Mining of minerals)

1.

S. No	Terms of Reference
1.1	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
1.2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given
1.3	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
1.4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the areashould 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)
1.5	Information should be provided in Survey of India Toposheet 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
1.6	Details about the land proposed for mining activities should be givenwith 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
1.7	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
1.8	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

S. No	Terms of Reference
1.9	The study rea 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
1.10	Land use of the study rea 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
1.11	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
1.12	A 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
1.13	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
1.14	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
1.15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given
1.16	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
1.17	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 Wildlifeand copy furnished
1.18	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 alongwith 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

S. No	Terms of Reference
1.19	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 Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered
1.20	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 w.r.t 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)
1.21	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
1.22	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
1.23	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
1.24	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
1.25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided
1.26	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
1.27	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
1.28	Based on actual monitored data, it may clearly be shown whether working will intersect

S. No	Terms of Reference
	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 State Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished
1.29	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
1.30	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
1.31	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
1.32	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
1.33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report
1.34	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
1.35	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
1.36	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
1.37	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
1.38	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

S. No	Terms of Reference
	any, occupational health impacts besides other impacts specific to the proposed Project
1.39	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
1.40	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given
1.41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out
1.42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report
1.43	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
1.44	Besides the above, the below mentioned general points are also to be followed:- a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) 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. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF 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. g) 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. h) 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. i) 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

A. 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 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 is acquisition, nearby (in 2-3 km.) water body, population, with in 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 -l1013/77/2004-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 willtake 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.

Signature Not Verified

Digitally Signed by : A R Rahul Nadh IAS
Member Secretary, SEIAA

Date: 03/06/2025

From

Thiru.V.Sasikumar, M.Sc.,
Deputy Director (i/c),
Geology and Mining,
Tiruppur

To

Tvl.V.K.P.Engineering Ind Pvt Ltd.,
Thiru.P.Jagadeesan, Director,
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District.

R.c. No.677/ Mines / 2023 dated: 29.07.2024

Sub: Mines and Minerals – Minor Mineral – Rough Stone and Gravel- Tiruppur District – Tiruppur South Taluk – Peruntholuvu Village- S.F.Nos. 543/2 – totally over an extent of 1.64.38 Hectares of patta land- Quarry lease for Rough Stone and Gravel - Application preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd.,- Precise area communicated for the proposed grant of quarry lease - Mining Plan Approved - details of quarries located within 500 mts radius called for - details furnished – Regarding.

Ref:
1. Application for grant of Rough Stone and Gravel quarry lease preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., dated: 09.10.2023
2. G.O. Ms. No. 79 / Industries (MMC 1) Department dated 06.04.2015.
3. The Deputy Director (i/c), Geology and Mining, Tiruppur letter R.C. No.677/Mines/2023 dated 24.07.2024
4. Tvl.V.K.P.Engineering Ind Pvt Ltd., letter dated:nil received on 26.07.2024.
5. This office letter in even no. dated.29.07.2024 (Mining Plan approved)

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In the reference 4th cited above, Tvl.V.K.P.Engineering Ind Pvt Ltd., has requested to furnish details of other quarry leases of expired, existing and proposed within 500mtr radius from the proposed rough stone and gravel lease over an extent of 1.64.38 Hect. in S.F.No543/2 in Peruntholuvu village, Tiruppur South Taluk, Tiruppur District for the period of 10 years.

As requested by the applicant, the details of existing, proposed and expired quarries situated within the radius of 500 meters from the subject area are furnished as follows:-

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1. Existing quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Collector's proceedings No. & Date	Lease period
1	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	538/1(P), 539/1(P), 539/2(P)	4.94.95	738/ Mines/2019 dated 19.06.2020 & 285/2021/Mines dated 26.02.2021	19.06.2020-18.06.2030

2. Proposed quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Lease period
1	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	543/2	1.64.38	Proposed quarry
2	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	. 536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0)	4.51.00	Proposed quarry
3	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	538/2A (0.92.95), 538/2B(0.92.25), 539/2B(1.05.50)	2.90.00	Proposed quarry

3. Lease expired quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Collector's proceedings No. & Date	Lease period
----Nil-----						

Deputy Director (i/c)
Geology and Mining,
Tiruppur

Copy to : State Level Environment Impact Assessment Authority-Tamil Nadu,3rd Floor, Panagal Maaligai,No.1 Jeenis Road, Saidapet, Chennai-15

From

Thiru.V.Sasikumar, M.Sc.,
Deputy Director (i/c),
Geology and Mining,
Tiruppur

To

Tvl.V.K.P.Engineering Ind Pvt Ltd.,
Thiru.P.Jagadeesan, Director,
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District.

R.c. No. 677/ Mines / 2023 dated: 29.07.2024

Sub: Mines and Minerals – Minor Mineral – Rough Stone and Gravel- Tiruppur District – Tiruppur South Taluk – Peruntholuvu Village- S.F.Nos. 543/2 – totally over an extent of 1.64.38 Hectares of patta land- Quarry lease for Rough Stone and Gravel - Application preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., - Precise area communicated for the proposed grant of quarry lease - Mining Plan Submitted for approval - Approved - regarding.

Ref: 1. Application for grant of Rough Stone and Gravel quarry lease preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., dated: 09.10.2023
2. G.O. Ms. No. 79 / Industries (MMC 1) Department dated 06.04.2015.
3. The Deputy Director (i/c), Geology and Mining, Tiruppur letter R.C. No.677/Mines/2023 dated 24.07.2024
4. Tvl.V.K.P.Engineering Ind Pvt Ltd., letter dated:nil received on 26.07.2024

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Tvl.V.K.P.Engineering Ind Pvt Ltd., has preferred an application for the grant of Rough Stone and Gravel quarry lease over an extent of 1.64.38 Hectares of Patta land in S.F.Nos. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District vide the reference 1st cited and the precise area was communicated to the applicant vide the reference 3rd cited with a direction to submit the approved mining plan and Environmental Clearance.

As directed, the applicant submitted three copies of mining plan for approval vide the reference 4th cited. The Mining Plan has been verified and found that,

The applicant intends to apply and obtain permission from Director of Mines Safety, Chennai under Regulation 111(3) of Metalliferous Mines Regulations, 1961 for working Common mine boundary with adjacent proposed quarry lease applied by the same company (M/s.V.K.P.Engineering Ind Pvt Ltd.,) over an extent of 2.90.0 Hectares of patta lands in

25 A

S.F.Nos.538/2A, 538/2B, 539/2(P) of Peruntholuvu village situated on the Northern side of the proposed quarry lease area.

Hence, the year wise productions are calculated with two categories i) including common boundaries ii) excluding common boundary. The yearwise production including common boundary between the proposed rough stone quarry in S.F.Nos. 543/2 and Rough stone quarry applied in S.F.Nos. 538/2A, 538/2B, 539/2(P) is given below.

Yearwise production after leaving safety distance and benches for the first five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
1st Year	8000	8568
2nd year	8000	7956
32035	32035	7344
4th year	8200	-
5th year	8065	-
Total	**64300**	**23868**

Yearwise production after leaving safety distance and benches for the second five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
6th Year	7600	-
7th year	27760	-
8th year	8085	-
9th year	7885	-
10th year	7920	-
Total	**59250**	**-**

Yearwise production excluding common mine boundary for the first five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
1st Year	8000	8568
2nd year	8000	7956
3rd year	32035	7504
4th year	9180	-
5th year	6890	-
Total	**64105**	**24028.**

Yearwise production excluding common mine boundary for the second five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
6th Year	7600	-
7th year	28160	-
8th year	8330	-
9th year	7355	-
10th year	8645	-
Total	**60090**	**-**

The Mining Plan has been verified in detail and found that it was prepared in accordance with the guidelines / instructions issued by the Commissioner of Geology and Mining in letter RC. No. 3868 / LC / 2012 dated 19.11.2012.

Therefore, in exercise of the powers conferred under Rule 41(2) of Tamil Nadu Minor Mineral Concession Rules, 1959, read with G.O. (Ms). No.79 / Industries (MMC 1) Department dated 06.04.2015, the mining plan is hereby approved, subject to the following conditions:

(i) 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.

(ii) This approval of the mining plan does not in any way convey the approval of the Government in terms or 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, Explosives Act, 1884 (Central Act IV of 1884) Minor Mineral Concession and Development Rules, 2010 and the Rules made there under and the Tamil Nadu Minor Mineral Concession Rules, 1959.

(iii) The mining plan is approved without prejudice to any other order or direction from any court of competent jurisdiction.

(iv) The validity of the mining plan is co-terminus with the lease period.

(v) Quarrying shall be done in accordance with 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.

(vi) If anything is found to be concealed as required by the Mines Act in the contents of the Mining Plan and the proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.

(vii) A safety distance of 7.5 meters shall be provided for the patta lands situated adjacent to the applied area.

viii) High Tension Tower line is passing on the Western side of the applied area at a distance of 35 meteres. Hence, No objection certificate should be obtained from the Electrical Inspector of Mines before commencement of quarrying operations, as per CEA Regulations, Sl.No.65(2).

ix) A safety distance of 10 meters shall be provided for the High Tension Tower line on the Western side of the applied area

x) All the conditions mentioned in the precise area communicated to the applicant shall be followed during quarry operation as per Act & Rules.

Special Condition:

Only after obtaining appropriate permission for common boundary from the Directorate General of Mines Safety under Regulation 111(3) of the Metaliferous Mines Regulations,1961, the lessee shall work in the areas of common boundary between the proposed roughstone quarry in 543/2 and Rough stone quarry lease applied in S.F.Nos. 538/2A, 538/2B, 539/2(P) of Peruntholuvu Village. No quarry works shall be extended into the common boundary unless permission for the effect is obtained from the Directorate General of Mines Safety and submitted the same to the Deputy Director, Department of Geology and Mining, Tiruppur

Encl.: Approved Mining Plan.

Deputy Director (i/c),
Geology and Mining,
Tiruppur

29/7/24

25/7/24

MINING PLAN AND PROGRESSIVE QUARRY CLOSURE PLAN FOR PERUNTHOLUVU ROUGH STONE AND GRAVEL QUARRY

(PREPARED UNDER RULES 41 & 42 AS PER THE AMENDED UNDER TAMIL NADU MINOR MINERAL CONCESSION RULES, 1959)

Patta Land/ Lease period = Ten years

IN

LOCATION OF THE QUARRY LEASE APPLIED AREA

EXTENT	: 1.64.38 Ha
S.F.No.	: 543/2,
VILLAGE	: PERUNTHOLUVU
TALUK	: TIRUPPUR SOUTH
DISTRICT	: TIRUPPUR
STATE	: TAMIL NADU

FOR

APPLICANT

M/s. VKP Engineering Ind Pvt., Ltd.,

Thiru. P. Jagadeesan, Director

No.11/32, Vettukattu Valasu,

Ingur, Perundurai,

Erode District,

Tamil Nadu State– 638 052.

PREPARED BY

Dr. P. Thangaraju, M.Sc., Ph.D.,

Qualified Person

No.17, Advaitha Ashram Road,

Alagapuram,

Salem District – 636 004.

Mobile No.: +91 94433 56539.

Email ID: infogeoexploration@gmail.com

ASSISTANT DIRECTOR GEOLOGY AND MINING TIRUPPUR

ASSISTANT DIRECTOR
GEOLOGY AND MINING
THENI

ABBREVIATIONS

- EIA - Environmental Impact Assessment
- SEAC - State Expert Appraisal Committee
- SEIAA - State Level Environment Impact Assessment Authority
- MoEF&CC - Ministry of Environment, Forest and Climate changes
- MSL - Mean Sea Level
- CPCB - Central Pollution Control Board
- TNPCB - Tamil Nadu Pollution Control Board
- S.F.No. - Survey Field Number
- DMS - Director of Mines Safety
- DGMS - Director General of Mines Safety
- MMR - Metalliferous Mines Regulations
- MCR - Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules
- TNMMCR - Tamil Nadu Minor Mineral Concession Rules
- EMP - Environment Management Plan
- NONEL - Non Electric
- PPV - Peak Particle Velocity
- CRZ - Coastal Regulatory Zone
- HACA - Hill Area Conservation Authority
- QP - Qualified Person
- AGL - Above Ground Level
- BGL - Below Ground Level

M/s. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

CONSENT LETTER FROM THE APPLICANT

The Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholuvu Rough Stone and Gravel Quarry lease applied area over an extent of 1.64.38 Hectares Patta lands in S.F.No. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared by

Dr. P. Thangaraju, M.Sc., Ph.D.,
Qualified Person

We have entrust the works to prepared the Mining Plan based upon the production requirements to me as per the Mines Acts, Rules, Regulations and Amendments as on date. We request to the Deputy Director (i/c), Department of Geology and Mining, Tiruppur District, Tamil Nadu State to make further correspondence regarding the modification of the Mining Plan with the said Qualified Person at his following address.

Dr. P. Thangaraju, M.Sc., Ph.D.,
No.17, Advaitha Ashram Road,
Alagapuram, Salem District – 636 004.
Mobile No.: +91 94433 56539.

We hereby undertake that all the responsibilities of contents in the Mining Plan and if any corrections made in the Mining Plan by the Qualified Person may be deemed to have been made with our knowledge and consent and shall be acceptable to me and binding on me in all respects. If there is any substantial change during operation we will carried out a Modified Mining plan and seek its approval from concerned Authorities.

Signature of the Applicant
M/s. VKP Engineering Ind Pvt., Ltd.,

P. Jagadeesan
(Director)

Place: Erode
Date: 25.07.2024

M/s. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

DECLARATION OF THE APPLICANT

The Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholuvu Rough Stone and Gravel Quarry lease applied area over an extent of 1.64.38 Hectares Patta lands in S.F.No. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared in full consultation with me.

I have understood its contents and agree to implement the same in accordance with Laws, Rules and Act applicable to quarry from time to time as per Tamil Nadu Minor Mineral Concession Rules, 1959.

Signature of the Applicant
M/s. VKP Engineering Ind Pvt., Ltd.,

P. Jagadeesan
(Director)

Place: Erode
Date: 30.07.2024

CERTIFICATE

Certified that I am, **Dr. P. Thangaraju, M.Sc., Ph.D.,** having an office at Regd. Off. No. 17, Advaitha Ashram Road, Alagapuram, Salem – 636 004, holding a Post Graduate Degree in Geology (M.Sc. Geology) from Madras University, Chennai and I worked in the field of Mining in a role of Geologist.

Rule 15(I)(a) and (b) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 stipulates the eligibility for preparing Mining plans as "(I)(a) a degree in mining engineering or a post-graduate degree in geology granted by a university established" and (I)(b) "Professional experience of five years of working in a supervisory capacity in the field of mining after obtaining the degree". Since my qualification and experience are satisfied the Rule (I)(a) and (I)(b) of 15 of the said Rules, I am eligible to prepare Mining Plans for both Major and Minor Minerals.

Accordingly, I prepared this Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholuvu Rough Stone and Gravel Quarry over an extent of 1.64.38 Hectares Patta lands in S.F.No. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District for **M/s. VKP Engineering Ind Private Limited,** Thiru. P. Jagatheesan is a director, residing at No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District, Tamil Nadu State– 638 052. Since the Mining Plan is prepared as per the provisions contained in Rule 15(I)(a) and (I)(b) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016.

Signature of the Qualified Person

Dr. P. Thangaraju, M.Sc., Ph.D.,

Place: Salem

Date: 30.07.2024

Dr. P. Thangaraju, M.Sc., Ph.D.,
Regd. off. No.17, Advaitha Ashram Road,
Alagapuram, Salem – 636 004.
Cell: 94433 56539.

CERTIFICATE FROM THE QUALIFIED PERSON

This is to certify that the Provisions of Prepared under Rules 41 & 42 as Amended in Tamil Nadu Minor Mineral Concession Rules, 1959. The preparation of Mining Plan and Progressive Quarry Closure Plan for Peruntholuvu Rough Stone and Gravel Quarry lease applied area over an extent of 1.64.38 Hectares Patta lands in S.F.No. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared for

M/s. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

Whenever specific permissions / exemptions / relaxations and approvals are required, the applicant will approach the concerned authorities of the Deputy Director (i/c), Department of Geology and Mining, Tiruppur District, Tamil Nadu State for such permissions / exemptions / relaxations and approvals.

It is also certified that information furnished in the above Mining Plan are true and correct to the best of my knowledge.

Signature of the Qualified Person

Dr. P. Thangaraju, M.Sc., Ph.D.,

Place: Salem
Date: 30.07.2024

Dr. P. Thangaraju, M.Sc., Ph.D.,
Regd. off. No.17, Advaitha Ashram Road,
Alagapuram, Salem – 636 004.
Cell: 94433 56539.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

CERTIFICATE FROM THE QUALIFIED PERSON

Certified that the Provisions of Mines Act, Rules and Regulations or Orders made there under have been observed in the preparation of Mining Plan and Progressive Quarry Closure Plan for Peruntholuvu Rough Stone and Gravel Quarry lease applied area over an extent of 1.64.38 Hectares Patta lands in S.F.No. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared for

M/s. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

Whenever specific permissions / exemptions / relaxations and approvals are required, the Applicant will approach the concerned authorities of Director of Mines Safety (DMS), No.5, II Street, Block–AA, Anna Nagar, Chennai-40, Tamil Nadu State for such permissions / exemptions / relaxations and approvals.

It is also certified that information furnished in the Mining Plan are true and correct to the best of my knowledge.

Signature of the Qualified Person

Dr. P. Thangaraju, M.Sc., Ph.D.,

Place: Salem
Date: 30.07.2024

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ASSISTANT DIRECTOR GEOLOGY AND MINING

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MINING PLAN ALONG WITH PROGRESSIVE QUARRY CLOSURE PLAN FOR PERUNTHOLUVU ROUGH STONE AND GRAVEL.

(PREPARED UNDER RULES 41 & 42 AS PER THE AMENDMENT OF TAMIL NADU MINOR MINERAL CONCESSION RULES, 1959)

INTRODUCTION AND EXECUTIVE SUMMARY

The Company **M/s. VKP Engineering Ind Private Limited,** Thiru. P. Jagadeesan is a director, residing at No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District, Tamil Nadu State– 638 052 has entrust and given consent to preparation of Mining plan and Progressive Mine Closure Plan as per the provisions of Mines Act, Rules, Regulations and as amended till date.

The Company has applied quarry lease for quarrying of Rough stone and Gravel over an extent of 1.64.38 Hectares Patta lands in S.F.No. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State for a period of ten years under Rules 19 of Tamil Nadu Minor Mineral Concession Rules, 1959. The following are the statutory requirements with respect to Rough stone and Gravel quarry (Refer Annexure No. I).

1. M/s. VKP Engineering Ind Private Limited, Thiru. P. Jagadeesan is a director, residing at No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District company application Dated: 09.10.2023.
2. Deputy Director, Department of Geology and Mining, Tiruppur, letter Rc.No. 677/Mines/2023 dated: 12.10.2023.
3. The Tashildar, Tiruppur South letter R.C.No.3887/2023/A1 dated: 15.02.2024.
4. The Sub Collector(i/c), Tiruppur, Letter Roc. No.5352/2023/A3 dated: 05.05.2024.
5. The Block Development Officer, Pongalur letter R.c.No.1200/2024/A2 dated:23.05.2024.
6. Assistant Geologist, Department of Geology and Mining, Tiruppur, inspection report dated: 13.06.2024.
7. Other related Documents.

The application was examined, Scrutinized, Inspected and processed by the Deputy Director(i/c), Department of Geology and Mining, Tiruppur and issued a Precise Area Communication letter vide letter **R.C. No. 677/Mines/2023, dated: 24.07.2024** for preparation of Mining plan as per the Rule 41 & 42 of Tamil Nadu Minor Mineral Concession Rules, 1959 within 90 days and getting approval from the Department of Geology and Mining, Tiruppur to obtain Environmental Clearance from the State Level Environment Impact Assessment Authority (SEIAA), Tamil Nadu, with the following conditions to provide (Refer Annexure No. I):

General Conditions:

- The quarried out minerals should be transported after paid the necessary seniorage fee as per Appendix- II of Tamil Nadu Minor Mineral Concession Rules, 1959.
- A safety distance of 7.5 meters should be provided to the adjacent patta lands from the lease applied area.
- Quarrying should be carried out using low explosives with qualified blaster.
- The applicant should submit the DGPS survey report for the area applied for lease area.
- Explosives should be carried out by experienced explosives operators using low power explosives without No Encroachment shall be caused to the adjacent Government Poramboke lands and Patta lands while quarry operation.
- As per the rules, approved mining plan should be submitted within due time.
- The applicant should submit the Mining plan and Environmental Clearance before grant of quarry lease.

Specific conditions as prescribed in the precise area communication letter:

- The High Voltage tower is situated in 35m to the western side of the lease applied area it is informed that permit will be issued only after obtaining and submitting a clearance certificate from the Electrical Inspector of Mines as per CEA Rules, Sl.No.65 (2). Also, quarrying should be done so that there is no damage to the tower.
- Tamil Nadu Minor Mineral Concession Rules 1959 Rule No. 36 (1) quarrying should be carried out at a distance of 50m from the tower.

This Mining Plan along with Progressive Mine closure Plan is prepared in full consultation with **M/s. VKP Engineering Ind Private Limited,** Thiru. P. Jagadeesan is a director, residing at No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District, Tamil Nadu State – 638 052 for Rough stone and Gravel quarry over an extent of 1.64.38 Hectares Patta lands in S.F.No. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State under Rules 19 of Tamil Nadu Minor Mineral Concession Rules, 1959 with obtained full consent as per the application and Production schedule in preparation of Mining plan as per the provisions of Mines Act, Rules, Regulations as on date.

The Mining plan has been prepared after carrying the field survey, collection of Primary & secondary data, environmental setting, geological features and tentatively estimated the Resources & Reserves, depth of mining as identified in the field with best our knowledge and experience. This mining plan is prepared by considering the Rule 41 & 42 as Amended in Tamil Nadu Minor Mineral Concession Rules, 1959 and as per the EIA Notification 2006 and its subsequent Amendments.

In order to ensure compliance of the order of the Honourable Supreme Court Dated: 27.02.2012 in I.A.No.12-13 of 2011 in Special Leave Petition (SLP) (C) No 19628-19629/2009, it has been now decided that all mining projects of minor minerals including their renewal is require prior environmental clearance. As per amendment in EIA Notification 2006 vide S.O. 1886(E), Dated:20.04.2022 "All mining lease area in respect of minor mineral mining leases and ≤ 250 ha mining lease area in respect of major mineral mining lease other than coal" would be treated as category B and will be considered by the state notified by Ministry of Environment, Forest and Climate Change as prescribed procedure under EIA notification 2006.

The field survey carried out by the Qualified Person and Team as on 27.07.2024.

Short Notes of Mining plan:

a. Village Panchayat - Peruntholuvu

b. Panchayat Union - Pongalur

c. Total extent of the lease applied area is 1.64.38Ha.

d. Topography of the area - The area is exhibits Undulated topography (The Ground Surface Level is R.L.318m).

e. The company is intending to apply and obtain permission from The Director of Mines Safety, Chennai for amalgamating the mine boundaries with adjacent proposed Rough stone and Gravel quarry lease applied by the same company (**M/s. VKP Engineering Ind Private Limited**) over an extent of 2.90.0 hectares of patta land in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholuvu Village situated on the Northern side of this lease applied area under Regulation 111(3) of Metalliferous Mines Regulations, 1961. This relaxation will be applied and obtained after execution of lease deed. The mineral reserves locked up under safety distance and benches will be removed only after obtained permission and approval from the competent authority. Hence, the mineable reserves are calculated with two categories, one is Amalgamating the mine boundaries on the Northern side as requested by the company (Refer Plate No. IV and IV-B) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. IV-A and IV-C).

f. The Estimated Reserves and Resources are given table below:

Table – 1

Description			Rough stone in (m^3)	Weathered Rock in (m^3)	Gravel (m^3)
Estimated Geological Resources			575435	150725	32882
Tentative Mineable Reserves	As per proposed amalgamating mine boundary on the Northern side		124195	100800	24028
	After leaving safety distance and Bench loss		123550	99800	23868
Proposed production for First Five years	As per Amalgamating mine Boundary	Total Proposal	64105	67500	24028
		Peak Production	32035	29500	8568
	After leaving safety distance and Bench loss	Total Proposal	64300	67500	23868
		Peak Production	32035	29500	8568
Proposed production for remaining five years	As per Amalgamating mine Boundary	Total Proposal	60090	33300	-
		Peak Production	28160	18050	-
	After leaving safety distance and Bench loss	Total Proposal	59250	32300	-
		Peak Production	27760	18050	-

The EIA and EMP will be prepared for maximum reserves and the Impact will be accounting an annual peak production value.

g. Proposed Depth of mining = 47m (9m above ground level + 38m below ground level)
[2m Gravel + 10m Weathered Rock + 35m Rough Stone]

h. Lease Period = Ten years

i. Mining Plan Period = Five years

j. It is a fresh lease applied area, at present the area is virgin. Hence no existing pit.

k. Method of mining / level of mechanization.

Opencast mechanized method, the quarry operation involves shallow jack hammer drilling, slurry blasting with NONEL initiation.

l. Type of machineries proposed in the quarrying operation is given below.

Excavators attached with bucket and rock breaker.

Hand Jack hammer, Compressor (Diesel drive) (4 Jack Hammer capacity).

m. No trees will be uprooted due to this quarry operation.

n. The approach road from the main road to quarry will be constructed and same has been maintained in a good condition for the haulage of quarry materials and machineries.

o. There is No Export of this Rough stone and Gravel.

p. Topo sketch covering 10km and 1km radius around the proposed area with markings of habitations, water bodies including streams, rivers, roads, major structure like bridges, wells, archaeological importance and places of worships is marked and enclosed as Plate Nos. IA & IB.

q. The lease applied area is about 1.64.38Ha bounded by five corners; the corners are designated as 1 – 5 clockwise from the Southwest corner and the Co – ordinates for all the corners are clearly marked in the Quarry Lease Plan and Surface Plan enclosed as Plate No. II.

r. The plans of proposed quarrying area showing the dimensions of the pit, their proposed depth and maximum area of proposed quarrying are enclosed as Plate Nos. IV - IV-C and V.

s. General conditions will not applicable for the proposed area. The area applied for lease is 10Km away from the,

- *i) Interstate Boundary,*
- *ii) Protected area under wild life protection ACT, 1972,*
- *iii) Critically polluted areas as identified by CPCB,*
- *iv) Notified Eco sensitive areas.*

t. There is no waste anticipated during this quarry operation, hence waste dump is not proposed in the lease applied area.

u. Around 31 employees are proposed to deploying the quarrying operation.

v. Total Cost of the project is about **Rs.1,41,56,000/-**.

1.0 GENERAL INFORMATION

1.1 Name of the Applicant : **M/s. VKP Engineering Ind Private Limited,**
Thiru. P. Jagadeesan is a director,

Address	:	No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District,
State with Pin Code	:	Tamil Nadu – 638 052.
Mobile No	:	+91 98428 30265 and +91 98422 30265.
Aadhaar No	:	7091 1371 8745
E-mail	:	vkpeindpvtltd@gmail.com

1.2 Status of the Applicant (Individual / Company / Firm):

The applicant is a Private Limited Company (Refer Annexure Nos. VIII). Thiru. P. Jagadeesan is the Director and he is an authorized person for signing all the documents on behalf of this company (Refer Annexure Nos. IX).

1.3 Mineral which the Applicant intends to mine:

The Applicant intends to quarry Rough stone and Gravel only.

1.4 Period of permission / lease to be granted:

Ten Years as mentioned in Precise area Communication letter.

1.5 Name and address of the Qualified Person who preparing the Mining Plan:

Name	:	**Dr. P. Thangaraju, M.Sc., Ph.D.,** Qualified Person (As per Rule 15(I)(a) and (I)(b) of MCR, 2016)
Address	:	No.17, Advaitha Ashram Road, Alagapuram, Salem District – 636 004.
Mobile	:	+91 94433 56539.
Email	:	infogeoexploration@gmail.com

1.6 Name and Address of the Prospecting Agency:

State Geology and Mining Department, Government of Tamil Nadu, has carried out the regional prospecting and exploration in these areas during 1992 to 1993.

Geological Survey of India has carried out detailed regional exploration studies and geological mapping in Tamil Nadu. Besides, the Qualified Person and his team members made a detailed geological study of the proposed area and the Rough stone is clearly inferred from the nearby existing pit. No detailed Exploration has carried out.

1.7 Reference no. Date of grant/ Precise Area Communication received form the State Government:

The Precise area communication letter was received from the Deputy Director (i/c), Department of Geology and Mining, Tiruppur District vide **R.C. No. 677/Mines/2023, dated: 24.07.2024** to submit approved mining plan and to obtain Environmental Clearance from the Competent Authority, Tamil Nadu State and was given to us for the preparation of mining plan to meet out the applicant's production schedule (Refer Annexure No. I).

2.0 LOCATION

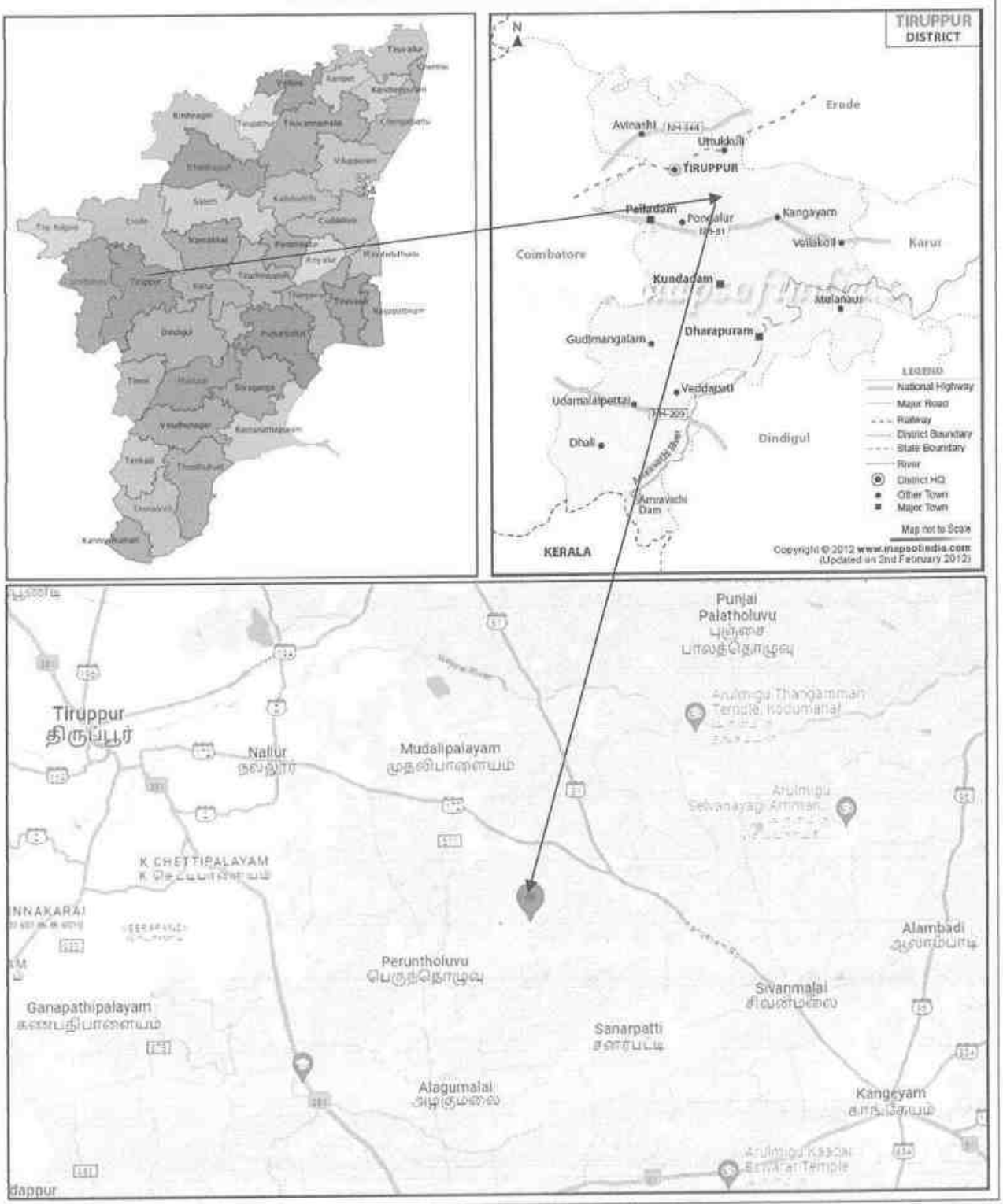
2.1 Details of the area with location map:

The lease applied area is about 13km Southeastern side of Tiruppur and 3km Northeastern side of Peruntholuvu Village.

Tiruppur —11km→ Peruntholuvu —3km→ Lease applied area

Southeast Northeast

Location Map of the Lease Applied area



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Table – 2

District	Taluk	Village	S.F. No.	Area (Ha.)	Patta No.
Tiruppur	Tiruppur South	Peruntholuvu	543/2	1.64.38	2844
Total Extent				**1.64.38**	

Source: As per the FMB and 'A' register record furnished by the applicant.

2.2 Classification of the area (Ryotwari/ Poramboke / others):

It is Patta lands, classified as Punsei (Barren land) (Refer Annexure Nos. IV & VI).

2.3 Ownership / Occupancy of the applied area (surface right):

It is Patta lands, registered in the name of Tmt. P. Sivakami and Tmt. N. Sarojini vide patta No. 2844 (Refer Annexure Nos. IV & VI). The Company has obtained consent form the Pattadhar (Refer Annexure No. VII).

2.4 Existence of public road / Railway line, if any nearby and approximate distance:

The approach road is situated on the Northeastern side which is connects to the Village Road located on Eastern side of the lease area.

Road access is available from the quarry to State Highways and National Highway, no towns are enrooted hence the traffic density is not much more due to the transportation of Rough stone and Gravel.

The approach road from the quarry will be constructed and the same has been utilized for haulage and maintained during the entire lease period.

The Nearest Railway line is Coimbatore - Salem which is located about 10.9km on the Northwestern side of the area as per the GSI Toposheet and Google Map.

2.5 Toposheet No. with latitude and longitude:

The lease applied area falls in the Toposheet No: **58 E/08** Latitude between: **11°03'17.1620"N to 11°03'21.4317"N** and Longitude between: **77°27'40.3163"E to 77°27'45.1877"E** on WGS datum-1984. Please refer the Plate Nos. I to II as per the GSI Toposheet.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPPUR

PART – A

3.0 GEOLOGY AND MINERAL RESERVES

3.1 Brief description of the Topography and general Geology of the area (with plans):

The lease applied area is exhibits undulated topography. The area has gentle sloping towards Northwestern side and altitude of the area is 327m to 324m above from Mean Sea Level. The area is covered by 2m thickness of Gravel, 10m thickness of Weathered Rock and followed by Massive Charnockite which is clearly inferred from the nearby existing quarry pit. The Water level in the surrounding area is 93m - 96m below from general ground profile which is observed from the nearby bore wells. The Normal rainfall is about 619mm.

Peninsular gneiss forms the oldest rock formations, in which the massive formation of Charnockite lies over with rich accumulation of recent quaternary formation. On regional scale of the Charnockite body is N40°E – S40°W with dipping towards SE60°.

The general geological sequences of the rocks in this area are given below:

AGE		FORMATION
Recent	-	Quaternary formation (Gravel)
---------Unconformity----------		
Archaean	-	Charnockite
		Peninsular Gneissic complex

3.2 Details of exploration already carried out if any:

State Geology and Mining Dept, Govt. of Tamil Nadu, has carried out the regional prospecting and exploration in these areas during 1992 to 1993.

Geological Survey of India has carried out detailed mapping in Tiruppur District. Besides, the Qualified Person and his team members made a detailed geological study of the proposed area. The Rough stone formation is clearly inferred from the nearby existing quarry pit.

3.3 Estimation of Reserves:

a) Geological Resources with geological sections on a scale of 1:1000 / 1:2000

As far as Rough stone (Charnockite) is concerned, the only practical method is the systematic geological mapping and delineation of Rough stone within the field and careful evaluation of body luster, physical properties, engineering properties, commercial aspects etc.,

Totally three sections have been drawn, one cross section drawn length wise as (X-Y) and another two cross sections are drawn as Width wise (A-B and C-D) to cover the maximum area considered for lease upto 47m (2m Gravel + 10m Weathered Rock + 35m Rough stone) depth.

The Topographical, Geological plan and sections demarcated the commercial marketable Rough stone (Charnockite) deposit has been prepared in the scale of 1:1000 (please refer the Geological plan and sections Plate Nos. III). As the sale of Rough stone are in terms of cubic metres (Volume) only and not in terms of tonnage. No Exploration has been carried out.

Estimation of Geological Resources (Plate No. III):

The Geological Resources of Rough Stone and Gravel are calculated upto a depth of 47m [9m above ground level and 38m below ground level]. The total **Geological Resources are calculated by cross sectional method**. The total geological resources are given table below:

TABLE – 3

GEOLOGICAL RESERVES							
Section	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Geological Resources of Rough stone in (m^3) 100%**	**Weathered Rock in (m^3)**	**Gravel (m^3)**
XY-AB	i	114	119	2	-	-	27132
	ii	91	119	5	-	54145	-
	iii	114	119	5	-	67830	-
	iv	114	119	5	67830	-	-
	v	114	119	5	67830	-	-
	vi	114	119	5	67830	-	-
	vii	114	119	5	67830	-	-
	viii	114	119	5	67830	-	-
	ix	114	119	5	67830	-	-
	x	114	119	5	67830	-	-
Total					**474810**	**121975**	**27132**
XY-CD	i	25	115	2	-	-	5750
	ii	25	115	5	-	14375	-
	iii	25	115	5	-	14375	-
	iv	25	115	5	14375	-	-
	v	25	115	5	14375	-	-
	vi	25	115	5	14375	-	-
	vii	25	115	5	14375	-	-
	viii	25	115	5	14375	-	-
	ix	25	115	5	14375	-	-
	x	25	115	5	14375	-	-
Total					**100625**	**28750**	**5750**
Grand Total					**575435**	**150725**	**32882**

The Geological Resources of Gravel : **32,882m^3**

The Geological Resources of Weathered Rock : **1,50,725m^3**

The Geological Resources of Rough Stone : **5,75,435m^3**

Geological Resources has been computed based on the physical investigation and filed survey data.

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ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR *

Estimation of Mineable Reserves:

The company is intending to apply and obtain permission from The Director of Mines Safety, Chennai for amalgamating the mine boundaries with adjacent proposed Rough stone and Gravel quarry lease applied by the same company (**M/s. VKP Engineering Ind Private Limited**) over an extent of 2.90.0 hectares of patta land in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholuvu Village situated on the Northern side of this lease applied area under Regulation 111(3) of Metalliferous Mines Regulations, 1961. This relaxation will be applied and obtained after execution of lease deed. The mineral reserves locked up under safety distance and benches will be removed only after obtained permission and approval from the competent authority.

Hence, the mineable reserves are calculated with two categories, one is Amalgamating the mine boundaries on the Northern side as requested by the company (Refer Plate No. IV and IV-B) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. IV-A and IV-C).

TABLE – 4

MINEABLE RESERVE - AFTER LEAVING SAFETY DISTANCE AND BENCHES

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Mineable Reserves of Rough stone in (m^3) 100%	Weathered Rock in (m^3)	Gravel (m^3)
XY-AB	i	117	102	2	-	-	23868
	ii	106	100	5	-	53000	-
	iii	104	90	5	-	46800	-
	iv	94	80	5	37600	-	-
	v	84	69	5	28980	-	-
	vi	74	59	5	21830	-	-
	vii	63	49	5	15435	-	-
	viii	53	39	5	10335	-	-
	ix	43	29	5	6235	-	-
	x	33	19	5	3135	-	-
Total					**123550**	**99800**	**23868**

The Tentative mineable reserves have been computed as **1,23,550m^3** of Rough stone at the rate of 100% recovery, **99,800m^3** of Weathered Rock and **23,868m^3** of Gravel as per after leaving safety distance and benches on all sides for a period of Ten years upto a depth of 47m (9m above ground level + 38m below ground level) (Refer Plate No. IV-A).

Table – 5

MINEABLE RESERVE AS PER PROPOSED AMALGAMATING MINE BOUNDARIES ON THE NORTHERN SIDE

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Mineable Reserves of Rough stone in (m^3) 100%	Weathered Rock in (m^3)	Gravel (m^3)
XY-AB	i	101	102	2	-		20604
	ii	91	100	5	-	45500	-
	iii	94	90	5	-	42300	-
	iv	89	80	5	35600		-
	v	84	69	5	28980		-
	vi	74	59	5	21830		-
	vii	64	49	5	15680		-
	viii	53	39	5	10335		-
	ix	43	29	5	6235		-
	x	33	19	5	3135		-
Total					**121795**	**87800**	**20604**
XY-CD	i	16	107	2	-		3424
	ii	15	106	5	-	7950	-
	iii	10	101	5	-	5050	-
	iv	5	96	5	2400		-
Total					**2400**	**13000**	**3424**
Grand Total					**124195**	**100800**	**24028**

The tentative Mineable Reserves of Gravel : **24,028m^3**

The tentative Mineable Reserves of Weathered Rock : **1,00,800m^3**

The tentative Mineable Reserves of Rough stone @ 100% : **1,24,915m^3**

The EIA and EMP will be prepared for the maximum reserves. Hence, the tentative mineable reserves have been computed as **1,24,915m^3** of Rough stone at the rate of 100% recovery, **1,00,800m^3** of Weathered Rock and **24,028m^3** of Gravel as per proposed amalgamating mine boundaries on the northern side for a period of Ten years upto a depth of 47m (9m above ground level + 38m below ground level) (Refer Plate No. IV).

Summary of Reserves and Resources:

Table – 6

Description	Rough stone (m^3)	Weathered Rock in (m^3)	Gravel (m^3)
Geological Resources	5,75,435	1,50,725	32,882
Mineable Reserve - as per amalgamating the mine Boundary	1,24,195	1,00,800	24,028
Mineable Reserves After leaving safety and Benches	1,23,550	99,800	23,868

4.0 MINING

4.1. Method of mining (opencast / underground):

Open cast Mechanized Mining is being carried out with 5.0 meter vertical bench with a bench width is not less than the bench height.

However, as far as the quarrying of Rough Stone is concerned, observance of the provisions of Regulation 106 (2) (b) is available with Director General of Mines Safety. If the applicant intends to modify the dimensions of benches, relaxation and permission are available with Director General of Mines Safety under 106 (2) (b) of Metalliferous Mines Regulations, 1961.

The company intends to apply and obtain permission from Director of Mines Safety, Chennai for amalgamating the mine boundaries with adjacent proposed quarry lease under Regulation 111(3) of Metalliferous Mines Regulations, 1961. The relaxation will be applied and obtained after execution of lease deed/ commencement of quarry operation. In such a scenario if there is any drastic change in the Resources and Reserves a modified plan will be submitted to the concerned authority for necessary relaxation, clearance and permission.

4.2. Mode of working (mechanized/ manual):

The Rough Stone is proposed to quarry at 5m bench height & width with conventional Opencast Mechanized Method.

The quarry operation involves shallow jack hammer drilling, slurry explosives in blasting, excavation, Loading and transportation of Rough stone to the needy crusher.

The production of Rough stone in this quarry involves the following method which is typical for Rough Stone quarrying in contrast to other major mineral mining.

Splitting of rock mass of considerable volume from the parent rock mass by shallow jackhammer drilling and blasting, hydraulic excavators are used for loading the Rough Stone from pithead to the needy crushers.

Occasionally hydraulic excavators are attached with rock breakers for fragmentation to avoid secondary blasting. The primary boulders thus splitted are removed from the pits by excavators and further made to smaller sizes by rock breakers attached in excavators. It is a conventional opencast mechanized method of mining.

4.3. Proposed Bench Height and Width:

The bench height is proposed 5.0meter vertical bench the width of the bench is not less than the Height. After obtaining relaxation as per 106 2(b) and 111(3) of Metalliferous Mines Regulations, 1961 from the DMS, the realignment of benches will be carried out.

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4.4. Indicate the overburden / mineral production expected pit wise as detailed below (composite plan and section showing pit layout, dumps, disposal of waste if any etc.):

The yearwise proposed production are arrived with two categories based on the company's requirement, one is Amalgamating the mine boundaries on the Northern side as requested by the company (Refer Plate No. IV and IV-B) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. IV-A and IV-C).

The overburden in the form of Gravel and Weathered Rock, the Gravel and Weathered Rock will be directly loaded into Tippers for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fee to the Government. The excavated rough stone will be directly loaded into Tippers to the needy customers. The Composite year wise Development and production plan and sections indicating the pit lay out and green belt development are shown in Plate No. IV to IV-C.

Year wise Development and Production after leaving safety distance and benches

TABLE – 7

YEARWISE DEVELOPMENT AND PRODUCTION FOR FIRST FIVE YEARS								
Year	**Section**	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Recoverable Reserve of Rough stone in (m^3) 100%**	**Weathered Rock in (m^3)**	**Gravel (m^3)**
i	XY-AB	i	42	102	2	-	-	8568
		ii	32	100	5	-	16000	-
		iii	30	90	5	-	13500	-
		iv	20	80	5	8000	-	-
		Total				**8000**	**29500**	**8568**
ii	XY-AB	i	39	102	2	-	-	7956
		ii	20	100	5	-	10000	-
		iii	20	90	5	-	9000	-
		iv	20	80	5	8000	-	-
		Total				**8000**	**19000**	**7956**
iii	XY-AB	i	36	102	2	-	-	7344
		ii	20	100	5	-	10000	-
		iii	20	90	5	-	9000	-
		iv	20	80	5	8000	-	-
		v	50	69	5	17250	-	-
		vi	23	59	5	6785	-	-
		Total				**32035**	**19000**	**7344**
iv	XY-AB	vi	17	59	5	5015	-	-
		vii	13	49	5	3185	-	-
		Total				**8200**	-	-
v	XY-AB	vii	17	49	5	4165	-	-
		viii	20	39	5	3900	-	-
		Total				**8065**	-	-
Grand Total						**64300**	**67500**	**23868**

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The Recoverable reserves have been computed as **64,300m³** of Rough stone at 100% recovery for first five years, **67,500m³** of Weathered Rock and **23,868m³** of Gravel for first three years upto a depth of 37m (9m above ground level + 28m below ground level) (Refer Plate No. IV-A). The peak production capacity in the quarry is 32,035m³ of Rough stone on 3rd year and the proposed production schedule is arrived as per company's requirement

Table – 7A

YEARWISE PRODUCTION FOR REMAINING FIVE YEARS							
Year	**Section**	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Recoverable Reserve of Rough stone in (m³) 100%**	**Weathered Rock in (m³)**
vi	XY-AB	ii	19	100	5	-	9500
		iii	19	90	5	-	8550
		iv	19	80	5	7600	-
		Total				**7600**	**18050**
vii	XY-AB	ii	15	100	5	-	7500
		iii	15	90	5	-	6750
		iv	15	80	5	6000	-
		v	34	69	5	11730	-
		vi	34	59	5	10030	-
		Total				**27760**	**14250**
viii	XY-AB	vii	33	49	5	8085	-
		Total				**8085**	-
ix	XY-AB	viii	33	39	5	6435	-
		ix	10	29	5	1450	-
		Total				**7885**	-
x	XY-AB	ix	33	29	5	4785	-
		x	33	19	5	3135	-
		Total				**7920**	-
	Grand Total					**59250**	**32300**

The Recoverable reserves have been computed as **59,250m³** of Rough stone only at 100% recovery and **32,300m³** of Weathered Rock to a depth of 47m (9m above Ground level + 38m below ground level) for remaining five years of the lease period (Refer Plate No. IV-C).

The Recoverable reserves have been computed as **1,23,550m³** of Rough stone at the rate of 100% recovery, **99,800m³** of Weathered Rock and **23,868m³** of Gravel as per after leaving safety distance and benches on all sides for a period of Ten years upto a depth of 47m (9m above ground level + 38m below ground level).

Year wise Development and Production as per Amalgamating the mine boundaries on the Northern side

Table – 8

YEARWISE DEVELOPMENT AND PRODUCTION FOR FIRST FIVE YEARS								
Section	**Year**	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Recoverable Reserve of Rough stone in (m^3) 100%**	**Weathered Rock in (m^3)**	**Gravel (m^3)**
XY-AB	i	i	42	102	2	-	-	8568
		ii	32	100	5	-	16000	-
		iii	30	90	5	-	13500	-
		iv	20	80	5	8000	-	-
		Total				**8000**	**29500**	**8568**
XY-AB	ii	i	39	102	2	-	-	7956
		ii	20	100	5	-	10000	-
		iii	20	90	5	-	9000	-
		iv	20	80	5	8000	-	-
		Total				**8000**	**19000**	**7956**
XY-CD	iii	i	16	107	2	-	-	3424
XY-AB		i	20	102	2	-	-	4080
		ii	20	100	5	-	10000	-
		iii	20	90	5	-	9000	-
		iv	20	80	5	8000	-	-
		v	50	69	5	17250	-	-
		vi	23	59	5	6785	-	-
		Total				**32035**	**19000**	**7504**
XY-AB	iv	vi	17	59	5	5015	-	-
		vii	17	49	5	4165	-	-
		Total				**9180**	-	-
XY-AB	v	vii	13	49	5	3185	-	-
		viii	19	39	5	3705	-	-
		Total				**6890**	-	-
Grand Total						**64105**	**67500**	**24028**

The Recoverable reserves have been computed as **64,105m^3** of Rough stone at 100% recovery for first five years, **67,500m^3** of Weathered Rock and **24,028m^3** of Gravel for first three years upto a depth of 37m (9m above ground level + 28m below ground level) (Refer Plate No. IV). The peak production capacity in the quarry is 32,035m^3 of Rough stone on 3rd year and the proposed production schedule is arrived as per company's requirement.

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TABLE – 8A

YEARWISE PRODUCTION FOR REMAINING FIVE YEARS							
Section	**Year**	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Recoverable Reserve of Rough stone in (m^3) 100%**	**Weathered Rock in (m^3)**
XY-AB	vi	ii	19	100	5	-	9500
		iii	19	90	5	-	8550
		iv	19	80	5	7600	-
		Total				**7600**	**18050**
XY-AB	vii	iii	5	90	5	-	2250
		iv	10	80	5	4000	-
		v	34	69	5	11730	-
		vi	34	59	5	10030	-
XY-CD		ii	15	106	5	-	7950
		iii	10	101	5	-	5050
		iv	5	96	5	2400	-
		Total				**28160**	**15250**
XY-AB	viii	vii	34	49	5	8330	-
		Total				**8330**	-
XY-AB	ix	viii	34	39	5	6630	-
		ix	5	29	5	725	-
		Total				**7355**	-
XY-AB	x	ix	38	29	5	5510	-
		x	33	19	5	3135	-
		Total				**8645**	-
Grand Total						**60090**	**33300**

The Recoverable reserves have been computed as **60,090m^3** of Rough stone only at 100% recovery and **33,300m^3** of Weathered Rock to a depth of 47m (9m above Ground level + 38m below ground level) for remaining five years of the lease period (Refer Plate No. IV-B).

The EIA and EMP will be prepared for the maximum reserves. Hence, the Recoverable reserves have been computed as **1,24,915m^3** of Rough stone at the rate of 100% recovery, **1,00,800m^3** of Weathered Rock and **24,028m^3** of Gravel as per proposed amalgamating mine boundaries on the northern side for a period of Ten years upto a depth of 47m (9m above ground level + 38m below ground level).

The Annual peak production capacity in the quarry is 32,035m^3 of Rough stone on 3rd year, 29,500m^3 of Weathered Rock and 8,568m^3 of Gravel on 1st year and the proposed production schedule is arrived as per company's requirement and the EIA & EMP will be prepared an annual peak production.

The company ensures the total quantity proposed in the benches will not exceed during the quarrying operation. Besides the rough stone locked up in benches will be exploited after obtaining necessary permission from the office of Director of Mine Safety, Chennai region by submitting relevant documents, appropriate safety plans and its Mitigation measures.

One lorry load	=	6m³ (approx.)
Total No of Working days	=	300 Days per year
Total quantity to be removed during the ten years lease period	=	1,24,195m³
Peak production capacity during the 3rd year	=	32,035m³
Hence total Lorry loads per day	=	32,035m³/6m³
	=	5,339 Lorry loads
	=	5,339/300 days
Rough Stone (Maximum)	=	**17 – 18 Lorry loads per day**
One lorry load	=	6m³ (approx.)
Total No of Working days	=	300 Days per year
Total quantity to be removed during the ten years lease period	=	1,00,800m³
Peak production capacity during the 1st year	=	29,500m³
Hence total Lorry loads per day	=	29,500m³/6m³
	=	4,917 Lorry loads
	=	4,917/300 days
Weathered Rock (Maximum)	=	**16 – 17 Lorry loads per day**
Total Gravel to be removed during the first three years	=	24,028m³
Peak production capacity during the 1st year	=	8,568m³
Hence total Lorry loads per day	=	8,568m³/6m³
	=	1,428 Lorry loads
	=	1,428/300 days
Gravel (Maximum)	=	**4 – 5 Lorry loads per day**

Working hours = 9.00 am to 6.00 pm (with 1.00-2.00 P.M. lunch break).

4.5. Machineries to be used:

For Mining:

The following machineries are utilized on rental basis for the development and production work at this quarry.

TABLE – 9

I. DRILLING MACHINE:

S. No.	Type	Nos	Dia Hole mm	Size Capacity	Motive power
1	Jack-Hammer	4	32	1.2m to 2.0m	Compressed air
2	Compressor	1	-	400 psi	Diesel Drive

II. EXCAVATION & LOADING EQUIPMENT:

S. No.	Type	Nos	Capacity	Motive Power
1	Excavator with Bucket and Rock Breaker	2	300	Diesel Drive

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III. HAULAGE WITHIN THE MINE & TRANSPORT EQUIPMENT:

S. No.	Type	Nos	Capacity	Motive Power
1	Tippers	4	20 tonnes	Diesel Drive
2	Water Sprinkling Tanker	1	6,000 litres	Diesel Drive

4.6. Brief note on conceptual mining plan for the entire lease period base on the geological, mining and environmental considerations:

Conceptual mining plan is prepared with an object of long-term systematic development of benches, layouts, selection of permanent structures, depth of quarrying and ultimate pit dimensions, selection of sites for construction of infrastructure, etc.,

The ultimate pit size is designed based on certain practical parameters such as economical depth of mining, safety zones, permissible area, etc.,

As the company has applied quarry lease for Ten years, the ultimate pit limit (dimension) at the end of this mining plan period is given below (Refer Plate No. VI-A):

Table – 10

Length (Max) (m)	Width (Max) (m)	Depth (Max) (m)
117	102	47m (9m AGL + 38m BGL)

After obtained permission from the Director of Mines safety, Chennai for working under Common mine boundary, the ultimate pit dimensions are modified as given table below (Refer Plate No. VI):

Table – 10A

Length (Max) (m)	Width (Max) (m)	Depth (Max) (m)
117	107	47m (9m AGL + 38m BGL)

All the base line information studies like Air quality monitoring, Noise and vibration monitoring, Water analysis studies will be carried out every year as per the MoEF & CC Norms. Please refer Plate Nos. IV to IV-C & V. As per the NGT orders the applicant is directed to plant 500 trees per hectares along the quarry site and in the haul road either at the regular or the phased manner by planting native species.

There is no waste anticipated during the entire life of quarry. Hence, backfilling is not proposed in this Rough stone quarry. After completion of quarry operation the quarried out pit will be allowed to collect the seepage and rainwater and the water storage will be kept as temporary reservoir for charging the nearby wells and the water will be utilized for Green belt development purpose. The quarry area will be fenced with barbed wire fencing also safety bund constructed around the quarry to prevent inadvertent entry of public and cattle (Refer Plate No. V and VI). The Conceptual Mining is based upon the entire ROM proposed for the life of the quarry.

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5.0 BLASTING

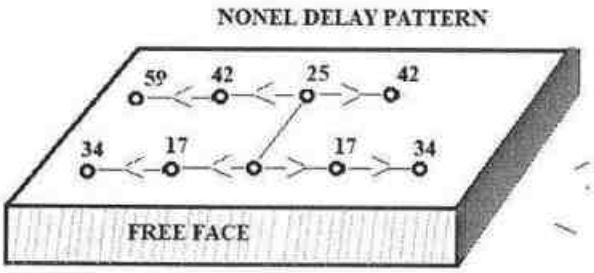
5.1 Blasting pattern:

Selection of drilling pattern for blasting varies with the type and size of the drills used, depth of hole, kind of rock, quantity, rapidity of the explosives and amount of steaming. The quarrying operation is proposed to carried out with conventional method of mining using shallow Jack hammer drilling and mild blasting with NONEL initiation of shattering effect for loosen the Rough stone. NONEL initiation provides reasonably good solution to fly rock problem. The main objectives of NONEL Blasting are to reduce the ground vibration, noise, fly rocks generated due to blasting operations. The overall cost of blasting in NONEL is very less compared to electrical blasting and hence it optimizes the cost of blasting.

Drilling and blasting parameters are as follows:

Depth of Each hole	:	1.5m
Spacing between holes	:	1.0m
Burden for hole	:	0.75m
Diameter of hole	:	32mm
Pattern of hole	:	Staggered pattern
Inclination of holes	:	80°from horizontal
Use of delay detonators	:	NONEL
Hole to Hole	:	17 milli second delay (ms)
Row to Row	:	25 milli second delay (ms)

BLASTING PATTERN DRAWING



Spacing	=	**1.0m**
Burden	=	**0.75m**
Depth of the hole	=	**1.5m**
No of holes proposed per day (Peak Production)	=	**92 Holes**

5.2 Type of explosives to be used:

Small Dia. 25mm Slurry explosives are proposed to be used for shattering and heaving effect for removal and winning of Rough stone. No deep hole drilling or secondary blasting is proposed. NONEL blasting and muffle blasting may be adopted after permission from DGMS.

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5.3 Measures proposed to minimize ground vibration due to blasting:

The quarry is situated more than 300m away from the nearby villages, Controlled blasting measures of NONEL initiation is being adopt for minimizing ground vibration and fly rock.

Shallow depths jackhammer drilling & blasting is proposed to be carried out with minimum use of explosive mainly to give heaving effect in rough stone for easy excavation and to control fly rock.

NONEL Delay detonators:

NONEL blasting permits for bottom initiation and lesser charge per delay.

The major advantages of NONEL blasting are:

- Reduction of ground vibration.
- Reduction in air blast.
- Reduction in over break.
- Improved fragmentation.
- Better control of fly-rock.

Blasting program for the production per day (As per Peak production capacity):

The Hydraulic excavators are attached with rock breakers for breaking the rock mass to reduce the blasting and explosive usage also to avoid secondary blasting. Anyhow, as per day's production schedule the maximum blasting program proposed as given below.

Peak production (3rd Year)	= 32,035m^3 x 2.6(Bulk Density) = 83,291Tons
No of Holes	= 92 Holes
Yield	= 276 Tons
Powder factor	= 6 Tons/Kg of explosives
Total explosive required	= 46 Kg-Slurry explosives
Charge/ hole	= 0.5 Kg
Blasting at day time only	= 12.00 – 12.30 P.M. (whenever required)

Anticipated theoretical calculation of PPV

The empirical equation for assessment of peak particle velocity (PPV) is:

$$V = K\,[R/Q^{0.5}]^{-B}$$

Where –

V = peak particle velocity (mm/s)

K = site and rock factor constant

Q = maximum instantaneous charge (kg)

B = constant related to the rock and site (usually 1.6)

R = distance from charge (m)

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PREDICTED PPV VALUES DUE TO BLASTING

Table – 11

Maximum Charge per day (kg)	Number of Round Blast per day	Maximum Charge per Round (kg)	Number of holes blasted per round	Number of holes blasted per day	Maximum Charge blast at a time by NONEL (kg)	Nearest Infrastructure (m)	PPV (mm/s)
46	1	46	92	92	1 (2 Holes)	760	0.263

From the above table, the charge per blast of 46kg is well below the Peak Particle Velocity of 8 mm/s as per Directorate General of Mines Safety for safe level criteria through Circular No. 7 dated 29/8/1997. Anyhow, the company ensures that carry out the **blasting once a day** under the supervision of competent qualified statutory personnel employed. However, as per statutory requirement control measures will be adopted to avoid the impacts due to ground vibrations and fly rocks due to blasting.

5.4 Storage and safety measures to be taken while blasting:

The applicant will engage authorized explosive agency to carry out the small amount of blasting and it will be supervised by competent and statutory foreman/Permit Mines Manager. The explosives agencies should be having the valid Blaster certificate. He will blast holes in the quarry site. After the completion of Blasting the explosives Agencies will take it out back the remaining quantity of Explosives. The Competent Qualified Statutory personnel appointed by the applicant will maintain the records of Explosives as per the Indian Explosives Act.

6.0 MINE DRAINAGE

6.1 Depth of water table (based on nearby wells and water bodies):

The area is an undulated topography; since the lease applied area consists the most common type of dendritic drainage pattern. The water table in the area is about 93m - 96m which is observed from the existing private boreholes. The lease area is fully covered by Massive Charnockite formation. The quarry operation confined to well above the water table hence, the Ground Water problem will not arise. If water seepage may occur due to the fracture, the same will be used for Greenbelt. Anyhow, Garland drain will be constructed all along the boundary to prevent surface run-off water entering into the quarry.

TABLE – 12

Type	Distance & Direction	Location
Bore Well	920m Eastern side	11° 3'18.70"N 77°28'15.32"E

6.2 Arrangements and places where the mine water is finally proposed to be discharged:

The quarry operations are confined to well above the water table during the entire lease period. If water is encountered at quarry due to rain water and seepage, the same will be pumped out by 5HP water pump and discharge to the Green belt development areas. Besides, the water will also be used for dust suppression on haul roads during Haulage of machineries.

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7.0 STACKING OF MINERAL WASTE AND DISPOSAL OF WASTE:

There is no waste anticipated during entire life of the quarry hence, disposal of waste does not arise.

8.0 USE OF THE MINERAL:

The excavated rough stone (100%) will be directly loaded into Tippers as raw form to the needy nearby crushing unit to making Road metals and construction materials. The quarried out gravel and weathered rock will be directly loaded into Tippers for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fee to the Government.

9.0 OTHERs

9.1. PERMANENT STRUCTURES (also shown in the map)

TABLE – 13

S.No.	Description	Particulars	Aerial Distance & Direction
1	Nearest National Highway	(NH-381) Tiruppur – Oddanchatram	7.8km – West
2	State Highways	(SH-172) Tiruppur – Kangeyam	2.2km – NE
3	Village Road	Village Road	120m – West
4	Railway station	Uthukuli Railway station	11km – NW
5	Airport	Coimbatore Airport	46.2 km – SW
6	Nearest Habitation	760m – SW	
7	Nearest Town	Tiruppur	13 km – NW
8	Nearest Government School	Government school - Andipalayam	780m – SW
9	Government Hospital	Tiruppur	13 km – NW
10	Reserved Forest	No Reserve Forest within 60m Radius.	
11	Defense Installation/Historical Monuments/ Archaeological	Nil within 500m radius.	
12	Nearby Water Bodies	Nil within 50m radius.	
13	Interstate Boundary	Around 67.3km – SW (Kerala State Boundary)	
14	Critically Polluted areas identified by the CPCB	Around 54km – SW (Coimbatore – SIDCO)	
15	Protected areas Notified under wildlife (Protection) Act, 1972.	Around 29.2km – NE (Vellode birds Sanctuary) Around 11.2km – NW (Nanjarayan birds Sanctuary)	
16	Applicability of CRZ, Notification 2011 as amended.	Not Applicable	

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17	Applicability of Hill Area Conservation Authority (HACA) Clearance.	Not Applicable
18	Housing area, EB line (HT & LT Line)	The High tension line is passing from 35m Western side of the lease applied area. Hence, 50m safety distance has been provided. There is no other EB-LT/HT line or Housing area situated within 50m radius from the lease area.
19	Boundaries of the permitted area.	The boundaries of the permitted areas are as follows (Refer Plate No. II): North - S.F.Nos. 542 and 539 East - S.F.No. 545 South - S.F.No. 544 West - S.F.No. 543/1
20	Adjacent Patta lands / Govt. Land	

Direction	Classification	Safety Distance
North	Patta land	7.5m
East	Patta land	7.5m
South	Patta land	7.5m
West	Patta land	7.5m / 50m for HT line

9.2. Employment potential (skilled, semi-skilled, un skilled):

TABLE – 14

Designation	Present Employment position	Employees Requirement	Total
a) Supervisory category			
Geologist	-	1	1
Mines manager	-	1	1
b) Skilled labour			
Mine Foreman	-	1	1
Blaster/Mate	-	1	1
Excavator – Operator	-	2	2
Tipper Driver	-	4	4
Water sprinkler Driver	-	1	1
Jack-Hammer Drillers	-	8	8
c) Unskilled			
Security	-	2	2
Labour & Helper	-	4	4
Co-operator and Cleaner	-	6	6
Total	-	**31**	**31**

The proposed output per man shift:

TABLE – 15

Peak Production at 3rd year		52,335m^3
No. of days likely to be worked		300 days
Average ROM production per day		107m^3
OMS =	Average Production per day / Average employment per day	107m^3 / 31 = 3.4m^3

The above manpower is adequate to meet out the production schedule and the machinery strength envisaged in the mining plan and to comply with the statutory provisions of the Mines Safety Regulations. It is been ensured that the labour will not be employed less than 18 years, **No child labour** will engaged or entertained for any kind of quarrying operations. All the labours engaged for quarrying operations will be insured during the quarry lease period.

9.3. Welfare Measures:

a) Drinking Water:

Packaged drinking water is available from the nearby water vendors in Peruntholuvu which is located about 3km on the Southwestern side of the lease applied area.

b) Sanitary Facilities:

Hygienic modern Sanitary Facilities will be constructed in the safety area as semi-permanent structure and it will be maintained periodically.

c) First aid facility:

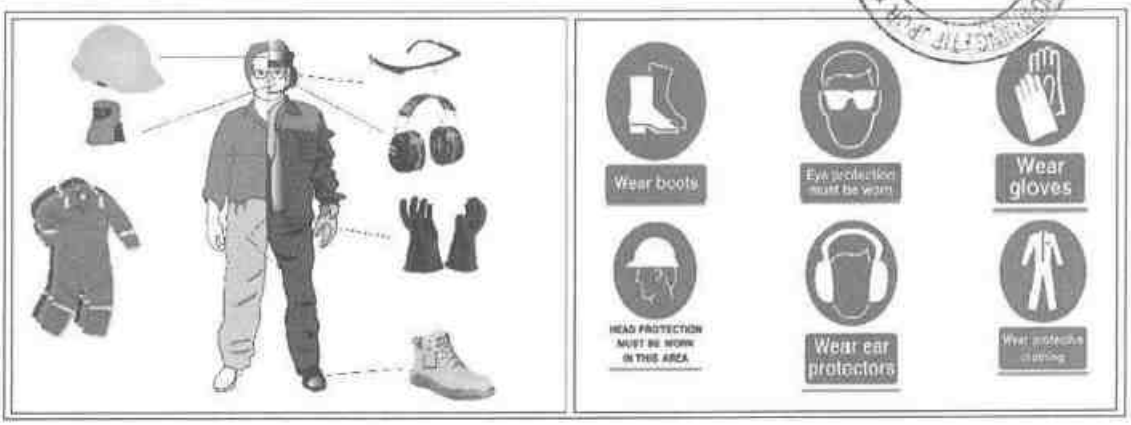
First aid kits are kept in Mines office room, in case of such eventuality is the victim will be given first aid immediately at the site by the competent and statutory foreman/permit manager/mate will be in charge of first aid and injured person will be taken to the hospital by the company's vehicle. Hospital is available in Tiruppur located at a distance of 13km on the Northwestern side.

d) Labour Health:

Periodically medical check-up related to occupational health safety will be conducted to all the workers in company own cost.

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e) **Precautionary safety measures to the labourers:**



- Helmets,
- Reflector Jackets,
- Dust mask,
- Mine Goggles,
- Ear plugs,
- Ear muffs,
- Safety Shoes,

All personnel protective equipment as per the DGMS standard will be provided as per the specification approved by Director of mines safety. Periodically medical check-up will be conducted for all workers for any mine health related problems. Proper training and vocational education will be given by qualified and experienced safety officer to all the employees about the safety and systematic Rough stone quarrying operations. The drillers and workers will be sent for vocational training periodically, to carry out the quarrying operations scientifically and to safe guard the men and machinery and to create awareness about conventional opencast quarrying operations.

10.0 MINERAL PROCESSING:

No mineral processing/beneficiation is involved.

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PART – B

11.0 ENVIRONMENT MANAGEMENT PLAN

The EMP is prepared based on the Mines act, Rules & amendment from by state & central government. If the SEIAA/SEAC instructed the modification and alter the EMP the outcome of their recon would be final and the company is instructed to followed the EIA / EMP for its compliance as per the CPCB / TNPCB Norms.

Environment	Anticipated impact	Mitigation measure
Land Environment	i. Topography of the area will change due to mining activity.	i. No waste will be anticipated during entire life of quarry. Hence, backfilling is not proposed in this quarry operation. Anyhow, barbed wire fencing and safety bund will be constructed around the quarry to prevent inadvertent entry of public and cattle. ii. The excavated benches shall be developed for plantation with grasses, herbs and shrubs of local species to improve aesthetic of the area and to prevent any soil erosion and landslide. iii. Mining benches will not exceed beyond the approved height and width. iv. Leftover foreign material like polythene bag, jute bag and useless articles will not be allowed to litter and no ill managed dumping will be used for filling the excavated pits
	ii. Soil quality and it's fertility of adjacent lands will affected due to fugitive dust and Vehicular emissions during drilling, blasting, loading, unloading and haulage of men and machineries.	This is discussed in following Air Environment due to avoid repetition.

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Water Environment	Surface Mining can have direct impact on physico-chemical characteristics of the local drainage and groundwater resources. The detrimental effects, if any, to water resources resulting from surface mining are caused by following: i. Alteration of natural drainage pattern resulting from modification of topography. ii. Abnormal increase in the turbidity of the nearby stream and Gundar River. iii. The activities can also disrupt the ecological diversity in many ways. iv. Contamination of groundwater if mining intersects with the water table.	i. Construction of Garland drain with check dam and settling tank will be constructed around the quarry to collect the surface run off rain water and which will be discharge in to the natural drainage system and water bodies in manure as prescribed by TNPCB standards. ii. Further mining will be completely stopped during the monsoon for free flow of surface run off and allowing natural recharge of groundwater. iii. No wastewater shall be generated from the quarry activity. Proper drainage will be Maintained to eliminate inundation of working pits during rains from run-off water. iv. The mine pit water collected due to rain will be utilized for water spraying on the haul Roads and watering for plantations. v. Septic tanks and soak pits will be provided for the disposal of domestic/ washroom effluents. vi. The deposit will be worked from the top surface up to a depth of 47m and shall not in any case intersect and contaminate the ground water as the depth of the water table in the area is 93m - 96m.
Air Environment	In surface mining operations, the source of air pollution may cause deterioration of air quality due to the fugitive dust emissions from drilling/blasting, scooping, loading-unloading operation of extracted mineral and its transportation. Drilling/blasting and loading of quarry material would be associated with the fugitive dust emission in the active area whereas fugitive emission during transportation would affect the areas/villages situated adjacent to the road side. Another source of air pollution would be	i. Green belt will be developed in the safety zone with thick long leaves plant to arrest the fugitive dust and vehicular emissions on the surrounding environments. ii. Wet drilling with dust extractor unit will be carried out to minimize the dust generation. iii. Controlled blasting with Proper blasting pattern will be followed for effective rock fragmentation and generation of minimal fine dust to the atmosphere. iv. Quarry material will be handled under wet condition during loading and unloading to minimize the dust generation of proposition, besides loaded materials are covered by Tarpaulin until to reach the destination during transportation. v. Regular water sprinkling to the haul road to arrest the dust generation.

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	emission from the drilling machinery and excavators/tippers vehicles to be used for loading.	vi. Provision of dust filters/ mask to workers working at dust prone and affected areas. vii. Vehicular emission as a result of combustion of diesel generates small particulate matter (PM_{10} & $PM_{2.5}$), Nitrogen oxides and Sulphur dioxide (NO_2 & SO_2). High quality diesel will be used in the motor vehicles to control these pollutants. viii. PUC (Pollution under control) certified vehicles will be used for transportation. ix. CPCB Prescribed emission standards for the vehicles would be followed. x. All vehicles and their exhausts would be well maintained and regularly tested for pollutant concentrations.
Noise and Vibration	In the present mining activity for building material, noise will be generated from drilling machinery, blasting and vehicular movement. Noise level in the working environment is compared with the standards prescribed by Central Pollution Control Board as adopted and enforced by the Govt. of India through Noise Pollution (Regulation and Control) Rules, 2000.	i. Selection of new low – noise equipments for the quarry operation. ii. The noise levels shall be maintained within the permissible levels by involving all the noise regulating measures in vehicles and drilling/blasting operations. iii. To ensure minimum vibrations and noise due to blasting, Non-electric delay detonators in continuous sequence is proposed. iv. **Personnel Protective Equipment (PPE) like** earmuffs and earplugs shall be provided to the employees whose in critical operation like drilling, blasting and excavation as occupational safety measures. v. Proper maintenance done with regular interval by the Oiling and greasing for the machineries and vehicles to controle the Source of noise during operation and transportation. vi. Regular and proper maintenance of machinery and transportation vehicles shall be ensured. vii. Transporting vehicles are enforcing the speed limits of 20km/hour within quarry area and not exceed 40km per hour from quarry to destination to reduce Noise and vibration level. viii. There would be restrictions on mining activity and vehicular movement during night hours.

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Biological Environment	The area having main floras are Neem, Palm, Cocos nucifera, Palm, Senna auriculata, Calotropis, Casuarina, Teak, Acacia nilotica, Thorney bushes and shrubs. No plants of botanical interest or animals of zoological interest recorded within 500m radius. The anticipated impacts on biological environment as follows: i. Diversity of living insects in the overburden material. ii. Natural habitats of the existing faunas and its breeding will change due to the noise and vibration during operation. iii. Mining may drive away the nearby residents from their habitat. iv. Access roads crossing the riparian areas will have impact on the species disturbing the ecosystem. v. Diminution of the quality and quantity of habitat essential for aquatic and riparian species vi. Deposition of dust on the plant and crop leaves is affecting the photosynthesis, Pollination, ratio of growth and reduction in the yield of agriculture. vii. Excessive and unscientific surface mining results in the destruction of aquatic and riparian habitat through large changes in the channel morphology.	i. The natural habitats of the existing flora and fauna will not be disturbed. ii. No mining will be carried out during the monsoon season to minimize impact on aquatic life which is mainly breeding season for many species. iii. Fruit bearing trees will be planted to survive of the existing native faunas. iv. No clearance of vegetation will be done during the entire mining operations. v. Water sprinkling on haul roads would be reduces the dust emission, thus avoiding damage to the crops and plants. vi. No night hour mining will be carried out which may catch the attention of wildlife.

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Socio – Economic Environment	Any activity during mining will have adverse impact on Environment, careful mitigation measures are proposed to balance the impact on the existing environment and the company is always instruct to carry out safe, sustainable, eco-friendly mining operations at all times. The following positive impact on the society due to this mining activity. i. It is proposed to provide employment to about 31 persons for carrying out mining operations and give preference to the local people in providing employment. In addition, there will be opportunity for indirect employment to many people in the form of contractual jobs, business opportunities, service facilities etc. the economic status of the local people will be enhanced due to mining project. ii. The employment opportunities both direct and indirect will contribute to enhanced money incomes to job seekers with minimal skill sets especially among the local communities. iii. Improvement of Physical structure like Road Transport facilities, Communications, Medical, Educational and social benefits will be made available to the nearby civilian population in addition to the workmen employed in the mine. iv. The continuation of opportunity for the employments, the nearby villages, living peoples and their life style would be improved. v. The company is advised to invest the CER cost (@ 2% from the total Project Cost) to develop the local Panchayat.	Does not arise.

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11.1 Environmental impact assessment statement describing impact of mining on the next Ten years:

In the mining plan proposed for a production of Rough stone does not involve deep hole drilling and blasting. Such limited mining activity is not likely to cause any impact adversely on the environment. As far as pollution of air, water and noise concerned, the environmental impact studies will be conducted as per EIA notification issued by MoEF& CC. It is B Category mine. The compliance monitoring will be carried out for every six months as prescribed by the MOEF&CC and with state concerned authorities.

11.2 Proposal for waste management:

There is no waste anticipated in this Rough stone and Gravel quarrying operation. The entire quarried out materials will be utilized (100%). The maintenance of machineries & fuelling will be carried out as per the TNPCB Norms and the waste will be disposed in the Norms.

11.3 Proposal for reclamation of land affected during mining activities and at the end of mining (refilling / fencing etc.):

In the mining plan only to a maximum depth of 47m (9m above ground level + 38m below ground level) has been envisaged as workable depth for safe & economic quarrying operation during entire life of quarry. There is no waste generated hence, backfilling is not possible. After completion of quarry operation the quarried out pit will be allowed to collect the seepage and rainwater and the water storage will be kept as temporary reservoir for charging the nearby wells and the water will be utilized for Green belt development purpose. The quarry area will be fenced with Barbed wire fencing also safety bund constructed around the quarry to prevent inadvertent entry of public and cattle.

11.4 Programme of Greenbelt development (indicate extend, number, name of species to be afforested):

The safety zone along the boundary barrier has been identified to be utilized for Greenbelt development. Around 4,068m^2 area will be utilized for green belt development by planting 850 numbers along the safety zone during entire lease period also around 500 tree saplings in the approach road at first year of the plan period and 400 tree saplings from third year onwards in quarried out top benches with 2m height tree saplings with an anticipated survival rate of 80% with maintain atleast 1400 plants during the entire life of the quarry.

As per the SEIAA Recommendation the plantation will be carried out based on the output Environmental Clearance and the recommended species will be carried out for green belt development. Appropriate native species of trees will be planted in a phased manner as described below.

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TABLE – 16

Year	No. of tress proposed to be planted	Area to be covered (m^2)	Name of the species	Survival %	No. of trees expected to be grown
I	90	430	Neem, Pongamia Pinnata, Cordia dichotoma, Mango, Thespesia populnea, Mantharai, etc.,	80%	72
II	90	430		80%	72
III	90	430		80%	72
IV	90	429		80%	72
V	90	429		80%	72
VI	80	384		80%	64
VII	80	384		80%	64
VIII	80	384		80%	64
IX	80	384		80%	64
X	80	384		80%	64

11.5 Proposed financial estimate / budget for (EMP) environment management:

Budget Provision for the Mining Plan period:

TABLE – 17

A. Operational Cost / Project Cost / Investment:		Cost (Rs.)
i) Land cost	The Land value as per the Government Guideline land cost is about, **SF. No** / **Extent** / **Cost / Ha** / **Total Cost** 543/2 / 1.64.38 / 55,00,000 / 9040900 / 1.64.38 / / 90,40,900 Round of Rs.90,41,000/- (Source: https://tnreginet.gov.in/portal/)	90,41,000
ii) Machinery cost	The machineries are proposed on rental basis to meet out the productions. The rental cost would be around (Including Fuel, oil, grease, spares, etc.,)	20,00,000
iii) Refilling/ Fencing	Fencing will be constructed around the quarry pit to prevent the inadvertent entry of public and cattle cost would be around (Total Peripheral length 520m x Rs. 300/meter)	1,56,000
iv) Labourers shed	Labour shed already constructed as semi-permanent structure. The cost is around	5,00,000
v) Sanitary facility	Adequate latrine and urinal accommodation has provided at conveniently accessible places the cost would be around	1,00,000
vi) Drinking water facility for the labourers	Packaged drinking water will be provided for all the Labours. Drinking water will be readily available at conveniently accessible points during the whole of the working shift the cost would be around.	2,00,000
vii) Sanitary arrangement	The latrine and urinal will keep clean and sanitary condition. The maintenance cost would be around.	80,000

viii) Safety kit	All the Safety kit such as Helmet, Earmuffs, Goggles, Reflector Jackets, Safety shoes etc., will be provided to the workers by the company own cost which would be around.	1,00,000
Total Cost		**1,21,77,000**

B. EMP Cost:		**Cost (Rs.)**
1. Environmental Monitoring Program (Air Quality, Water Quality Sampling, Noise and Ground vibration test) Rs. 76,000/ year.		7,60,000
2. Water will be sprinkled in the haul roads by own water sprinkler for dust suppression. The cost would be around.		3,00,000
3. Construction of Garland drain with check dam to prevent surface run-off rain water entering to the quarry pit, the construction cost is around (Total Peripheral length 470m x Rs. 300/meter).		1,41,000
4. First aid room & accessories		50,000
5. Dust extractor unit for Jackhammer (4 Nos.)		1,00,000
7. Greenbelt development for dust suppression & Noise control measures	Greenbelt development and maintenance will be carried out in the boundary barriers the cost would be around (850 saplings x Rs. 200/sapling).	1,70,000
	Greenbelt development and maintenance will be carried out in the quarried out top benches (400 saplings x Rs. 200/sapling).	80,000
	Greenbelt development and maintenance will be carried out in the Panchayat Road (500 saplings x Rs. 200/sapling).	1,00,000
Total EMP Cost		**Rs. 17,01,000/-**

Description	**Cost (Rs.)**
A. Operational Cost	**Rs.1,21,77,000/-**
B. EMP Cost	**Rs.17,01,000/-**
Total Project Cost (A+ B)	**Rs.1,38,78,000/-**
C. The company Indents to involve corporate environment responsibilities (CER) activity like Water Purifier, Plantation, Books to Library, sanitary facility, Painting for class rooms and as per requirement to the nearby School at 2.0% from the total project cost. The Cost would be around **Rs.2,78,000/-.** If the concerned authority is directed to modify the CER cost and mode of utilization of the cost, the same will be implement by the company.	**Rs.2,78,000/-**
Total Cost (A+B+C)	**Rs.1,41,56,000/-**
The total cost would be around one crore forty one lakh and fifty six thousand only.	

12.0 PROGRESSIVE QUARRY CLOSURE PLAN

12.1 Introduction:

The entire area is proposed for a short period of 10 years only hence, the progressive quarry closure plan may not be applicable to this quarry. Anyhow, during temporary discontinuance of quarry the following measures will be taken.

a. Barbed wire fencing will be constructed around the quarry.
b. Benches will be smoothening.
c. Quarry will be closed & sentries will be posted round the clock.
d. Green belt development will be maintained.
e. Machineries will be removed from pit and engaged in another site.

12.2 Present and Post Land use pattern:

LAND USE TABLE – 18

Description	Proposed Amalgamation		Leaving safety and Benches	
	Area to be required at the present mining plan period (Ha)	Area at the end of lease period (Ha)	Area to be required at the present mining plan period (Ha)	Area at the end of lease period (Ha)
Area Under Quarry	1.25.70	1.25.70	1.22.70	1.22.70
Site Services	#Nil	Nil	#Nil	Nil
Roads	0.01.00	0.01.00	0.01.00	0.01.00
Green Belt	0.21.48	0.37.68	0.21.48	0.40.68
Unutilized Area	0.16.20	Nil	0.19.20	Nil
Grand Total	**1.64.38**	**1.64.38**	**1.64.38**	**1.64.38**

Note: * Present Area is Virgin.
Site services are constructed in the Company's patta land.

12.3 Statutory obligations:

The company ensures to comply all the conditions stipulated in the precise area communication letter before grant of quarry lease and during the course of quarry operations as per the DGMS, Department of Geology and Mines, Labour Enforcement officer, controller of Explosives etc., circulars, Norms, Rules, Regulations and Act.

12.4 Progressive quarry closure plan preparation:

Name and address of the Qualified Person who prepared the progressive closure plan and name, address and register number of the executing agency who is involved in the Preparation of progressive quarry closure plan.

Name	:	**Dr. P. Thangaraju, M.Sc., Ph.D.,**
Address	:	Qualified Person (As per Rule 15(I)(a) and (I)(b) of MCR, 2016) No.17, Advaitha Ashram Road, Alagapuram, Salem District – 636 004.
Mobile	:	+91 94433 56539.
Email	:	infogeoexploration@gmail.com

The company will himself implement the closure plan; no outside agency will be involved.

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(i) Safety & Security:

Safety measures will be implemented to prevent access in the excavation area an un-authorized persons as per Mine Act 1952, MMR 1961.

- Safety measures will be implemented as per Mine Act 1952, MMR 1961, and Mines Rules 1955.
- Provisions of MMR 1961 shall be strictly followed and all roads shall be wider than the height of the bench or equal to the height of the bench and have a gradient of not more than 1 in 16.
- The bench height will be 5.0m.
- Width of working bench will be kept about 5.0 m for ease of operations and provide sufficient room for the movement of equipments.
- Protective equipment like dust masks, ear-plugs/ muffs and other equipments shall be provided for use by the work persons.
- Notices giving warning to prevent inadvertent entry of persons shall be displayed at all conspicuous places and in particular near mine entries.
- Danger signs shall be displayed near the excavations and proper signal by siren alarm will be given to the public before blasting to prevent accident.
- Security guards will be posted.
- In the event of temporary closer, approaches will be fenced off and notice displayed.
- Installation of CCTV cemaras in the quarry and entrance of the quarry.
- Monitoring of Quarrying operation by external agency as directed by authorities.

(ii) Disaster Management and Risk Assessment:

This should deal with action plan for high risk accidents like landslides, subsidence, flood, fire, seismic activities, tailing dam failures etc. and emergency plan proposed for quick evacuation, ameliorative measures to be taken etc. The capability of company to meet such eventualities and the assistance to be required from the local authorities should be described.

- The mechanized mining activities in the area may involve any high risk accident due to side falls/collapse, flying stones due to blasting etc.
- The complete mining operation will be carried out under the Management and control of experienced and qualified Mines Manager having Certificate of Competency to manage the mines granted by DGMS.
- All the provisions of Mines Act 1952, MMR 1961 and Mines Rules 1955, TNMMCR 1959 and other laws applicable to mine will be strictly complied with.
- During heavy rainfall the mining activities will be suspended.
- All persons in supervisory capacity will be provided with proper communication facilities.
- Competent persons will be provided FIRST AID kits which they will always carry.
- The Greenbelt Development will be formed in around the quarried out top benches and panchayat road of the lease applied area.

Environmental Monitoring Cell:

A dedicated team nominated by the mine manager or Agent will monitor and maintain the environmental compliances of the quarry as per the approved Environment Management Plan and report the Compliance to the Mine Manager half yearly.

Disaster Management Cell:

The Competent Qualified Statutory managers appointed by the applicant as per the Director of Mines Safety will be responsible for Disaster Management. It care any eventualities his mobile number will be displayed and he will take all the precautions and safety measures as per Mines and Minerals (Development and Regulations) Act, 1957.

(iii) Disposal of mining machinery

All the Machineries will be purchased fresh; the same has been maintained in good condition during entire life of quarry. After completion of quarry operation all machineries will be utilized at another quarry area or sold out to the second hand. Hence, disposal or decommissioning of mining machinery does not arise.

(iv) Care and Maintenance during Temporary Discontinuance:

In case of any temporary discontinuance due to court order or due to statutory requirement or any other unforeseen circumstance following measures shall be taken for care, maintenance and monitoring of conditions.

- Notice of temporary discontinuance of work in mine shall be given to the DGMS as per the MMR 1961.
- All the mining machinery shall be shifted to a safe place.
- Entrance to the mine or part of the mine, to be discontinued shall be fenced off. Fencing shall be as per the circular 11/1959 from DGMS.
- Security Guards shall be posted for the safety and to prevent any unauthorized entry to the area.
- Carry out regular maintenance of the facilities/area detailed below in such a way as would have been done as if the mines were operation:

  Quarry roads and approach roads,

  Fencing on approach roads,

  Checking and maintenance of machines and equipment,

  Drinking water arrangements,

  Quarry office, first aid stations etc.
- Competent persons shall inspect the area regularly.
- Air, water and other environmental monitoring shall be carried out as per CPCB and IBM Guideline.
- Care and upkeep of plantation shall be carried out on regular basis.
- Status of the working and status monitoring for re-opening of the mines shall be discussed daily.

In case of discontinuance due to any natural calamities/abnormal conditions, mining operation will be restarted as early as possible after completing rescue work, restoring safety and security, repairs of roads etc.

(v) Economic Repercussion of Closure of Quarry and manpower Retrenchments:

The quarry lease is granted for a period of ten years only. As per the production Programme envisaged, there will be no effect on the man power as the majority of persons belong to nearby villages and will have an option either to be available for employment for the next contract/ lease or do the agriculture in their fields.

(vi) Abandonment Cost:

As at present mining is not going to be closed so abandonment cost could not be assessed. However, based on the progressive quarry closure activities during the plan period, cost is assessed as given below at present scenario:

TABLE – 19

ACTIVITY		YEAR										RATE	COST (Rs.)
		I	II	III	IV	V	VI	VII	VIII	IX	X		
Plantation under safety zone	No. of sapling	90	90	90	90	90	80	80	80	80	80	Rs.200 Per sapling	1,70,000
	Cost	18000	18000	18000	18000	18000	16000	16000	16000	16000	16000		
Plantation in quarried out top benches and approach road		Approach Road		Quarried out top Benches									
	No. of sapling	250	250	50	50	50	50	50	50	50	50	Rs.200 Per sapling	1,80,000
	Cost	50000	50000	10000	10000	10000	10000	10000	10000	10000	10000		
Wire Fencing for 520 Mtrs length		156000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	1,56,000
Garland Drain with settling tanks for 470 Mtrs length		141000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	1,41,000
Total													**6,47,000**

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13.0 ANY OTHER DETAILS INTEND TO FURNISH BY THE APPLICANT

This Mining plan for Rough stone (Charnockite) and Gravel is under Rules 41 & 42 as per the Amended under Tamil Nadu Minor Mineral Concession Rules, 1959. The provisions of the Mines Act, Rules and Regulations and orders made there under shall be complied within the quarrying operation, so that the safety of the mine, machinery and person will be well protected. Permission, relaxation or exemption wherever required for the safe and scientific quarrying of the deposit will be obtained from the Department of Mines Safety. Any violation pointed out by the inspecting authorities shall be rectified and modified after scrutiny comments as per the guidelines of the Concerned Department and Authorities.

This Mining Plan and mine design is prepared based on the requirement instructed by the applicant to me. If there is any change in the production schedule, change of technology, change in product mix during the course of operations, the applicant is advice to prepare a modified mining plan and get approval by the concerned authority for subsequent clearance and approval. The same will be monitored by the inspecting authority of Department of Geology and mining and other Concerned Departments under Rule 25 and sub rule (5)(d) in Rule 36 of Tamil Nadu Minor Mineral Concession Rules, 1959.

I hereby ensure that the information provided is correct to best of my knowledge and experience, some of the information contained in this report has been provided by external sources and by the applicant and is presented as the form as submitted by the applicant. The information is not intended to serve as legal advice related to the individual situation. I do not owe and specifically disclaim any liability resulting from the use during the course of quarrying operations after the grant of lease. The document may be scrutinized by the competent authority before approval.

Prepared by

Dr. P. Thangaraju, M.Sc., Ph.D.,
Qualified Person

This Mining Plan is approved as per the Powers conferred under rule 41(2) of Tamil Nadu Minor Mineral Concession Rules, 1959

Place: Salem
Date: 29.07.2024

This Mining Plan is approved subject to the Conditions indicated in the Mining Plan approved Letter No. 677/MINES/2023 Dated 29.07.2024

29/7/2024

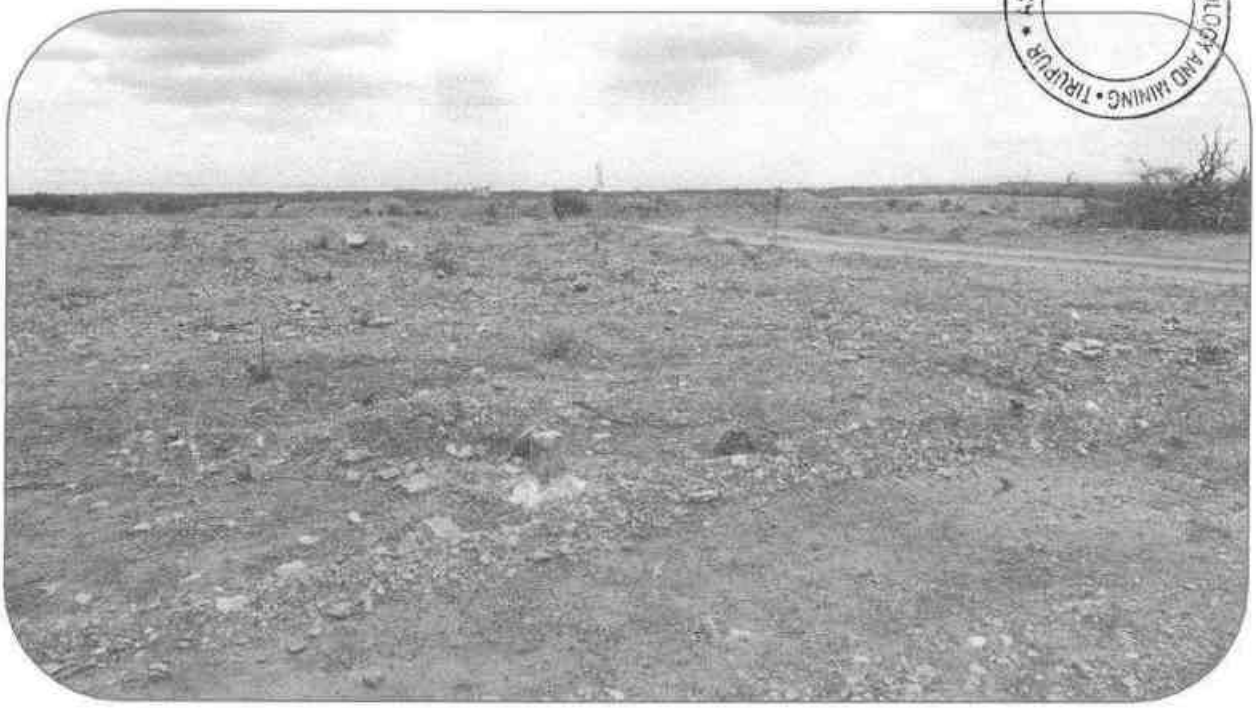
DEPUTY DIRECTOR i/c
Geology and Mining
Tiruppur

29/7/24

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TOPOGRAPHICAL VIEW OF PERUNTHOLUVU ROGH STONE AND GRAVEL QUARRY LEASE APPLIED AREA

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR





ANNEXURE 1

ந.க.எண். 677/கனிமம்/ 2023

புவியியல் மற்றும் சுரங்கத்துறை
மாவட்ட ஆட்சியர் அலுவலகம்,
திருப்பூர்.

நாள்:.24.07.2024.

குறிப்பாணை

பொருள் : கனிமங்களும் சுரங்கங்களும் - சிறு கனிமம் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - பட்டா புல எண். 543/2 ல்1.64.38ஹெக்டர் பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி குத்தகை உரிமம் கோரி தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) விண்ணப்பம் அளித்தது - புலத்தணிக்கை அறிக்கை சமர்பிக்கப்பட்டது - தகுதியான நிலப்பரப்பாக கருதி ஏற்பளிக்கப்பட்ட சுரங்க திட்டம் மற்றும் சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணைய இசைவிணை பெற்று சமர்பிக்கக் கோருதல் - தொடர்பாக.

பார்வை :
1. தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்), 11/32, வெட்டுக்காட்டு வலசு,ஈங்கூர், பெருந்துறை,ஈரோடு என்பவரின் மனு நாள்: 09.10.2023.
2. இவ்வலுவலக கடிதம் ந.க.எண். 677/கனிமம்/2023 நாள்:12.10.2023.
3. வட்டாட்சியர், திருப்பூர் தெற்கு கடிதம் ந.க. 3887/2023/அ1 நாள்: 15.02.2024.
4. சார் ஆட்சியர் (பொ), திருப்பூர் கடிதம் மூ.மு.எண்.5352/ 2023/அ3 நாள்.05.05.2024.
5. வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர் கடிதம் ந.க. 1200/2024/ஆ2. நாள்:23.05.2024.
6. உதவி புவியியலாளர் (கனிமம்), திருப்பூர் புலத்தணிக்கை அறிக்கை நாள்:13.06.2024.
7. மற்றும் உரிய ஆவணங்கள்

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண்.543 ல் 1.64.38ஹெக்டர் பரப்புள்ள பட்டா பூமியிலிருந்து 10 வருடங்களுக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்), 11/32, வெட்டுக்காட்டு வலசு,ஈங்கூர், பெருந்துறை,ஈரோடு என்ற நிறுவனத்தார்பார்வை 1-ல் கண்டுள்ளவாறு உரிய ஆவணங்களுடன் விண்ணப்பம் அளித்துள்ளனர்.

2. மேற்படி விண்ணப்பங்கள் தொடர்பாக, வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர், வட்டாட்சியர், திருப்பூர் தெற்கு, சார் ஆட்சியர்(பொ), திருப்பூர், மற்றும் உதவிப்

புவியியலாளர் (கனிமம்), திருப்பூர் ஆகியோர் புலத்தணிக்கை மேற்கொண்டு திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம்,புல எண்.543/2 ல் 1.64.38 ஹெக்டேர் பரப்பில் தி/ள்.V.K.P.இன்ஜினியரிங்இந்தியா பிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) என்ற நிறுவனத்திற்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி உரிமம் வழங்க கீழ்கண்ட நிபந்தனைகளுக்குட்பட்டு அனுமதி வழங்கலாம் என பரிந்துரை செய்துள்ளனர்.

நிபந்தனைகள்:

- 1959ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், அட்டவணை IIல் கண்டுள்ளபடி குவாரி செய்யப்படும் கனிமங்களுக்குரிய சீனியரேஜ் தொகை அவ்வப்போது செலுத்தி கனிமம் கொண்டு செல்லப்பட வேண்டும்.
- புலத்தை சுற்றி அமைந்துள்ள பட்டா நிலங்களுக்கு 7.5 மீட்டர் பாதுகாப்பு இடைவெளி விட்டு குவாரி பணிபுரிய வேண்டும்.
- அனுமதி கோரும் புலத்தின் மேற்கு திசையில் சுமார் 35 மீ தொலைவில் உயர் மின்னழுத்த கோபுரம் செல்வதால் மின் CEA Regulations, Sl.No.65 (2) ன்படி Electrical Inspector of Mines இடமிருந்து தடையின்மை சான்றிதழ் பெற்று சமர்ப்பித்த பின்னரே நடைசீட்டு வழங்கப்படும் என தெரிவிக்கப்படுகிறது. மேலும் கோபுரத்திற்கு எவ்வித பாதிப்பும் ஏற்படா வண்ணம் குவாரிப்பணி மேற்கொள்ள வேண்டும்.
- மேலும் தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959-ன் விதி எண். 36 (1)-ன் கீழ் கோபுரத்திலிருந்து 50 மீ இடைவெளி விட்டு குவாரிப்பணி மேற்கொள்ள வேண்டும்.
- தகுதிவாய்ந்த பிளாஸ்டருடன் கூடிய லேசான வெடிபொருட்களைப் பயன்படுத்தி குவாரி நடவடிக்கை மேற்கொள்ளப்பட வேண்டும்.
- குத்தகை உரிமம் கோரும் புலத்திற்கு DGPS முறையில் அளவீடு செய்து அதற்கான சான்றினை சமர்ப்பிக்க வேண்டும்.
- அனுபவம் வாய்ந்த வெடிபொருள் பயன்படுத்துவோர் மூலம் குறைந்த அளவு சக்தி கொண்ட வெடிபொருட்களை பயன்படுத்தி அருகிலுள்ள பட்டாதாரர்களுக்கு எவ்வித இடையூறுமின்றி / அருகிலுள்ள பட்டா மற்றும் அரசு புலங்களில் எவ்வித ஆக்கிரமிப்பும் இன்றி குவாரிப்பணி மேற்கொள்ள வேண்டும்.
- விதிகளின் படி ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தினை உரிய காலத்திற்குள் சமர்பிக்க வேண்டும்.
- குவாரி உரிமம் வழங்க உள்ள பகுதிக்கு சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் முன் அனுமதி பெற்று சமர்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும்.

3. எனவே, வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர், வட்டாட்சியர், திருப்பூர் தெற்கு, சார் ஆட்சியர்(பொ), திருப்பூர், மற்றும் உதவிப் புவியியலாளர் (கனிமம்), ஆகியோரின் பரிந்துரை மற்றும் நிபந்தனைகளின் அடிப்படையில், திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம்,புல எண்.543/2 ல் 1.64.38 ஹெக்டேர் பரப்பில் மட்டும் 1959ம் வருட தமிழ்நாடு சிறுகனிம விதிகள், விதி எண்.19-ன் படி மேற்கண்ட நிபந்தனைகளுக்குட்பட்டு 10 (பத்து) வருட காலத்திற்கு



தி/ள்.V.K.P.இன்ஜினியரிங்இந்தியா பிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) நிறுவனத்தாருக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி உரிமம் வழங்குவதற்குரிய தகுதியான நிலப்பரப்பாக கருதப்படுகிறது.

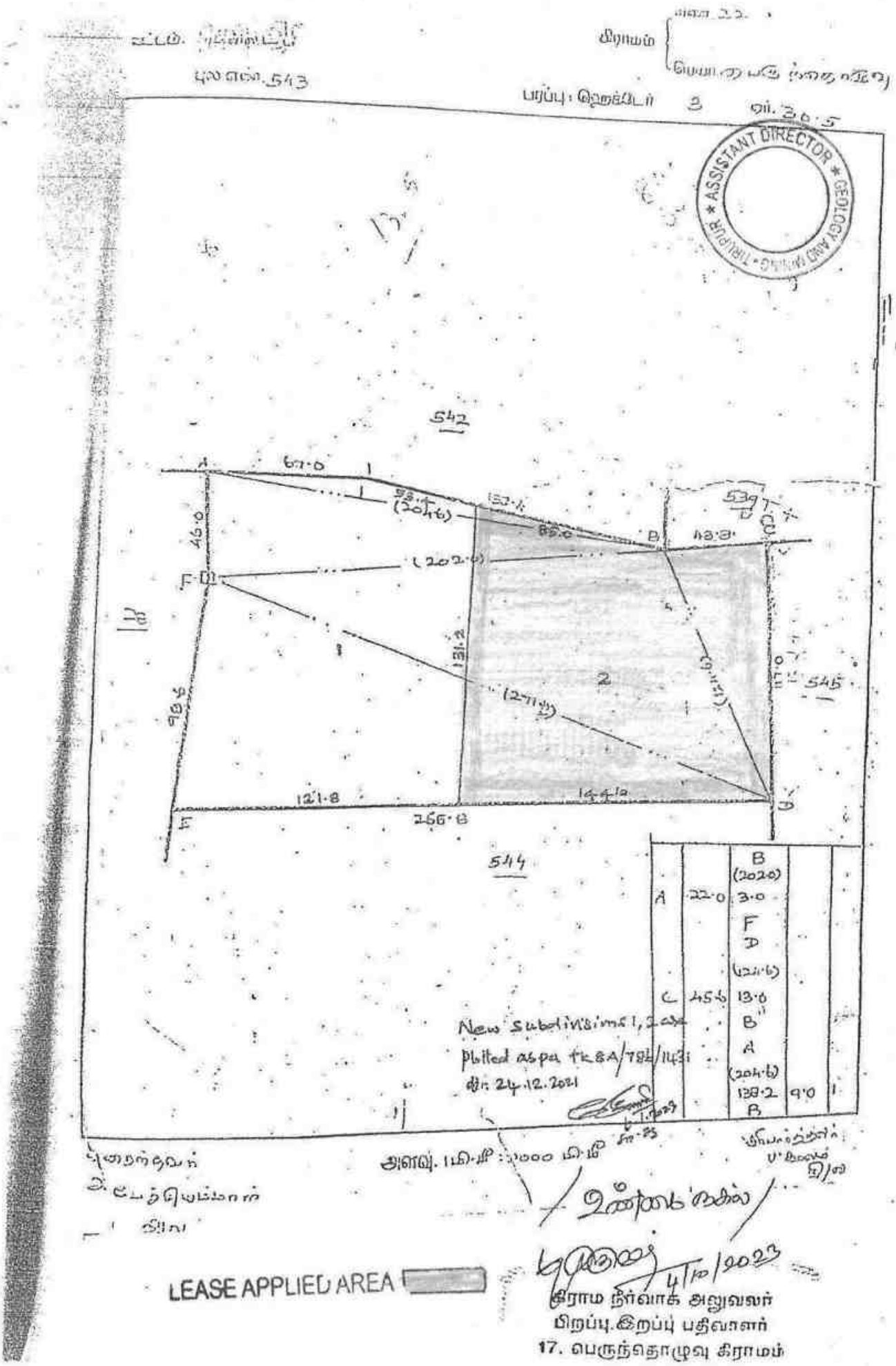
4. மேலும், தமிழ்நாடு சிறு கனிம சலுகை விதிகள்-1959 விதி எண். 41-ன்படி குவாரிப்பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்க திட்டத்தினை 90 தினங்களுக்குள் சமர்ப்பிக்குமாறு மனுதாரரைக் கேட்டுக்கொள்ளப்படுகிறது. மேலும் ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தின் தொடர்ச்சியாக 1959ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.42-ன் படி சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும் என இதன் மூலம் தெரிவிக்கப்படுகிறது.

துணை இயக்குநர்(பொ),
புவியியல் மற்றும் சுரங்கத்துறை,
திருப்பூர்.

பெறுநர்:

தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியா பிரைவெட் லிட்
(இயக்குநர்: திரு.P.ஜெகதீசன்),
11/32, வெட்டுக்காட்டு வலசு,
ஈங்கூர், பெருந்துறை,
ஈரோடு மாவட்டம்.

ANNEXURE 11

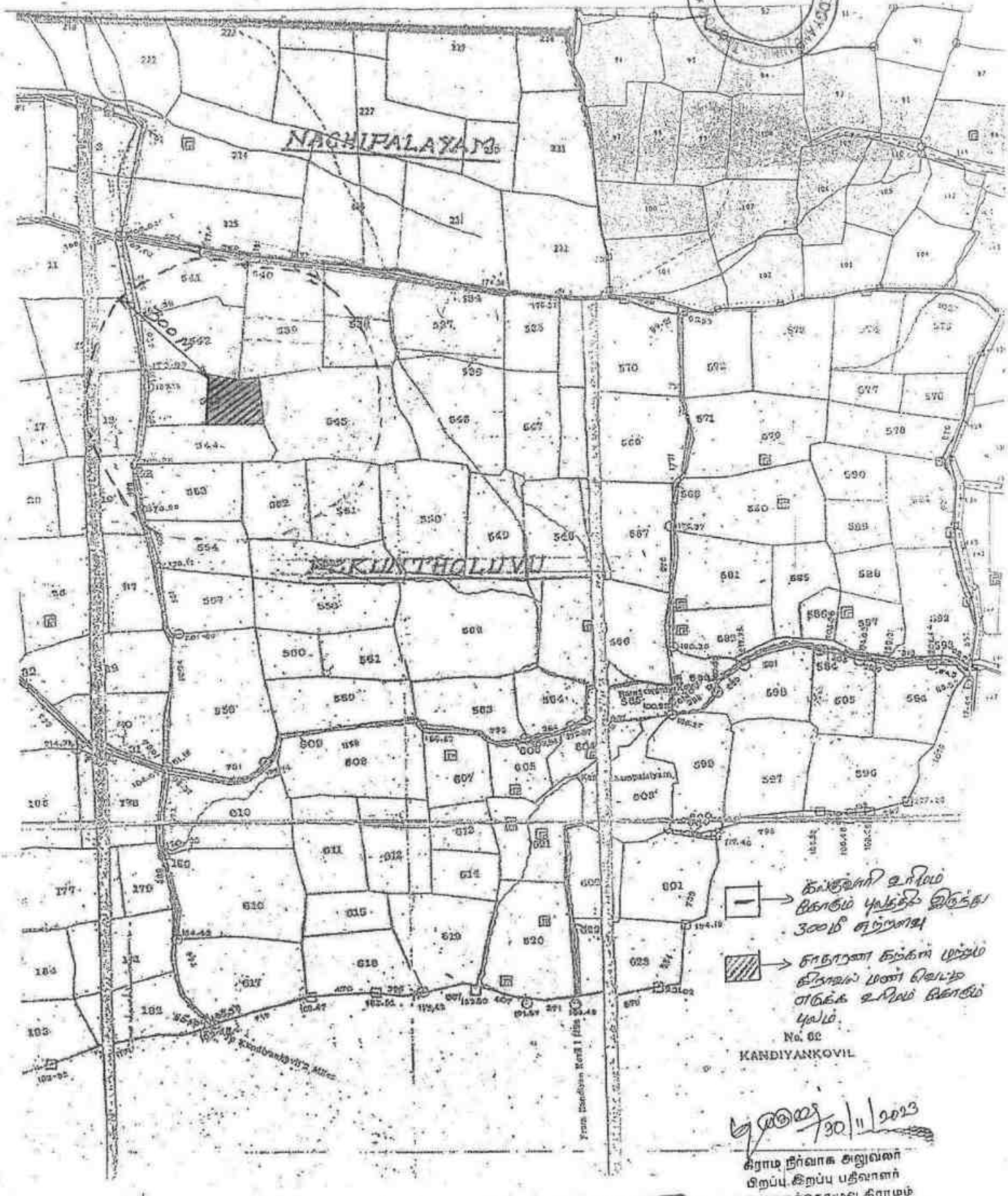


82 A

ANNEXURE III

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு, நாச்சிமலையம் மற்றும் பிளஸ் திராவை குட்டு வரைபடம்

ASSISTANT DIRECTOR GEOLOGY AND MINING



கல்குவாரி உரிமம் கோரும் புலத்தில் இருந்து 300மீ சுற்றளவு

சாதாரண கற்கள் முறும் திராவல் மண் வெட்டி எடுக்க உரிமம் கோரும் புலம்.

No. 62

30/11/2023

கிராம நிர்வாக அலுவலர்
பிறப்பு இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

83 A

ANNEXURE IV

தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : திருப்பூர் வட்டம் : திருப்பூர் தெற்கு

வருவாய் கிராமம் : பெருந்தொழுவு பட்டா எண் : 2844

உரிமையாளர்கள் பெயர்

1. பழனிச்சாமி மனைவி சிவகாமி

2. லேட் நஞ்சப்பன் மனைவி சரோஜினி

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	
543	2	1 - 64.38	2.27	--	--	--	--	2021/0105/32/149277--2021/32/08/000207SD -- 20-12-2021
		1 - 64.38	2.27					

குறிப்பு2 :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **32/08/017/02844/20728** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 08-02-2024 அன்று 06:52:28 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

1432 – ஆம் பசலியில் திருப்பூர் கிராமம் கணக்கு மாவட்டம் திருப்பூர்மாவட்டம் 10, பெருந்தொழு

எண் 2

கிராமத்தில் வருடவாரி புலவாரி கைப்பற்று சாகுபடி அடங்கல் கணக்கு

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.					கைப்பற்று தாருடைய பெரும் எண்ணும் அல்லது அறுபோக தாருடைய பெயர்.	சாகுபடி வாரிசின் பெயர்.	முதல் போகம்.					இரண்டாம் போகம்.						கீழ்க்கண்டவகையில் பயிரிடப்படாத உள்ள நிலத்தின் தன்மை மற்றும் பயிரின் விவரங்கள் ஒவ்வொரு நில அளவை என் அல்லது அதன் பருதியில்.	பயிர் பார்வையிடும் அலுவலர் குறிப்புரை.
நில அளவை எண்.	உட்பிரிவு எண்.	பரப்பு.	நீர்வரை.	ஒரு போகம் அல்லது இரு போகம்.		நிலத்தின் எந்த பகுதி யாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது அறுவடை மாதத்தில் அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிரான / அறுவடையான பரப்பு.	உள்ளையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விருத்தகாடு.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது அறுவடை மாதத்தில் அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிரான / அறுவடையான பரப்பு.	உள்ளையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விருத்தகாடு.	கிராம அலுவலரின் குறிப்புரை :- (1) புலன்களின் பகுதிகளில் பயிரிப்பட்ட விபரங்கள் அனைத்தும் (2) கைப்பற்றில் இல்லாத நிலம்- களின் காரணமும் (3) பூர்த்தியை மாதத்தில் பயிரிப்பட்டவை உதவியின்றி பயிரிடுவதை எனும் பிரிதை மாதங்களில் வருகிற பிரிதை மாதங்களில் நீர் பாய்ச்சப்பட்ட விபரங்கள்.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(18,a)	(19)
543	2	1.48	2.17	3844	திவகாமிடல)												—		

/உண்மை நகல்/

1/10/2023

கிராம நிர்வாக அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

ASSISTANT DIRECTOR GEOLOGY AND MINING

ANNEXURE V

85A

380/40-R.F. III-A-10-20,00,000 Cps.-GBP.-Mdu.-7-2022.

ANNEXURE V1

அ-பதிவேடு விவரங்கள்

மாவட்டம் : திருப்பூர்

வட்டம் : திருப்பூர் தெற்கு

கிராமம் : பெருந்தொழுவு

1. புல எண்	543	9. மண் வயனமும் ரகமும்	8 - 4
2. உட்பிரிவு எண்	2	10. மண் தரம்	6
3. பழைய புல உட்பிரிவு எண்	543--	11. தீர்வை (ரூ - ஹெ)	1.38
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 64.38
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.27
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	2844
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	1	16. பெயர்	1.சிவகாமி 2.சரோஜினி

குறிப்பு 1:

1. மேற்கண்ட புலவரி / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் http://eservices.tn.gov.in என்ற இணைய தளத்தில் 50728 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

செயலாளர்
பெருந்துறை கூட்டுறவு தொடக்க
வேளாண்மை மற்றும் ஊரக வளர்ச்சி
வங்கி லி., எண். கே. 598, பெருந்துறை

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR *

543/1 – 543பா – 5.4 – 1-8-4 6 1.38 1.66.12 2.29 112. ஈ. அங்காத்தாள் மற்றும் (11) நபர்கள்.

543/2 – 543பா – 5.4 – 1-8-4 6 1.38 1.64.38 2.27 2844. பழனிசாமி மனைவி சிவகாமி (மேல) நஞ்சப்பன் மனைவி சரோஜினி – (2).

3.30.50 4.56

TK. 8A/786/1431. நாள்: 24.12.2021ன் படி மாறுதல் மேற்கொள்ளப்பட்டது.

6.1.2023
கை.ஒ

538/2A – 538/2பா – 5.4 – 1-8-4-6 1.38 0.92.25 1.27. 2848. நஞ்சப்பன் மனைவி சரோஜினி

538/2B – 538/2பா – 5.4 – 1-8-4-6. 1.38 0.92.25 1.27. 2849. பழனிசாமி மனைவி சிவகாமி.

1.84.50

TK. 8A/786/1431. நாள்: 24.12.2021ன் படி மாறுதல் மேற்கொள்ளப்பட்டது.

6.1.2023
கை.ஒ

உண்மை நகல்

30/11/2023

கிராம நிர்வாக அலுவலர்
பிறப்பு. இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

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ANNEXURE VII



S. கிருஷ்ணன்,
முத்திரைத்தாள் விற்பனையாளர்,
பெருந்துறை டவுன்.
உரிமம் எண்: 16/2003/ ஈரோடு.
பெருந்துறை, தமிழ்நாடு.

GSTIN : 33AAECV6374R1ZL
M/s V.K.P Engineering Ind Private
151/260B, Bhavani Road,
Perundurai - 638 052. Erode (Dt)

சம்மதக் கடிதம்.

ஈரோடு மாவட்டம், பெருந்துறை வட்டம், சென்னிமலை முருங்கத்தொழுவு கிராமம், கதவு எண். 116 என்ற முகவரியில் வசிக்கும் காலஞ்சென்ற S.நஞ்சப்பன் அவர்களின் மனைவி N.சரோஜினி (1), மற்றும் திருப்பூர் மாவட்டம், திருப்பூர் வட்டம் பொலிக்காளியாபாளையம் 641 665, சிவசக்தி ரைஸ்மில், கதவு எண். 5/217 ல் வசிக்கும் பழனிச்சாமி அவர்களின் மனைவி P.சிவகாமி (2), ஆகிய நாங்கள் Tvl. V.K.P.Engineering Ind Pvt Ltd, 151/260B, பவானி ரோடு என்ற முகவரியில் இயங்கி வரும் நிருவனம் (3), ஆகிய உங்களுக்கு எழுதிக் கொடுக்கும் சம்மதக் கடிதம் என்னவென்றால்,

P. Sivakami
N. Saroja

S. MANIAN, M.A., B.L.,
Advocate & Notary Public
Area Perundurai Taluk
Regn. No. 34/16
M.A. No. 34/16
INDIA
Pin: 638 052

3.10.2023

Mob. 99655 41074 / 220074
S. MANIAN, M.A.,B.L.,
Advocate & Notary Public
305, 306, Ram Nagar,
PERUNDURAI -638 052. Erode Dt.
Tamilnadu, India.
Book No. XXII Serial No. 2566

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ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், தொட்டிபாளையம் சார்பதிவாளர் அலுவலகத்தில் 2021 - ம் வருடம் ஆகஸ்ட் மாதம் 24 - ம் தேதி பதிவான ஆவண எண் : 4244 ன் படி பு.ல எண் : 543 ல் 1.64.38 ஹெக்டேர் பரப்பு மேற்படி கிராம பட்டா எண் 2844 ஆக தாக்கலாகியுள்ளபடி (1) மற்றும் (2) இலக்கமிட்டவருக்கு சொந்தமானது. தற்போது V.K.P. Engineering IND Pvt Ltd (3) என்ற பெயரில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரி திருப்பூர் மாவட்ட ஆட்சியரிடம் மனு செய்துள்ளார். மேற்படி விண்ணப்பத்தின் பேரில் மாவட்ட ஆட்சியர் அனுமதி வழங்கும் நாளிலிருந்து பத்து ஆண்டுகளுக்கு குவாரி நடத்த நம்மில் (1), (2), இலக்கமிட்டவர்களான எங்களுக்கு எவ்விதமான ஆட்சேபனையும் இல்லை. கனிம குவாரி நடத்த (1), (2), இலக்கமிட்டவர் பின்னிட்டு எவ்வித பிரச்சனையும் செய்யமாட்டோம், முழுமனதுடன் சம்மதம் அளிக்கின்றோம் என உறுதி கூறுகின்றோம்.

இப்படிக்கு,

P. Sivakami

N. சிவகாமி

3.10.2021.

SOLEMNLY AFFIRMED AND SIGNED
BEFORE ME AT PERUNDURAI, ERODE Dt,
PIN : 638 052 ON 3.10.2021

NOTARIAL NOTARIAL

3.10.2021

Mob. 99655 41074 98 220074
S. MANIAN, M.A.,B.L.,
Advocate & Notary Public
305, 306, Ram Nagar,
PERUNDURAI -638 052. Erode Dt
Tamilnadu, India.
Book No. X.51/1 Serial No 3566

3.10.2021

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPPUR

ANNEXURE VIII

COMPANY LIMITED BY SHARES

(THE COMPANIES ACT, 2013)

MEMORANDUM OF ASSOCIATION OF VKP ENGINEERING IND PRIVATE LIMITED

I The name of the company is VKP ENGINEERING IND PRIVATE LIMITED

II The registered office of the company will be situated in the State of Tamilnadu.

III The objects for which the company is established are:

(A) MAIN OBJECTS OF THE COMPANY TO BE PURSUED BY THE COMPANY ON IT'S INCORPORATION ARE:

1. To carry on the business to construct, alter, act as civil, architectural engineer, contractor for constructing, reconstructing, improving, commercial complexes, shops, offices, industrial estates, flats, houses, hotels, restaurants, bungalows and to manage construction and developmental work of roads, highways and bridges and to acquire license or lease mines for extracting blue metals, gravels, such other items and to trade or manufacture in construction materials in India or elsewhere.

[B] THE OBJECTS INCIDENTAL AND ANCILLARY TO THE ATTAINMENT OF THE MAIN OBJECTS ARE:

1. To enter into contracts, agreements and arrangements with any other company, firm or person in India or abroad on behalf of the company for the objects for which the company is formed.
2. To employ experts to investigate and examine into the conditions, prospects, value, character and circumstance of any business concerns or undertakings or of any assets, properties, and rights in connection with the business of the company.
3. To establish branches subsidiary companies or appoint agencies for or in connection with any of the objects of the company, and to enter into any arrangement with such subsidiary company for taking the profits to and bearing the losses of any business or branch so carried on or for financing any such subsidiary company or guaranteeing its liabilities, or to make any other arrangement which may seem desirable with reference to any business or branch so carried on including power at any time

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either temporarily or permanently, to close any such branch or business.

4. To establish and maintain branch offices and local registers and to procure recognition of the company and to carry on business in any part of the world as are possessed by local companies or partnerships or as may be thought desirable.
5. Subject to the provisions of the Act to take part in the technical supervision and control of the business or operations of any company or undertaking having similar objects and to appoint and remunerate any directors, accountants or other experts or agents for such business operations.
6. To purchase, take on lease or in exchange, hire or otherwise acquire any immovable or movable property and any rights or privileges which the company may think necessary or convenient for the purpose of its business, and in particular any land, buildings, machinery, plant and either to retain any property so acquired for the purposes of the Company's business or to turn the same to account as may seem expedient.
7. To construct, improve, maintain, develop, work, manage, carry out or control any buildings, offices, roadways, branches, or siding, bridges, wells, reservoirs, watercourses, wharves, warehouses, electric works, shops, stores chawls and other buildings for housing employees, workers and others, other works and conveniences which may seem calculated directly or indirectly to advance the Company's interests, and contribute to, subsidise or otherwise assist or take part in the construction, improvement, maintenance, development working, management, carrying out or control thereof.
8. To sell, lease, mortgage, grant licenses, easements and other rights over and in any other manner deal with or dispose of the undertaking, property, assets, rights and effects of the Company or any part thereof, for such consideration as the Company may think fit, and in particular for shares, debentures or securities of any other company having objects altogether or in part similar to those of this company.



9. To acquire and undertake whole or any part of the business, property and liabilities of any person, firm or company carrying on or proposing to carry on any business which the company is authorised to carryon or possessed of property suitable for the purposes of this Company.
10. To amalgamate, enter into any partnership or partially amalgamate with or acquire interest in the business of any other company, person or firm carrying on or engaged in, or about to carry on or engage in any business or transaction included in the objects of the Company, or enter into arrangement of sharing profits or for co-operation or for mutual assistance with any such person, firm or company, to acquire the business of the Company or connected therewith any of the Company's property and to give or accept by way of consideration for any of the acts or things aforesaid or property acquired, any shares, debentures, debenture-stock or securities that may be agreed upon and to hold and retain, or sell, mortgage and deal with any shares, debentures, debenture-stock or securities so received.
11. Subject to Section 391 to 394 of the Act to amalgamate with any other company whose objects are, or include objects similar to those of this Company whether by sale or purchase of fully or partly paid up shares or otherwise of the undertaking subject to the liabilities of this or any such company as aforesaid, with or without winding up or by sale or purchase of fully or partly paid-up shares or otherwise of all or a controlling interest in the shares or stock of this or any other company as aforesaid or in any other manner.
12. To enter into arrangement with any government or authorities, supreme, municipal, local or otherwise, or any other person or company that may seem conducive to Company's objects, or any of them, and obtain from any such government, authority, person or company any rights, privileges, charters, contracts, licenses and concessions which the company may think fit, desirable to obtain and to carry out, exercise and comply therewith.

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13. To apply for, promote, and obtain any Act, charter, order, regulation, privilege, concession, license or authorization of any Government, municipality or any authority or any corporation or any public body which may be empowered to grant for enabling the Company to carry any of its objects into effect or for extending any of the powers of the Company or for any other purpose which may seem expedient and to oppose any bills, proceedings or applications which may be seen calculated to prejudice the Company's interests, and to appropriate any of the Company's shares, debentures or other securities and assets to defray to necessary cost, charges and expenses thereof.
14. To apply for, purchase, or otherwise, acquire, and protect and renew in any part of the world and patents, patent rights, brevets, invention, trade-marks, designs, formulae, copyrights, licenses, concessions and the like, conferring any exclusive or non-exclusive or limited rights to their use, or any secret or other information as to any invention which may seem capable of being used for any of the purpose of the company and to use exercise, develop, or grant licenses in respect of or otherwise turn to account the proprietary rights, or information so acquired and to expend money in experimenting upon, testing or improving any such patents, inventions or rights.
15. To sell any patent rights or privileges belonging to the Company or which may be acquired by it or any interest in the same, and to grant licenses for the use and practice of the same or any inventions, patents or privileges in which the Company may be interested, and to do all such acts and things as may be deemed expedient for turning to account any inventions, patents, and privileges in which Company may be interested.
16. To sell or sublet any concession or licenses obtained or contracts entered into and generally to sell the whole or part of the property and business of the Company for cash of for the shares or obligations of any person or persons.

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17. To improve, manage, cultivate, develop, exchange, refine, repair, alter, let on account, grant rights and privileges in respect of or otherwise deal with all or part of the properties and rights of the Company.
18. To adopt such means of making known the business of the company as may seem expedient, and in particular by advertising in the press, circulars, by purchase and exhibition of works of art or interest, by publication of books and periodicals and by granting prizes, rewards and donations.
19. Subject to provisions of the Act to make donations to such persons or institutions and in such cases and either by cash or any other assets as may be thought directly or indirectly conducive to any of the Company's objects or otherwise expedient and in particular to remunerate any person or corporations introducing business to this Company and also to subscribe, contribute or otherwise assist or guarantee money for charitable scientific, religious or benevolent, national, public, cultural, educational or other institutions or objects or for any exhibition or for any public, general or other objects.
20. To establish and maintain or procure the establishment and maintenance of any contributory or non-contributory pension or superannuation funds for the benefit of and give or procure the giving of donations, gratuities, pensions, allowances or emoluments to any persons who are or were at any time in the employment or service of the Company or of any company which is subsidiary of the company, or who are or were at any time Directors or officers of the Company or of any such other company, as aforesaid and the wives, widows, families, dependents and connections of any such persons, and to also establish and subsidise and subscribe to any institutions, associations, clubs or funds calculated to be for the benefits of or for advancing the interests and wellbeing of the Company as aforesaid, and make payments, to or towards the insurance of any such person aforesaid and to do any of the matters aforesaid either alone or in conjunction with any such other company as aforesaid.

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21. To refer or agree to refer any claim, demand, dispute or any other question, by or against the Company, or in which the Company is interested or concerned, and whether between the company and the member or members of his or his or their representatives, or between the Company and third parties, to arbitration in India or at any place outside India, and to observe and perform awards made thereon, and to do all acts, deeds, matters and things necessary or expedient to carryout or enforce the awards.
22. To pay out of the funds of the Company all expenses which the company may lawfully pay with respect to the promotion, formation and registration of the Company.
23. To pay all preliminary expenses of any company promoted by the Company or any company in which the Company is or may contemplate being interested, including in such preliminary expenses all or any part of the costs and expenses of owner of any business property acquired by any such company.
24. To pay for any rights or property acquired by the Company and to remunerate any person or Company for services rendered or to be rendered in placing of or assisting to place or guaranteeing the placing of shares in the company's capital or any debentures, debenture stock, or other securities of the company or in or about the formation or promotion of the company, or the acquisition of property by the company or the conduct of its business or otherwise for any of the purpose of the company, whether by cash payment or by the allotment of shares, debentures, or other securities of the company, credited as paid up in full or in part or otherwise.
25. To open any kind of account in any Bank, and to make, draw, accept, endorse, discount, execute and issue bills of exchange, promissory notes, bills of lading, warrants, debentures and other negotiable or transferable instruments or securities.

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26. To vest any movable or immovable property, rights or interest acquired by or belonging to the Company in any person or company on behalf of or for the benefit of the company, and with or without any declared trust in favour of the Company.
27. Subject to the provisions of the Companies Act 1956, to distribute among the members in specie or in kind any property of the Company or any proceeds of sale or disposal of any property of the company in the event of winding up of the Company.
28. To insure the whole or any part of the property and assets of the company either fully or partially to protect and indemnify the Company from liability or loss in any respect either fully or partially, and to also ensure, and to protect and indemnify any part or portion thereof either in mutual principle or otherwise.
29. To carry out in any part of the world all or any of the company's objects as principal, agent, contractor, or otherwise, and by or through agents or otherwise, and either alone or in conjunction with any person, firm, association, corporate body, municipality, province, state, body politic or government or colony or dependency thereof.
30. To subscribe, acquire, take up, and hold shares, stocks, debentures, debenture stock, bonds, obligations, and other securities issued or guaranteed by any company and to invest in debentures, debenture stock, bonds, obligations, and other securities issued or guaranteed by any Government Sovereign Ruler, Commissioner, public body or authority supreme, municipal, local or otherwise, whether in India or in any foreign country.
31. To issue and deposit any securities which the Company has power to issue by way of mortgage to secure any sum less than the nominal amount of such securities and also by way of securities for the performance of any contracts or obligations of the company or of its customers or other persons or corporations having dealings with the Company, or in whose business or undertakings the Company is interested, whether directly or indirectly.

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32. To lend and advance money or property with or without security or to give credit to such persons or companies and upon such terms as may seem expedient and in particular to customers and persons having dealings with the Company and to guarantee the performances of any contract or obligation and the payment of money of or by any such persons or companies, generally to provide guarantees and give indemnities and generally to provide credit facilities to customers and others provided that the Company shall not carry only the business of banking as defined by the Banking Regulation Act 1949.
33. To place, to reserve, or to distribute as bonus shares among the members or otherwise to apply as the Company if permitted by law and may deem fit including other money received by way of premium on shares or debentures or debentures issued at a premium by the Company and any money received in respect of dividends accrued on forfeited shares.
34. To undertake and execute any trusts, the undertakings of which may seem to the Company desirable and either gratuitous or otherwise
35. To render or assist in rendering of technical services to any person, firm, company and undertaking in connection with the business of the Company.
36. To exercise all or any of its corporate powers, rights and privileges and to conduct its business in all or any of its branches in the Union of India, and in any or all states, territories, possessions, colonies and dependencies thereof and in any or all foreign countries, and for this purpose to have and maintain and to discontinue, such number of offices and agencies therein as may be convenient.

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[C] OTHER OBJECTS: (NOT INCLUDED IN CLAUSES (A) & (B) ABOVE)

1 To carry on the business of assembling, participating in, establishing, erecting, building, planning, commissioning all types of engineering, mechanical, construction and industrial plants and projects including turnkey projects in India and any other country in the world.

2 To carry on the business of manufacturers, installers, maintainers, repairers of and dealers in electrical and electronic appliances and apparatus of every description, including ratio, magnetic tapes, tape recorders, television and telecommunication requisites, supplies, equipments and stores.

3 To manufacture, make, assemble, build, construct, mould, erect, fabricate, fund and participate in industrial, mechanical, construction and office plants, equipments, machinery, vehicles, buildings and real estate required for manufacturing, processing, transportation and other commercial, manufacturing, trading and service business.

4 To plan, manufacture, design, import, export, purchase, sell, construct, repair install and otherwise deal in or with apparatus, appliances, instruments, machinery, fixtures, devices and contrivances of every kind more particularly those used in the regulation or control of temperature, heat, ventilation, compression, moisture and other conditions of air, steam, electricity, gas, water, oil and in the drying and moistening of materials and in the regulation or control of the said or allied instruments and systems, pertaining in any manner to the act, art, science and/or business of heating, humidification, dehumidification, absorption, purification, and handling of air or other gases.

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5 To carry on the trade or business of manufacturers of and dealers, in calculators and tabulators of every kind, description and activation, accounting, book-keeping, calculating, accounting, reckoning, registering, recording, perforating, tabulating, sorting, adding, subtracting, dividing, multiplying, printing, typewriting, copying, reproducing and distributing machinery systems, apparatus appliance and devices of all kinds, and for all purposes and any products and components thereof or materials or articles used in connection therewith, and any and all other machines. Machinery, appliances, apparatus, devices, materials, substances, articles or things of a character similar or analogous to the foregoing or any of them or connected therewith.

6 To provide and undertake consultancy services in the fields of management, finance, administration, personnel including selection and recruitment, marketing, accountancy, business planning, diversification, new products, technology, engineering, contracting, erection, supervision, commissioning, guidance and other works, services and activities including the marking estimates, preparing evaluations and economic studies and furnishing all other works, services and securities required to enable clients to consider the feasibility and execution of all types of works relating to or connected therewith.

7 To undertake, carry out, promote and sponsor rural development including any program for promoting the social and economic welfare of or the uplift of the public in any rural area and to incur any expenditure on any program of rural development and to assist execution and promotion thereof either directly or through an independent agency or in any other manner.

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8 To undertake, carry out, promote sponsor or assist any activity for the promotion and growth of national economy and also any activity likely to promote national welfare or social, economic or moral uplift of the public or any section of the public and in such manner and by such means and without prejudice to the generality of the foregoing, undertake, carry out, promote and sponsor any activity for publication of any books, literature, newspapers or for organizing lectures or seminars likely to advance these objects or for giving merit awards for giving scholarships, loans or any other assistance to deserving students or other scholars or persons to enable them to prosecute their studies or academic pursuits or researches.

IV. The liability of the member(s) is limited and this liability is limited to the amount unpaid, if any, on the shares held by them.

V. The Authorised Share Capital of the Company is Rs. 10,00,000/- (Rupees Ten Lakhs) divided into 100,000/- (One lakh) Equity shares of Rs. 10/- (Rupees Ten) each. The Company has the power, from time to time, to increase or reduce its capital not below the minimum paid-up capital as aforesaid, and to vary, modify or abrogate any such rights, privileges or conditions or restrictions in such manner as may, for the time being be permitted by the Articles of Association of the Company or the legislative provisions for the time being in force that behalf.

We, the several persons, whose names, addresses, descriptions and occupations are hereunder subscribed below, are desirous of being formed into a company in pursuance of this Memorandum of Association and

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We respectively agree to take the number of shares in the capital of the Company set opposite to out respective names: -

Sl. No.	Name, address, description and occupation of each subscriber	No. of Equity Shares taken by each subscriber	Signature
1	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPA GOUNDER S/O KOLANDAVELAPPA GOUNDER VELICHANAN KADU V.K VALASU, INGUR PO PERUNDURAI TK 638058 Age: 56 OCCUPATION: BUSINESS	10,000 TEN THOUSAND ONLY	V K Palanisamy
2	PALANISAMY JAGADEESAN S/O PALANISAMY 32 VETTUKATTU VALASU INGUR, INGUR ERODE - 638058, AGE: 34 OCCUPATION: BUSINESS	10,000 TEN THOUSAND ONLY	P. Jagadeesan
3	GNANA SUNDARI D/O PALANSAMY 11-32 VETKATTUVALASU ENGUR (P) PERUNDURAI ERODE(D) 638068 Age: 31 Occupation: Business	10,000 TEN THOUSAND ONLY	J. GnanaSundari
4	NANJAPPAN BHUVANESWARI D/O NANJAPPAN 230A MURUNGATHOZUVU MURUNGATHOZUVU(P) WARD-1 ERODE 638051 Age: 30 Occupation: Business	10,000 TEN THOUSAND ONLY	N. Bhuvaneswari
	TOTAL	40,000 FORTY THOUSAND	

All have signed before me at Erode

Date: 09.10.2013
Place: Erode
Witness to above signatures:

S. Parthasarathy
S. SARAVANAN B.Com FCA
Chartered Accountant
M.No. 210614
S/o V. Shanmugam
L375/54 First Floor
Periyar Nagar Surampatti
Erode - 638009



View Signatory Details

Company / LLP Name : VKP ENGINEERING IND PRIVATE LIMITED
CIN/LLPIN : U45400TZ2013PTC019956

List of Signatories

DIN/DPIN/PAN	Full Name	Present residential address	Designation	Date of Appointment	Whether DSC Registered	Expiry Date of DSC
06692274	JAGADEESAN PALNISAMY	32 VETTUKATTU VALASU, INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	25/10/2013	NO	-
06692275	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER	VELICHANAN KADU, V.K.VALASU, INGUR PO, PERUNDURAI TK, 638058, Tamil Nadu, INDIA	Director	25/10/2013	YES	16/09/2016
06781531	MAHENDRAN	32 VETTUKATTUVALASU INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	15/01/2014	NO	-



COMPANY LIMITED BY SHARES

(THE COMPANIES ACT, 2013)

ARTICLES OF ASSOCIATION OF
VKP ENGINEERING IND PRIVATE LIMITED

TABLE F SHALL APPLY

1. All the regulations of Table 'F' in Schedule I of the Companies Act, 2013 shall be deemed to be incorporated with these Articles and to apply to the Company in so far as they are not inconsistent with provisions of the following Articles.

CONSTITUTION

2. The Company is a Private Company within the meaning of Section 2 (68) of the Act, having a minimum paid-up capital of one lakh rupees or such higher paid-up capital as may be prescribed and which by its articles

(i) restricts the right to transfer its shares;

(ii) limits the number of its members to two hundred:

Provided that where two or more persons hold one or more shares in a company jointly, they shall, for the purposes of this clause, be treated as a single member:

Provided further that—

(A) persons who are in the employment of the company; and

(B) persons who, having been formerly in the employment of the company, were members of the company while in that employment and have continued to be members after the employment ceased,

shall not be included in the number of members; and

(iii) prohibits any invitation to the public to subscribe for any securities of the company;

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BUSINESS

3. The Business of the company may comprise of all or any part of the business and objects mentioned or included in the Memorandum of Association.

SHARE CAPITAL

4. The Authorised Share Capital of the Company is Rs. 10,00,000/- (Rupees Ten Lakhs only) divided in to 100,000 (ONE LAKH) Equity Shares of Rs. 10/- (Rupees Ten) each. The Company shall have the power to increase or reduce the capital for the time being of the Company and to divide the shares in the capital into several classes with rights, privileges or conditions as may be determined.
5. The Company may issue preference shares which shall, or at the option of the Company, be liable to be redeemed, subject to the provisions of the Companies Act
6. Subject to the provisions of the Companies Act the shares shall be under the control of the Directors, who may allot or dispose of them on such terms and conditions and at such time as the Directors may think fit.
7. The Board may allot fully paid-up shares to minors represented by their guardians.

CALLS ON SHARES

8. In clause 13 of the Table 'F' the words "provided that no call shall exceed one fourth of the nominal value of the shares or be payable at less than one month from the date for the payment of the last proceeding call" shall be omitted.
9. If any Member fails to pay any call due from him on the day appointed for payment thereof, or any such extensions thereof as aforesaid, he shall be liable to pay interest on the same from the day appointed for the payment thereof to the time of actual payment at such rate as shall from time to time be fixed by the Board not exceeding 12 per cent per annum but nothing in this Articles shall render it obligatory for the Board to demand or recover any interest from any such Member.



SHARE CERTIFICATE

10. Every persons whose name is entered as a member in the register of members shall be entitled to receive within two months after incorporation, in case of subscribers to the memorandum or after allotment or within one month after the application for the registration of transfer or transmission or within such other period as the conditions of issue shall be provided,—
    (a) One certificate for all his shares without payment of any charges; or
    (b) Several certificates, each for one or more of his shares, upon payment of Twenty rupees for each certificate after the first.
11. Every certificate shall be under the seal and shall specify the shares to which it relates and the amount paid-up thereon.
12. In respect of any share or shares held jointly by several persons, the company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all such holders

TRANSFER OF SHARES

13. No share shall be transferred to any other person so long as any member is willing or if no member is willing any other person selected by the Directors as one whom it is desirable in the interest of the Company to admit to membership is willing to purchase the same at the fair value.
14. Except where the transfer is made pursuant to Article 19, thereof, the person proposing to transfer any shares shall give notice in writing to the Company that he desires to transfer the same. Such notice shall constitute the Directors as agents of the transferor for the sale of the shares to any member or to any person selected as aforesaid at the fair value to be agreed upon between the transferor and the purchaser and in default of such agreement at a value to be fixed by the Auditors of the Company. The notice may include several shares and in such case it shall operate as if it were a separate notice in respect of each share. The notice shall not be revocable except with the sanction of the Directors.



15. Every share specified in the notice given pursuant to the preceding Article hereof shall be offered to the members in proportion to the shares of the same class in the capital of the Company held by them, or if there are no other holders of shares of the same class then to the members generally in the proportion to the shares of the Company then held by them. If no member is ready and willing to take such shares the same may be offered to any person selected by the Directors as one whom it is desirable in the interest of the Company of admit to membership.
16. If the Directors shall within the period of 28 days after being served such notice, finds a member or person selected as aforesaid, willing to purchase the shares and gives notice thereof the transferor shall be bound upon payment of the fair value fixed as aforesaid to transfer the share to the purchaser.
17. In case any difference arises between the transferor and the Purchaser as to the fair value of a share the Auditors of the Company shall certify the fair value and the same shall be binding on the transferor and the Purchaser.
18. In any case the transferor after having become bound as aforesaid makes default in transferring the share, the Directors may receive the purchase money and shall thereupon cause the name of the purchaser to be entered in the register as the holder of the share and shall hold the purchase money in trust for the transferor. The receipt of the Directors for the purchase money shall be a good discharge to the purchaser and after his name has been entered in the register in purported exercise of the aforesaid power the validity of the transfer shall not be questioned by any person.
19. If the Directors shall not, within the time prescribed as aforesaid after being served with notice, find a member or person selected as aforesaid willing to purchase the shares or any of them and give notice in the aforesaid manner, the transferor shall at any time within thirty days thereafter be at liberty, subject to Articles herein to sell and transfer the shares to any person at any price.



20. The instrument of transfer of any share shall be in writing in the form prescribed if any, by law or otherwise and shall be duly stamped and executed by or on behalf of the transferor and the transferee and shall specify the full name, address and occupation, if any, of transferee. Every instrument of transfer shall be attested. The transferor shall be deemed to remain the holder of the share until the name of the transferee is entered in the register of members in respect thereof.
21. Restrictions as to transfer shall not apply to transfer of shares by a member to any major child, son-in-law, father, mother, brother, sister, wife or husband of such members, and any share of a deceased member to whom such deceased member may have specifically bequeathed the same the shares standing in the name of such deceased member or his executors or administrators may be transferred to the trustee of his will and shares standing in the name of the trustee of the will of any deceased member may be transferred upon any change of trustee to the trustees for the time being of such will. A member may by way of gift or otherwise, transfer any shares to any child, father, brother, sister, husband and wife of such members.
22. No transfer shall be made to an insolvent or person of unsound mind.
23. A fee not exceeding Rs. 2/- may be charged for the registration thereof.
24. The executor or administrator of a deceased member (not being one of several joint-holders) shall be the only person recognised by the company as having any title to the share registered in the name of such member and, in case of the death of any one or more of the joint holders of any registered share, the survivor shall be the only person recognised by the Company as having any title to or interest in such share, but nothing herein contained shall be taken to release the estate of a deceased joint-holder from any liability on the share held by him jointly with any other person. Before recognizing any executor or administrator the Board may require him to obtain a Grant of Probate or Letter of Administration or other legal representation, as the case may be; from a competent Court in India, provided nevertheless that in any case where the Board in its absolute discretion thinks fit it shall be lawful for the Board to dispense with the production of Probate or Letters of Administration or such other legal representation upon such terms as to indemnity or otherwise at the Board, in its absolute discretion may consider.



25. Any Committee or guardian of a lunatic member of any person becoming entitled to or to transfer a share in consequence of the death or bankruptcy or insolvency of any Member upon producing such evidence that he sustains the character in respect of which he proposes to act under this Article or of his title as the Board thinks sufficient, may, with the consent of the Board (which the Board shall not be bound to give), be registered as a member in respect of such share, or may subject to the regulations as to transfer herein contained transfer such share. This article is hereinafter referred to us the "Transmission Article".

    (a) the person so becoming entitled under the Transmission Article shall elect be to registered as holder of the share himself, he shall deliver or send to the Company a notice in writing signed by him stating that he so elect.

    (b) If the person aforesaid shall elect to transfer the share, he shall testify his election by executing an instrument of transfer of the share.

    (c) All the limitations, restrictions and provisions of these Articles relating to the right to transfer and registration of instruments of transfer of a share shall be applicable to any such notice or transfer as aforesaid as if the death, lunacy, bankruptcy or insolvency of the Member had not occurred and the notice of transfer were a transfer signed by that Member.

BUY BACK OF SHARES

26. Subject to and in full compliance of the requirements of Sections 68, 69 and 70 of the Companies Act, 2013 or corresponding provisions of any re-enactment thereof and any Rules and Regulations as may be prescribed by the Central Government, or any other appropriate authority in this regard, either the Company in a General Meeting may, at any time and from time to time, by a Special resolution authorise or the Board of Directors may itself approve and authorise buy-back of any part of the share capital of the company fully paid up on that date.

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GENERAL MEETINGS

27. All general meetings other than annual general meeting shall be called extraordinary general meeting.

28. (i) The Board may, whenever it thinks fit, call an extraordinary general meeting.

(ii) If at any time directors capable of acting who are sufficient in number to form a quorum are not within India, any director or any two members of the company may call an extraordinary general meeting in the same manner, as nearly as possible, as that in which such a meeting may be called by the Board.

PROCEEDINGS AT GENERAL MEETINGS

29. (i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.

(iii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in section 103.

30. The chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.

31. If there is no such Chairperson, or if he is not present within fifteen minutes after the time appointed for holding the meeting, or is unwilling to act as chairperson of the meeting, the directors present shall elect one of their members to be Chairperson of the meeting.

32. If at any meeting no director is willing to act as Chairperson or if no director is present within fifteen minutes after the time appointed for holding the meeting, the members present shall choose one of their members to be Chairperson of the meeting.

33. In case of a One Person Company—

(iv) the resolution required to be passed at the general meetings of the company shall be deemed to have been passed if the resolution is agreed upon by the sole member and communicated to the company and entered in the minutes book maintained under section 118;

(v) such minutes book shall be signed and dated by the member;

(vi) the resolution shall become effective from the date of signing such minutes by the sole member.

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ADJOURNMENT OF MEETING

34. (i) The Chairperson may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place.

(ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.

(i) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting.

(ii) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

VOTING RIGHTS

35. Subject to any rights or restrictions for the time being attached to any class or classes of shares,—

(a) on a show of hands, every member present in person shall have one vote;and

(b) on a poll, the voting rights of members shall be in proportion to his share in the paid-up equity share capital of the company.

36. A member may exercise his vote at a meeting by electronic means in

37. Accordance with section 108 and shall vote only once.

38. (i) In the case of joint holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders.

*(iii)*For this purpose, seniority shall be determined by the order in which the names stand in the register of members.

39. A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy, may vote, whether on a show of hands or on a poll, by his committee or other legal guardian, and any such committee or guardian may, on a poll, vote by proxy.

40. Any business other than that upon which a poll has been demanded may be preceded with, pending the taking of the poll.

41. No member shall be entitled to vote at any general meeting unless all calls or other sums presently payable by him in respect of shares in the company have been paid.



42. (i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes.

(ii) Any such objection made in due time shall be referred to the Chairperson of the meeting, whose decision shall be final and conclusive.

PROXY

43. The instrument appointing a proxy and the power-of-attorney or other authority, if any, under which it is signed or a notarized copy of that power or authority, shall be deposited at the registered office of the company not less than 48 hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, or, in the case of a poll, not less than 24 hours before the time appointed forthe taking of the poll; and in default the instrument of proxy shall not be treated as valid.

44. An instrument appointing a proxy shall be in the form as prescribed in the rules made under section 105.

45. A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given:

Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.

DIRECTORS

46. Subject to the provisions of the Companies Act, 2013, the number of Directors of the Company shall not be less than two, and not more than twelve.

47. The first directors of the Company are:

1) VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER
2) PALNISAMY JAGADEESAN

The two Directors mentioned hereinabove in Article 47 shall be permanent Directors and shall remain as Directors for life or until they voluntarily resign their office.

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48. The Board shall have power at any time from time to time to appoint Additional Directors other than a person who fails to get appointed as a director in a general meeting, as an additional director, subject to the maximum mentioned above, who shall hold office until the next annual general Meeting, but however such Additional Directors shall be eligible for re-appointment by the Company as a Director at that Meeting.
49. The Board may appoint as Alternate Director recommended for such appointment by the Director (hereinafter called the 'Original Director') to act for him during his absence for a period of not less than three months from the State in which the Meetings of the Board are ordinarily held. An Alternate Director appointed under this Article shall not hold office as such, for a longer period than that permissible to the Original Director in whose place he has been appointed and shall vacate office if and when the Original Director returns to the said State. If the term of office of the Original Director is determined before he so returns to the said State any provisions in the Act or in these Articles for the automatic reappointment or retiring Director in default of another appointment shall apply to the Original Director and not to the Alternative Director.
50. A Director shall not be required to hold any qualification shares and shall not be liable to retire by rotation.
51. Unless otherwise determined by the Company in General Meeting, each Director shall be entitled to receive out of funds of the Company for his services in attending Meeting of the Board or a committee of the Board of Directors of the Company may from time to time determine not exceeding, however, a sum of Rs. 2,000/- for each such Meeting attended. The Directors shall be entitled to be paid reasonable traveling, hotel and other expenses incurred in connection with attendance at Board and committee Meetings and otherwise in connection with the business of the Company for execution of their duties as Directors of the Company.
52. The remuneration of the Directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day to day.
53. Subject to the provisions of the Act, a Director, who is neither in the whole time employment nor a Managing Director may be paid remuneration by way of commission if the Company so resolves.
54. Subject to Section 174 of the Act, the quorum for a Meeting of the Board shall be one-third of its total strength (excluding Director, if any whose

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place may be vacant at the time and any fraction contained in that one third being rounded off as one), or two Directors, which ever is higher.

55. A resolution in writing signed by all the Directors shall be as effective as a resolution passed at a Meeting of the Directors duly convened and held and may consist of several documents in the like from each duly signed by one or more of the Directors.

56. The Directors may, from time to time, at their discretion raise or borrow for the purpose of the Company's business such sums of money as they think fit. The Directors may secure the repayment of or raise any such sum or sums as aforesaid by mortgage or charge upon the whole or any part of the property and assets of the Company, present and future including the uncalled capital or by the issue, at such price as they may think fit, of bonds or debentures or debenture stock, either charged upon the whole or any part of the property and assets of the Company or not so charged or in such other way as the Directors may think expedient.

57. The Board may exercise, all such powers of the Company and do such acts and things as are not by the Act, or any other Act or by the Memorandum or by the Articles of the Company, required to be exercised by the Company in General Meeting, subject nevertheless to these Articles, the provisions of the Act, or any other Act and to such regulations being not inconsistent with the aforesaid regulations or provisions as may be prescribed by the Company in General Meeting, but no regulation made by the Company in the General Meeting, shall invalidate any prior act of the Board which would have been valid if that regulation had not been made.

58. The Directors may, from time to time, accept deposits from members (either in advance of calls or otherwise), directors and from their relatives and generally raise or borrow any sums of money for the purpose of the Company from the Members or other persons, or the Director may themselves advance money to the company on such interest as may be approved by the Board of Directors.

59. The Directors, may, from time to time, secure the payment of such moneys in such manner and upon such terms and conditions in all respects they deem fit and in particular by the issue of debentures, or bonds of Company or any mortgage, charge hypothecation, pledge, lien or other security of all or any part of portion of the property of the Company and the uncalled capital for the time being.



60. The Director may grant retiring pensions or annuities or other allowance, including allowances on death to any person or to the widow or dependents of any person in respect of services rendered by him to the Company as Managing Director, Manager, or as an Officer or employee of the Company or of any subsidiary Company or if its Holding Company (if any) notwithstanding that he may have been a Director of the Company and may make payments towards insurance or trusts for such purposes in respect of such person and may include rights in respect of such pensions, annuities and allowances in terms of engagement of any such person.

61. (a) Subject to the provisions of the Companies Act, 2013, and notwithstanding anything to the contrary contained in these Articles, so long as any moneys remain owing by the Company to any Financing Company or Body or Financial Corporation or Credit Corporation or Bank or any Insurance Corporation (each such Financing Company or Body or Financial Corporation, Credit Corporation or Bank or any Insurance Corporation is hereinafter referred to as "Financial Institution") out of any loans granted by the Financial Institution to the Company or so long as the Financial Institution continues to hold debentures in the Company by direct subscription or private placement, or so long as the Financial Institution hold shares in the Company as a result of underwriting or direct subscription or so long as any liability of the Company arising out of any guarantee furnished by the Financial Institution on behalf of the Company remains outstanding the Financial Institution shall have a right to appoint from time to time, its nominee/s as a Director or Directors (which Director or Directors is/are hereinafter referred to as Nominee Director/s) on the Board of the Company and to remove from such office the Nominee Director/s so appointed, and at the time of such removal and also in the case of death or resignation of the Nominee Director/s so appointed at any time appoint any other person/persons in his/their place/s and also fill any vacancy which may occur as a result of such director/s ceasing to hold office for any reasons whatsoever; such appointment or removal shall be made in writing on behalf of the Financial Institution appointing such Nominee Director/s and shall be delivered to the Company at its registered office.



(b) The Nominee Director/s shall not be required to hold any qualification shares in the Company to qualify him/them for the office of a Director/s nor shall he/they be liable to retirement by rotation. The Board of Directors of the Company shall have no power to remove from office the Nominee Director/s shall be entitled to the same rights and privileges and be subject to the same obligations as any other Director of the Company.

(c) The Nominee Director/s so appointed shall hold the office only so long as any moneys remain owing by the Company to the Financial Institution or so long as the financial Institution holds Debentures in the Company as result of direct subscriptions or private placement or so long as the Financial Institution holds shares in the Company as a result of underwriting or direct subscription or the liability of the Company arising out of any guarantee, is outstanding and the Nominee Director/s so appointed in exercise of the said power shall ipso facto vacate such office, immediately the moneys owing by the Company to the Financial Institution is paid off or on the Financial Institution ceasing to hold debentures/shares in the Company or on the satisfaction of the liability of the Company arising out of any Guarantee furnished by the Financial Institution.

(d) The nominee Director/s appointed under this Article shall be entitled to receive all notices of and attend al General Meetings, Board Meetings and the Meeting of the Committee of which the Nominee Director/s is/are member/s as also the minutes of such meeting. The Financial Institution shall also be entitled to receive all such notices and minutes.

(e) The Company shall pay to the Nominee Director/s sitting fees and expenses to which the other Directors of the Company are entitled. PROVIDED that if the Nominee Director is an officer of the Industrial Development Bank of India (IDBI) the sitting fees in relation to such Nominee Director shall accrue to IDBI and the same shall accordingly be paid by the Company directly to the IDBI. Any expenses that may be incurred by the Financial or such Nominee Director/s in connection with his/their appointment of Directorship shall be paid by the Company. The IDBI or the Financial Institution shall be entitled to depute observer to attend the meetings of the Board or any other Committee constituted by the Board.



(f) The nominee Director/s shall notwithstanding anything to the contrary contained in these Articles, be at liberty to disclose any information obtained by him/them to the Financial Institution appointing him/them as such Director/s.

MANAGING DIRECTORS – DEPUTY MANAGING DIRECTOR

62. Subject to the provisions of the Act and of these Articles, the Board shall have power to appoint from time to time any one or more of its Directors as Managing Director or Managing Directors of the company and any other of its Directors as the Deputy managing Director or Deputy Managing Directors of the Company for a fixed term not exceeding five years at a time and upon such terms and conditions as the Board thinks fit, and subject to the provisions of Articles 56, the Board may by resolution vest in such Managing Director/s or Deputy managing Director/s such of the powers hereby vested in the Board generally as it thinks fit, as such powers may be made exercisable for such conditions and subject to such restrictions as it may determine. The remuneration of the Managing Director/s and the Deputy Managing Director/s may be by way of monthly payment, fee for each meeting or participating in profits, or by all or any of these modes or any other mode not expressly prohibited by the Act.

63. The Managing Director or the Deputy Director shall not exercise the powers to:

(a) make calls on shareholders in respect of money unpaid on their share in the Company.

(aa) the power to authorize the buyback referred to in the first proviso to clause (b) of sub sec (2) of section 77A,

(b) Issue debentures;

And except to the extent mentioned in the resolution passed at the Board meeting under Section 292 of the Act, the Managing Director/s or the Deputy Managing Director/s shall also not exercise the powers to: -

(c) borrow moneys, otherwise than on debenture;

(d) invest the funds of the Company; and

(e) make loan.



64. The company shall not appoint or employ, or continue the appointment or employment of a person as its Managing, Deputy Managing or whole time Director who: -

(a) is an undischarged insolvent, or has at any time been adjusted as insolvent;

(b) suspends, or has at any time suspended, payment to his creditors, or members, or has at any time made, a composition with them; or

(c) is or has at any time been convicted by a Court of an offense involving moral turpitude.

65. The Managing Director and the Deputy Managing Director shall not while he continues to hold that office be subject to retirement by rotation and if he ceases to hold the office of Director he shall ipso facto and immediately cease to be the Managing director or the Deputy Managing Director, as the case may be.

66. Subject to the provisions of the Act and of these Articles, the Board may from time to time appoint any of its members, as Executive Director or Directors of the Company for a fixed term not exceeding five years at a time and upon such terms and conditions as the Board thinks fit, an Executive director shall not be required to hold any qualification shares, and subject to provisions of Companies Act, the Board may from time to time determine that one or more of such Executive Director or Directors appointed or proposed to be appointed by the Board shall not be liable to retire by rotation so long as he continues to hold that office.

MANAGER OR SECRETARY

67. Subject to the provisions of the Act –

(1) A manager or secretary may be appointed by the Board for such term, at such remuneration and upon such conditions as it may think fit, and any manager or secretary so appointed may be removed by the Board.

(2) A director may be appointed a manager or secretary.



68. A provision of the Act, or these regulations requiring or authorizing a thing to be done by or to a director and the manager or secretary, shall not be satisfied by its being done by or to the same person acting both as director and as, or in place of the manager or secretary.

ACCOUNTS

69. The Company shall comply with the provisions of the Companies Act, 2013 regarding maintenance of books of accounts and other statutory records.

AUDIT

70. Subject to the provisions of Section 139 of the Act –

(i) The Company shall at each Annual General Meeting appoint an Auditor or Auditors to hold office from the conclusion of the meeting until the conclusion of the next Annual General Meeting.

(ii) Rights and Duties of the Auditors shall be regulated in accordance with Sections 139 to 147 of the Act.

(iii) Once at least in every year accounts of the Company shall be audited and correctness of the Final Accounts be ascertained by one or more Auditor or Auditors.

(iv) Every Account of the Company when audited and approved by General Meeting shall be conclusive.

THE SEAL

71. The Company shall have a common seal and the Directors shall provide for the safe custody thereof. The Seal shall not be affixed to any instrument except by the authority of a resolution of the Board of Director or a Committee of the Board except in the presence of at least two Directors or of one Director and the Secretary and such Directors or Secretary shall sign each instrument to which the Seal be affixed in his presence. Such signatures shall be conclusive evidence of the fact that the Seal has been properly affixed.



INDEMNITY

72. Every officer of the company shall be indemnified out of the assets of the company against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favour or in which he is acquitted or in which relief is granted to him by the court or the Tribunal.

SECRECY

73. Except to the extent allowed by the Companies Act, no member shall be entitled to visit or inspect any works of the company without the permission of the directors or to require discovery of or any information respecting any detail of the Company's trading or any matter which is or may be in the nature of a trade secret, mystery or trade, secret process or any other matter which may relate to the conduct of the business of the Company and which in the opinion of the directors, it would be inexpedient in the interest of the Company to disclose.



ALTERATION IN ARTICLES OF ASSOCIATION

74. The Company may from time to time alter, add to amend or delete any of the existing clauses of the Articles of Association of the Company or may add a new clause thereto or adopt a new set of articles in accordance with the provision of the Companies Act, 2013.

Sl. No.	Name, address, description and occupation of each subscriber	Signature
1	VETTUKATTUVALASU PALANISAMY KULANJAVELAPPA GOUNDER S/O KOLANJAVELAPPA GOUNDER VELICHANAN KADU V.K. VALASU, INGUR PO PERUNDURAI TK 638055 Age: 56 Occupation: BUSINESS	V.K. Palanisamy
2	PALANISAMY JAGADEESAN S/O PALANISAMY 32 VETTUKATTU VALASU INGUR INGUR ERODE: 638058 - AGE 21 OCCUPATION: BUSINESS	P. Jagadeesan
3	GNANA SUNDARI. D/O PALANISAMY 11-32 VETKATTUVALASU ENGUR(P) PERUNDURAI ERODE[D] 638058 AGE: 31 OCCUPATION: BUSINESS	J. GnanaSundari
4	NANJAPPAN BHUVANESWARI D/O NANJAPPAN 230A MURUNGATHOZUVU MURUNGATHOZUVU(P) WARD-1 ERODE 638051 AGE: 30 Occupation: Business	N. Bhuvaneswari

All have signed before me at Erode

Date: Erode
Place: 09.10.2013

Witness to above signatures:

S. Saravanan
S. SARAVANAN B.Com FCA
Chartered Accountant
M.No 210614
S/o V. Shanmugam
L 375/54 First Floor
Periyar Nagar, Surampatti
Erode - 638009

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View Signatory Details

Company / LLP Name : VKP ENGINEERING IND PRIVATE LIMITED
CIN/LLPIN : U45400TZ2013PTC019956

List of Signatories

DIN/DPIN/PAN	Full Name	Present residential address	Designation	Date of Appointment	Whether DSC Registered	Expiry Date of DSC
06692274	JAGADEESAN PALNISAMY	32 VETTUKATTU VALASU, INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	25/10/2013	NO	-
06692275	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER	VELICHANAN KADU, V.K.VALASU, INGUR PO, PERUNDURAI TK, 638058, Tamil Nadu, INDIA	Director	25/10/2013	YES	16/09/2016
06781531	MAHENDRAN	32 VETTUKATTUVALASU INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	15/01/2014	NO	-

ANNEXURE 1

VKP ENGINEERING IND PRIVATE LIMITED
CIN U45400TZ2013PTC019956
Registered Office: 151/260B, BHAVANI ROAD SOUTH SIDE, PERUNDURAI - 638052

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED IN THE MEETING OF BOARD OF DIRECTORS OF THE COMPANY HELD ON 08th JANUARY 2024 AT 10.00 AM AT THE REGISTERED OFFICE OF THE COMPANY AT 151/260B, BHAVANI ROAD SOUTH SIDE, PERUNDURAI – 638052.

Sub: To authorize **Mr.P.JAGADEESAN, Director** to sign, execute and complete the formalities pertaining to execute the Quarry Lease for rough stone.

RESOLVED THAT Mr.P.JAGADEESAN, Director of the Company who is residing at Door No.11/32, Vettukattuvalasu, Ingur (P.o), Perundurai, Erode – 638 052 (Aadhar No 7091 1371 8745) be and is hereby authorized to sign the mining plan and relevant documents and to submit the same to the DD (Mines), other Govt. Correspondences Tirupur on behalf of the Company for getting approval"

"RESOLVED FURTHER THAT Mr.P.JAGADEESAN, Director of the Company is hereby authorized to sign the application of Environment Clearance and consent of the Tamil Nadu Pollution Control Board, attend the meeting and sign the relevant on behalf of the Company for obtaining the consent of the Tamil Nadu Pollution Control Board"

Place: Perundurai
Date: 08.01.2024

By Order of the Board

On behalf of the Board

V.K.PALANISAMY,
Director

P.JAGADEESAN,
Director

P.MAHENDRAN,
Director

J.GNANASUNDARI,
Director

M.BHUVANESWARI,
Director

Scanned with OKEN Scanner

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

ANNEXURE X

आधार

இந்திய அரசாங்கம்
Unique Identification Authority of India
Government of India

பதிவேட்டு எண்/ Enrolment No.: 1111/71211/53228

To
ஜெகதீசன் பழனிச்சாமி
Jagadeesan Palanisamy
S/O: Palanisamy
11/32
VETTUKATTUVALASU
Ingur
Ingur
Erode Tamil Nadu - 638052
9842730265

Download Date: 31/07/2018

Generation Date: 30/10/2013

Signature valid

QR Code with Photograph

உங்கள் ஆதார் எண் / Your Aadhaar No. :

7091 1371 8745

VID : 9173 6631 7105 6045

எனது ஆதார், எனது அடையாளம்

இந்திய அரசாங்கம்
Government of India



ஜெகதீசன் பழனிச்சாமி
Jagadeesan Palanisamy
பிறந்த நாள்/DOB: 26/04/1979
ஆண்/ MALE

7091 1371 8745

VID: 9173 6631 7105 6045

எனது ஆதார், எனது அடையாளம்

Government of India

AADHAAR

தகவல்

- ஆதார் அடையாளத்திற்கான சான்று, குடியுரிமைக்கு அல்ல.
- அடையாள சான்றை ஆன்லைன் அதன்டிகேஷன் மூலமாகப் பெறவும்.
- இது எலக்ட்ரானிக் செயல்முறை மூலம் தயாரிக்கப்பட்ட கடிதமாகும்.

INFORMATION

- Aadhaar is a proof of identity, not of citizenship.
- To establish identity, authenticate online.
- This is electronically generated letter.

- ஆதார் நாடு முழுவதிலும் செல்லுபடியாகும்.
- வருங்காலத்தில் அரசு மற்றும் அரசு சாரா சேவைகளை பயன்படுத்திக் கொள்ள ஆதார் உதவிகரமாக இருக்கும்
- Aadhaar is valid throughout the country.
- Aadhaar will be helpful in availing Government and Non-Government services in future.

Unique Identification Authority of India

முகவரி:
S/O: பழனிச்சாமி, 11/32, வெட்டுகாட்டுவலசு, இங்கூர், ஈரோடு,
தமிழ் நாடு - 638052

Address:
S/O: Palanisamy, 11/32,
VETTUKATTUVALASU, Ingur, Erode,
Tamil Nadu - 638052

QR Code with Photograph

7091 1371 8745

VID: 9173 6631 7105 6045

आयकर विभाग
INCOME TAX DEPARTMENT

भारत सरकार
GOVT. OF INDIA

VKP ENGINEERING IND PRIVATE LIMITED

25/10/2013
Permanent Account Number
AAECV6374R

Signature

In case this card is lost / found, kindly inform / return to :
Income Tax PAN Services Unit, UTITSL
Plot No. 3, Sector 11, CBD Belapur,
Navi Mumbai - 400 614.

इस कार्ड के खोने/पाने पर कृपया सूचित करें/लौटाएं :
आयकर पैन सेवा यूनीट, UTIITSL
प्लाट नं: ३, सेक्टर ११, सी.बी.डी.बेलापुर,
नवी मुंबई ४००- ६१४.

ASSISTANT DIRECTOR
TIRUPUR
SECRECY AND ADMIN

ANNEXURE XI

ASSISTANT DIRECTOR TIRUPUR

2121010

சென்னைப் பல்கலைக் கழகம்

University of Madras

அறிவியல் புலம்

FACULTY OF SCIENCE

சென்னைப் பல்கலைக் கழகப் பேரவை 1994 ஆம் ஆண்டு ஏப்ரல் மாதம் கூடத்த கனிமவியல் தேர்வில் பெ.தங்கராசு என்பவர் முதல் வகுப்பில் தேர்ச்சி பெற்றார் என்று தக்க தேர்வாளர்கள் சான்றளித்தபடி அறிவியல் நிறைஞர் என்னும் பட்டத்தை அவருக்குப் பல்கலைக் கழக இலச்சினையுடன் வழங்குகிறது.

The Senate of the UNIVERSITY OF MADRAS *hereby makes known that* P. Thangaraju *has been admitted to the Degree of Master of Science, he/she having been certified by duly appointed Examiners to be qualified to receive the same in* Geology *and was placed in the* First *Class, at the Examination held in* April 1994.

Given under the seal of the University

சேப்பாக்கம், Chepauk,
சென்னை, Madras
நாள் Dated 25-01-1999

பதிவாளர் Registrar

P.T. [illegible]
துணை வேந்தர்
Vice-Chancellor

125 A

ANNEXURE XII

ASSISTANT DIRECTOR * TIRUPUR * GEOLOGY AND MINING

GOVERNMENT OF INDIA
MINISTRY OF LABOUR AND REHABILITATION
OFFICE OF THE DIRECTOR GENERAL OF MINES SAFETY

Certificate of Practical experience granted by the Manager to a candidate for a Manager's / Surveyor's / Foremen's / Over man's / Sirdar's / Mate's / Short firer's/ Blaster's Certificate of competency (Restricted) examination under the Metalliferous Mines Regulations 1961.

I **T.VENKATARAJAGOPALAN** being the Mines Agent of **M/S.LIMENAPH CHEMICALS, RAJAPALAYAM OF LIMESTONE PRODUCTS (Thenmali Limestone Mine)** do hereby certify that Thiru. **P.THANGARAJU**, son of S.PERIASAMY (whose signature is appended) worked as a Geologist in the above mine from 02.05.1994 to 30.12.1999. During his term of work aforesaid, he has obtained practical experience as detailed overleaf. The duties connected with his work have involved continuous attendance at the mine and have been efficiently performed by him.

I believe him to be of good character and a fit and proper candidate to be examined for Certificate of Competency.

THENMALAI LIME STONE MINES
10/6/06
Agent (Mines)

(Signature with date and official Seal)
[T.VENKATARAJAGOPALAN]

Mines Agent:

P.O. : **ARUKANGULAM**

District : **TIRUNELVELI**

State : **TAMIL NADU**

(Signature of Candidate)

(State name of Mineral) : LIMESTONE

126 A

S.No	Particulars of practical Expereince (a)	Place of Experience (b)	Period of practical experience(c)		Total Experience (c)		
			From	To	Yr.	Month	Day
01.	As a Trainee in Drilling Operation.	Semi Mechanised Opencast working	02.05.1994	15.07.1995	01	02	14
02.	As a Trainee in Blasting Operation.		16.07.1995	10.12.1996	01	04	25
03.	Exploration		11.12.1996	31.01.1998	01	01	20
04.	Surveying		01.02.1998	25.06.1998	00	04	25
05.	Sampling Quality control and		26.06.1998	20.07.1999	01	00	24
06.	Supervision in HEMM Operation.		21.07.1999	30.12.1999	00	05	10
GRAND TOTAL					05	07	28
(Five Years Seven Months Twenty Eight Days Only)							

AVERAGE MONTHLY OUTPUT (D) / AVERAGE DAILY EMPLOYMENT (e) DURING THE ABOVE PERIOD IS GIVEN BELOW :

In below ground working	In open – cast working	In all
Nil Nil	35	35

of THENMALAI LIME STONE MINES

Signature of Candidate

Signature of Manager with Date & Seal
[T.VENKATARAJAGOPALAN]

Name of the Mine :

Instructions :-

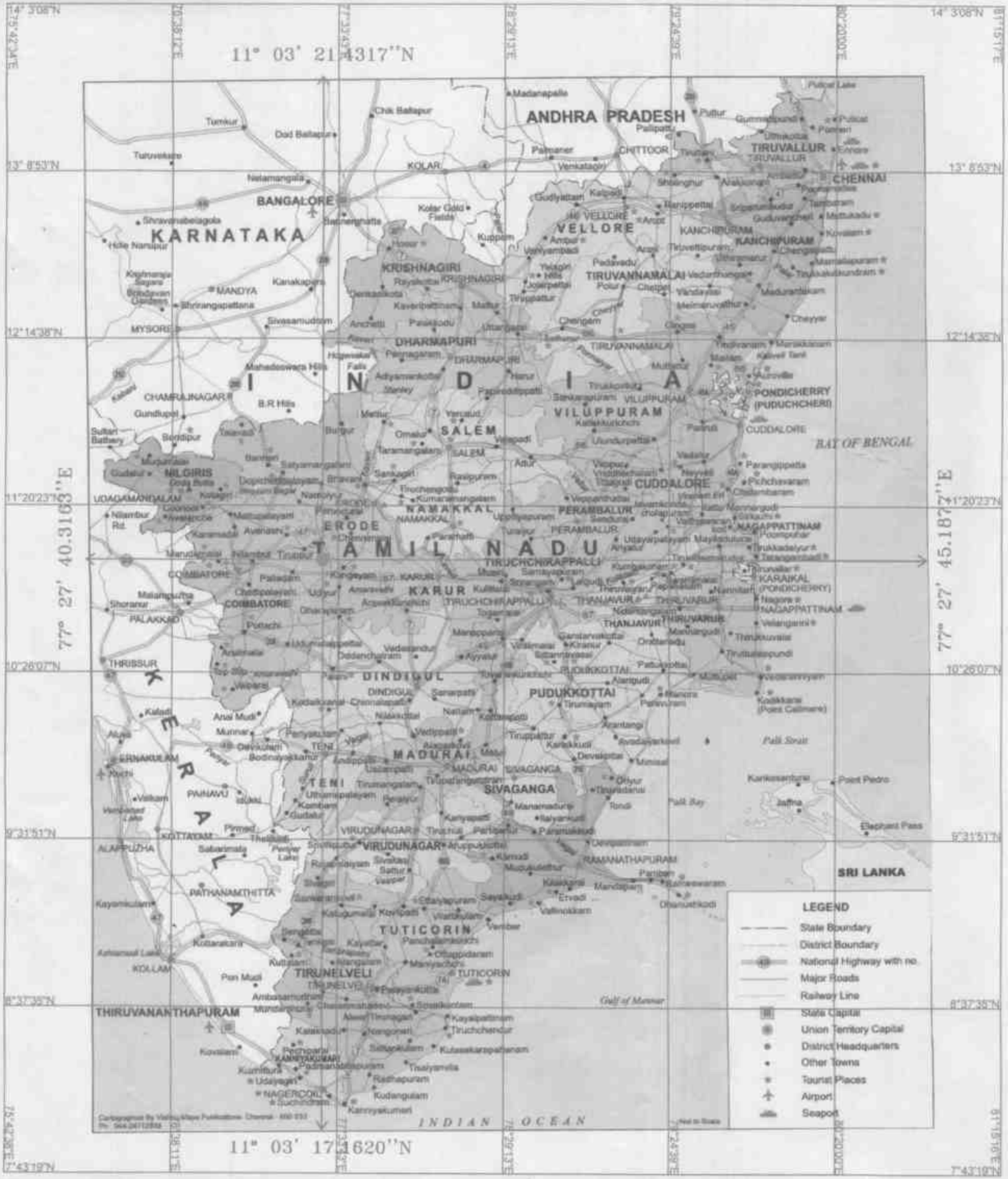
01. State clearly the nature of duties

02. State whether on surface, in open cast workings or below ground

03. State specifically the period spent by the applicant in different mining operations, or surveying operations, as the case may be. If the employment has not been such as to involve continuous attendance of the applicant at the mine,it must be stated how many days a week he was employed at the mine, whether underground or above ground and in what capacity.

04. Delete if the mine is a Metalliferous mine

05. Delete if the mine is a Coal mine



N

ASSISTANT DIRECTOR GEOLOGY AND MINING TIRUPUR

PLATE NO:I

DATE OF SURVEY : 27.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2.
EXTENT : 1.64.38 Ha.
VILLAGE : PERUNTHOLUVU.
TALUK : TIRUPPUR SOUTH.
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

INDEX

Q. L.A. AREA :

TOPO SHEET NO. : 58 E/08

LATITUDE : 11° 03' 17.1620"N to 11° 03' 21.4317"N

LONGITUDE : 77° 27' 40.3163"E to 77° 27' 45.1877"E

LOCATION PLAN

SCALE 1:24,00,000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

Dr.P.THANG... M.Sc., M.Phil., M.B.A., M.D.,
QUALIFIED PERSON
As Per Rule 15(2)(a)(ii)(a) of MCR 2016

PLATE NO:I-A

DATE OF SURVEY : 27.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR. THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA

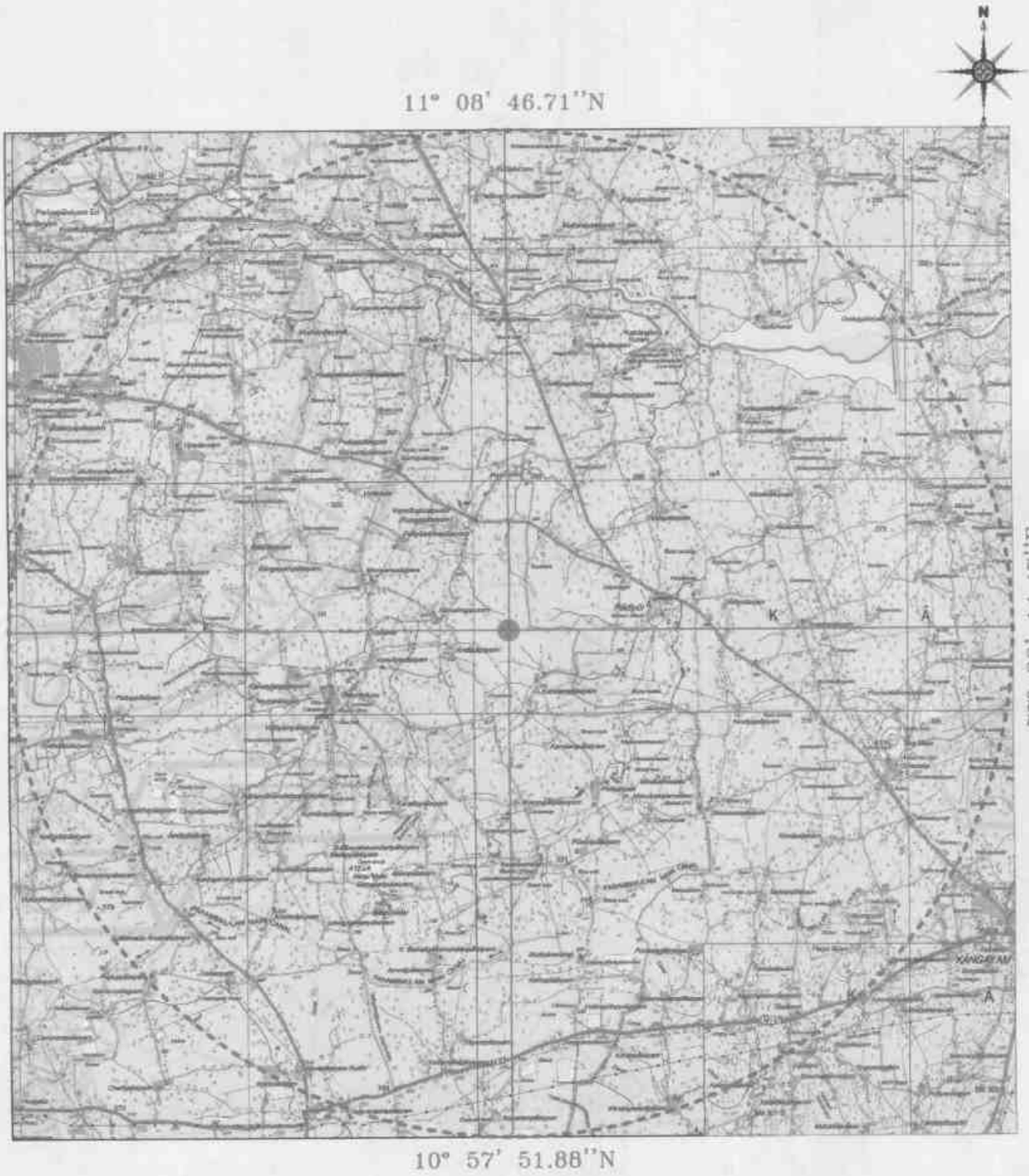
S.F.No : 543/2.
EXTENT : 1.64.38 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

ASSISTANT DIRECTOR GEOLOGY AND MINING TIRUPPUR

INDEX

CONVENTIONAL SYMBOLS





TOPO SKETCH OF QUARRY LEASE APPLIED AREA FOR 10Km RADIUS

SCALE- 1:100000

TOPO SHEET NO. : 58 E/08

LATITUDE : 11° 03' 17.1620"N to 11° 03' 21.4317"N

LONGITUDE : 77° 27' 40.3163"E to 77° 27' 45.1877"E

10KM RADIUS :

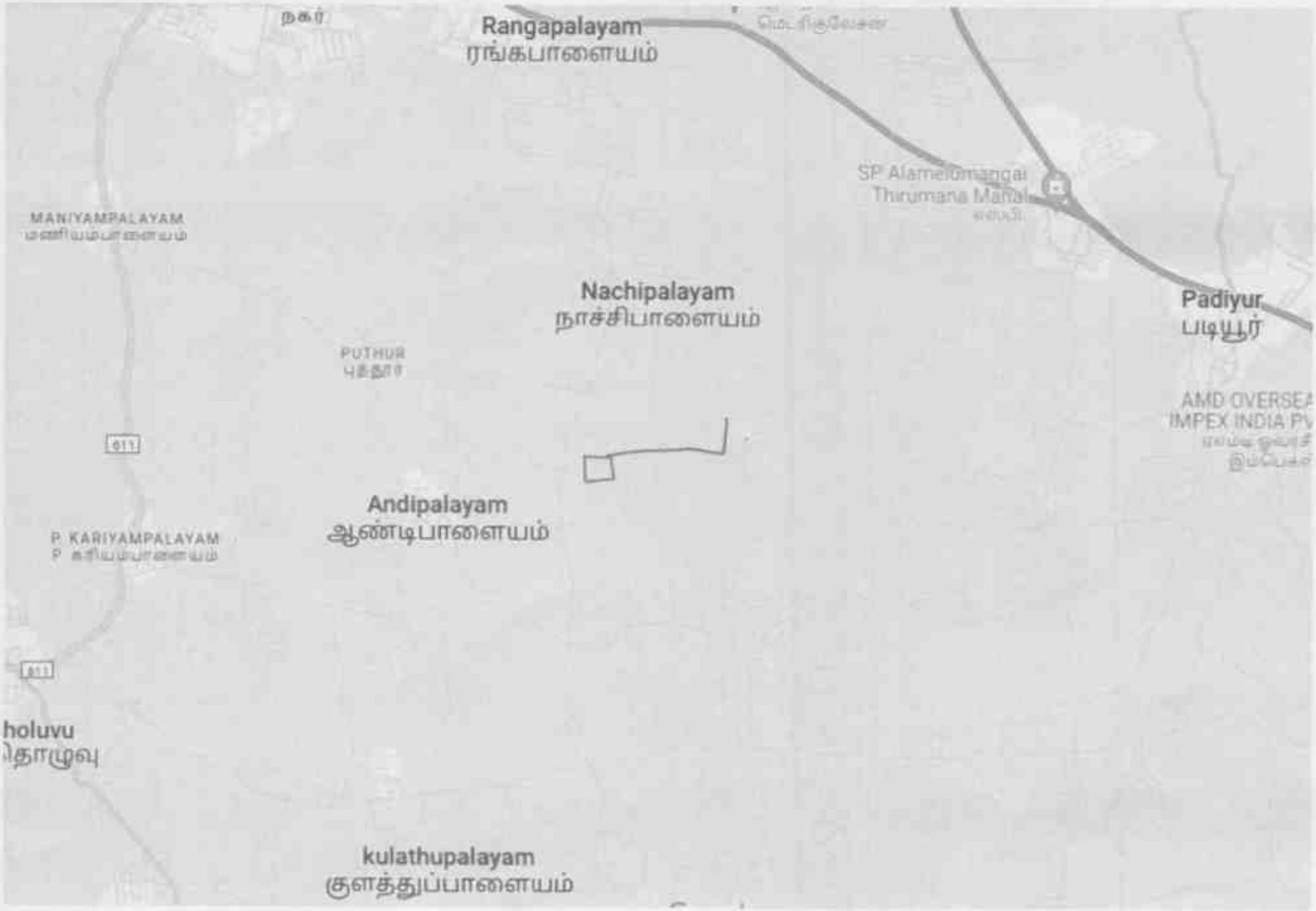
Q.L.APPLIED AREA :

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

Dr.P.THANGARAJU, M.Sc.,Ph.D.,
QUALIFIED PERSON
As Per Rule 15(1)(a)and(2) of MMR 2016

129 A



N

PLATE NO:I-C

DATE OF SURVEY: 27.07.2024

ASSISTANT DIRECTOR (GEOLOGY & MINING) TIRUPUR

APPLICANT :

Tvl.V.K.P.ENGINNEERING AND
PRIVATE LIMITED,
DIRECTOR. THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2.
EXTENT : 1.64.38 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

Q.L.APPLIED AREA	
VILLAGE ROAD	
MAJOR DISTRICT ROAD	611
SH ROAD	
APPROACH ROAD	

ROUTE MAP

Not To Scale

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

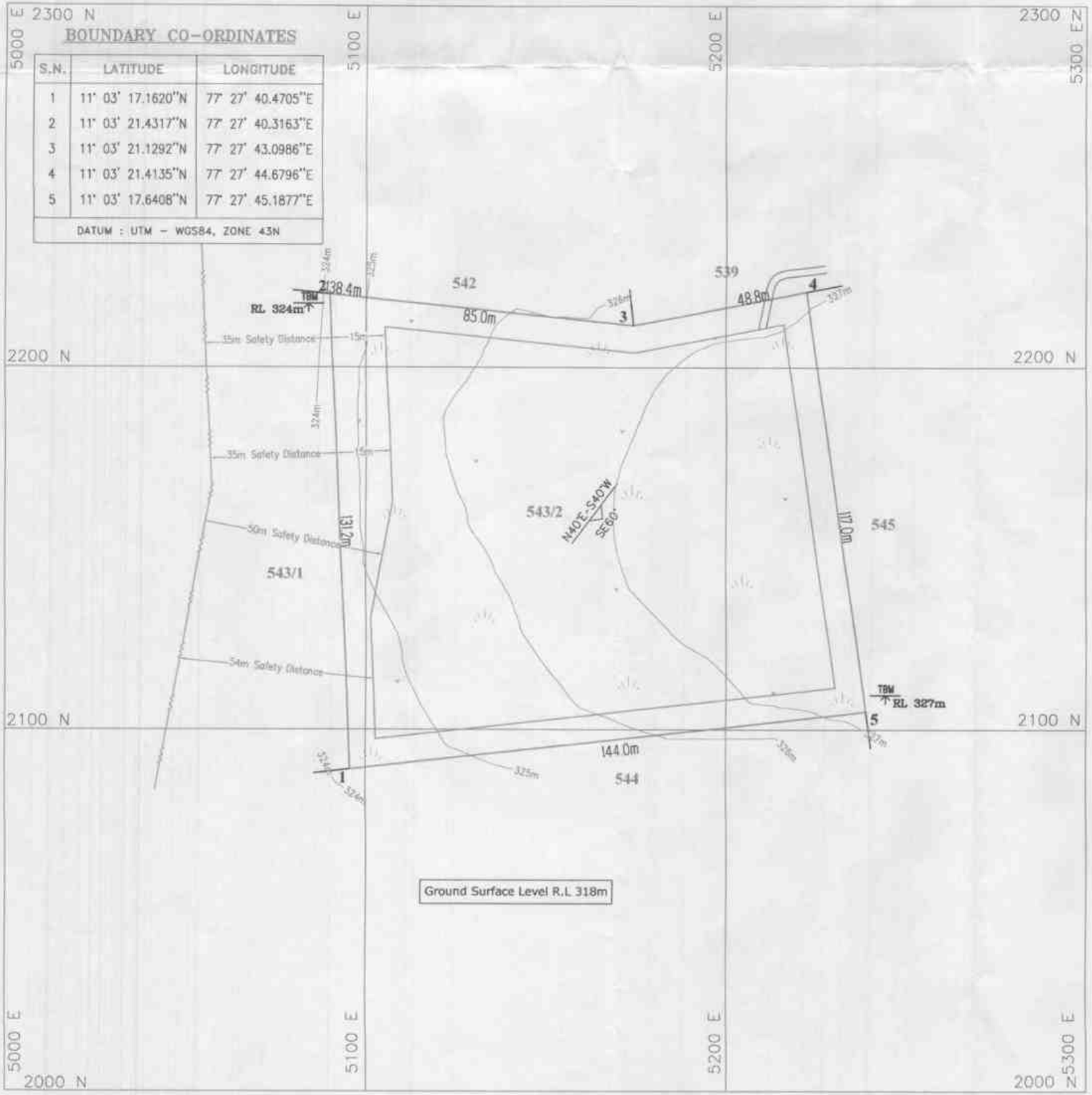
Dr.P.THANGARAJU, M.Sc.,Ph.D.,
QUALIFIED PERSON
As Per Rule 15(1)(a)and(b)of MCR,2016

130 A

BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 17.1620"N	77° 27' 40.4705"E
2	11° 03' 21.4317"N	77° 27' 40.3163"E
3	11° 03' 21.1292"N	77° 27' 43.0986"E
4	11° 03' 21.4135"N	77° 27' 44.6796"E
5	11° 03' 17.6408"N	77° 27' 45.1877"E

DATUM : UTM – WGS84, ZONE 43N



N

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

PLATE NO. II-A

DATE OF SURVEY :27.07.2024

APPLICANT :

M/s.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR: THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2.
EXTENT : 1.64.38 Ha.
VILLAGE : PERUNTHOLUVU.
TALUK : TIRUPPUR SOUTH.
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

INDEX

- Q.L. APPLIED AREA BOUNDARY
- 7.5m &50m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH ROAD
- GRAVEL
- SCRUB
- STRIKE AND DIP
- HT TOWER LINE
- CONTOUR

QUARRY LEASE AND SURFACE PLAN

SCALE 1:1000

PREPARED BY:

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

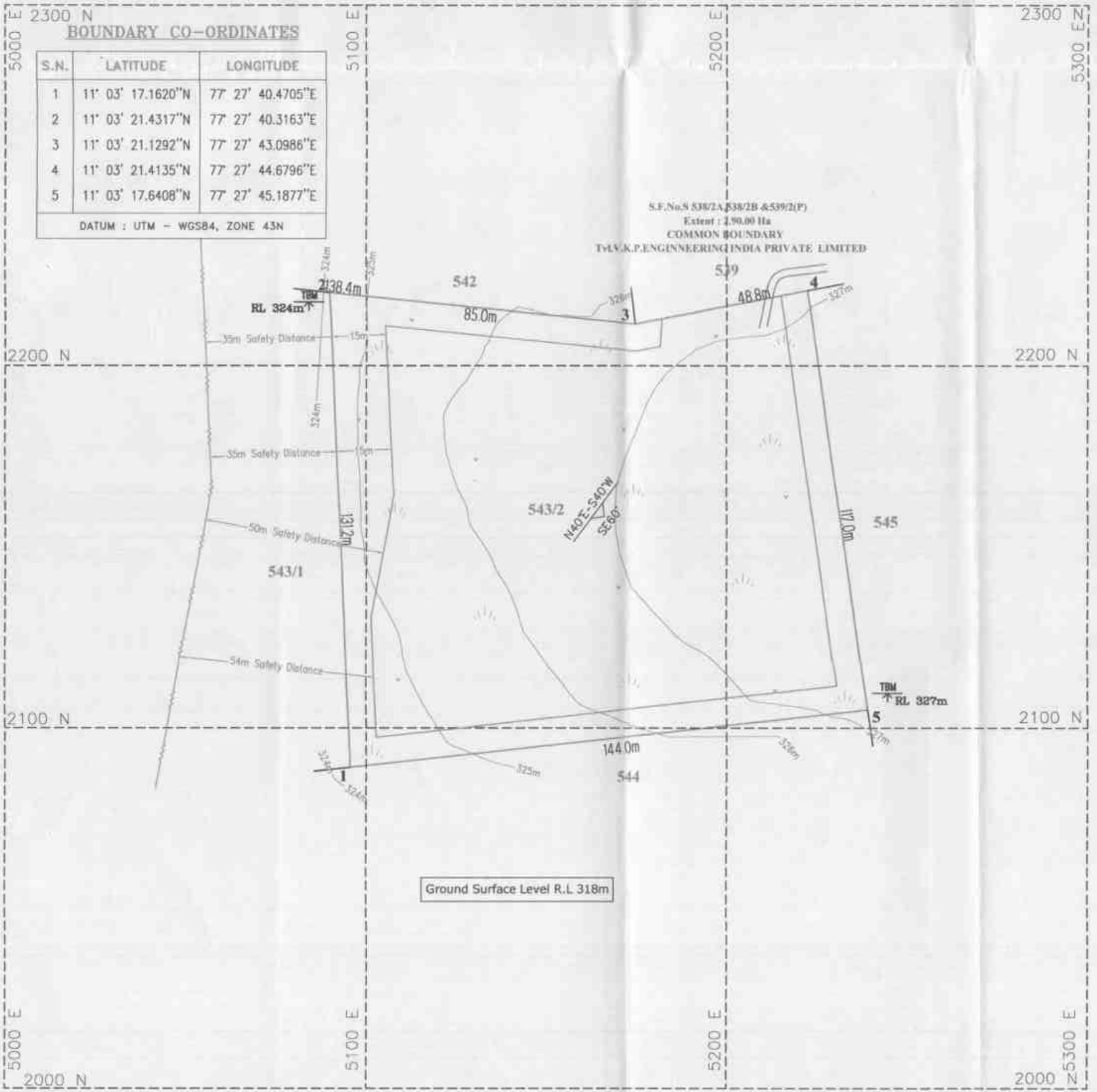
Dr.P.THANGARAJU, M.Sc.,Ph.D.,
QUALIFIED PERSON
As per Rule 34(a)and(b)of MCR,2011

131 A

BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 17.1620"N	77° 27' 40.4705"E
2	11° 03' 21.4317"N	77° 27' 40.3163"E
3	11° 03' 21.1292"N	77° 27' 43.0986"E
4	11° 03' 21.4135"N	77° 27' 44.6796"E
5	11° 03' 17.6408"N	77° 27' 45.1877"E

DATUM : UTM – WGS84, ZONE 43N



N

ASSISTANT DIRECTOR • GEOLOGY AND MINING • TIRUPUR

PLATE NO. II

DATE OF SURVEY :27.07.2024

APPLICANT :

TM.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2.
EXTENT : 1.64.38 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- Q.L. APPLIED AREA BOUNDARY
- 7.5m &50m SAFETY DISTANCE
- TEMPORARY BENCH MARK (TBM)
- APPROACH ROAD
- GRAVEL
- SCRUB
- STRIKE AND DIP
- HT TOWER LINE
- CONTOUR

QUARRY LEASE AND SURFACE PLAN

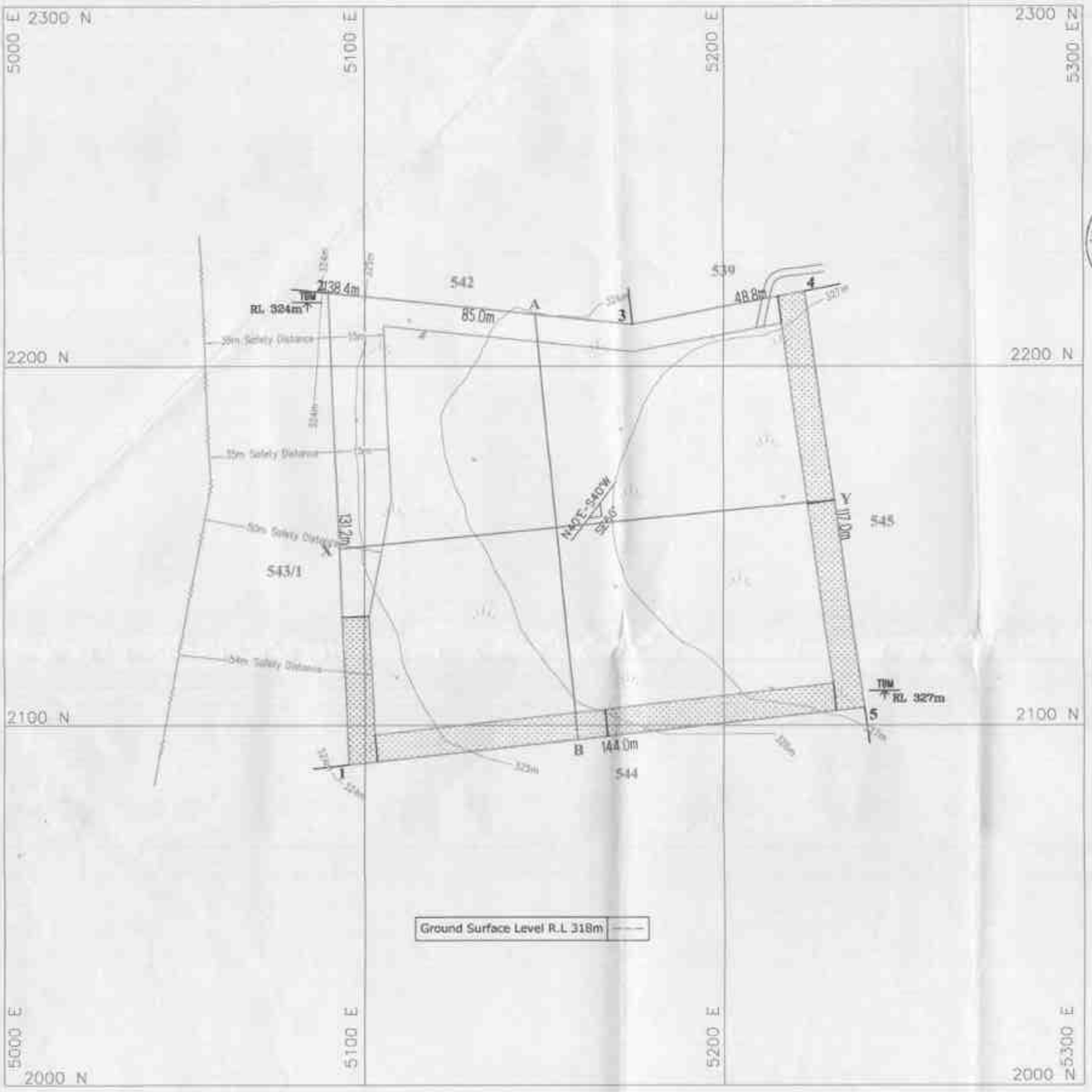
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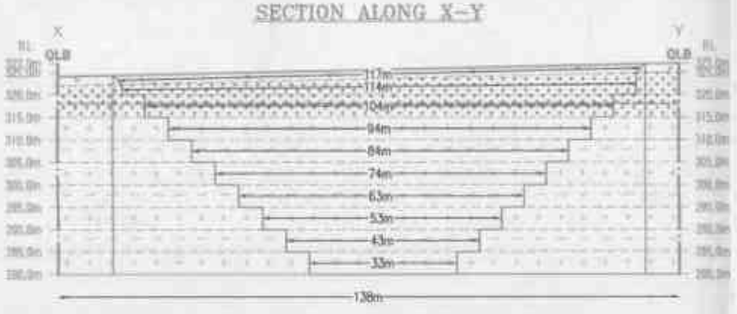
THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT.

Dr.P.THANGARAJU, M.Sc.,Ph.D.,
RECOGNISED PERSON
As Per Rule 34(a)and(b)of MCR,2015

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SECTION ALONG X–Y



SECTION ALONG A–B

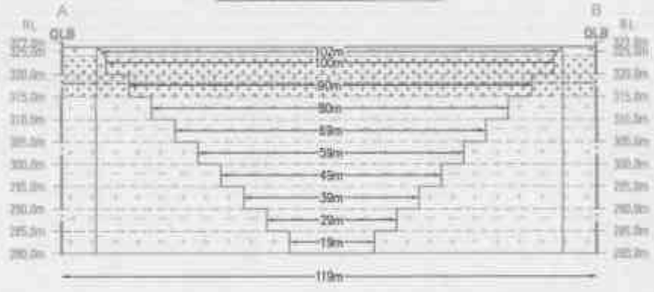


PLATE NO. III-A

DATE OF SURVEY :27.07.2024

APPLICANT :

M.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR: THIRU.P.JEGATHEESAN,
11/202,VETTUKATTUVALASU,
AMGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2,
EXTENT : 1.64.36 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

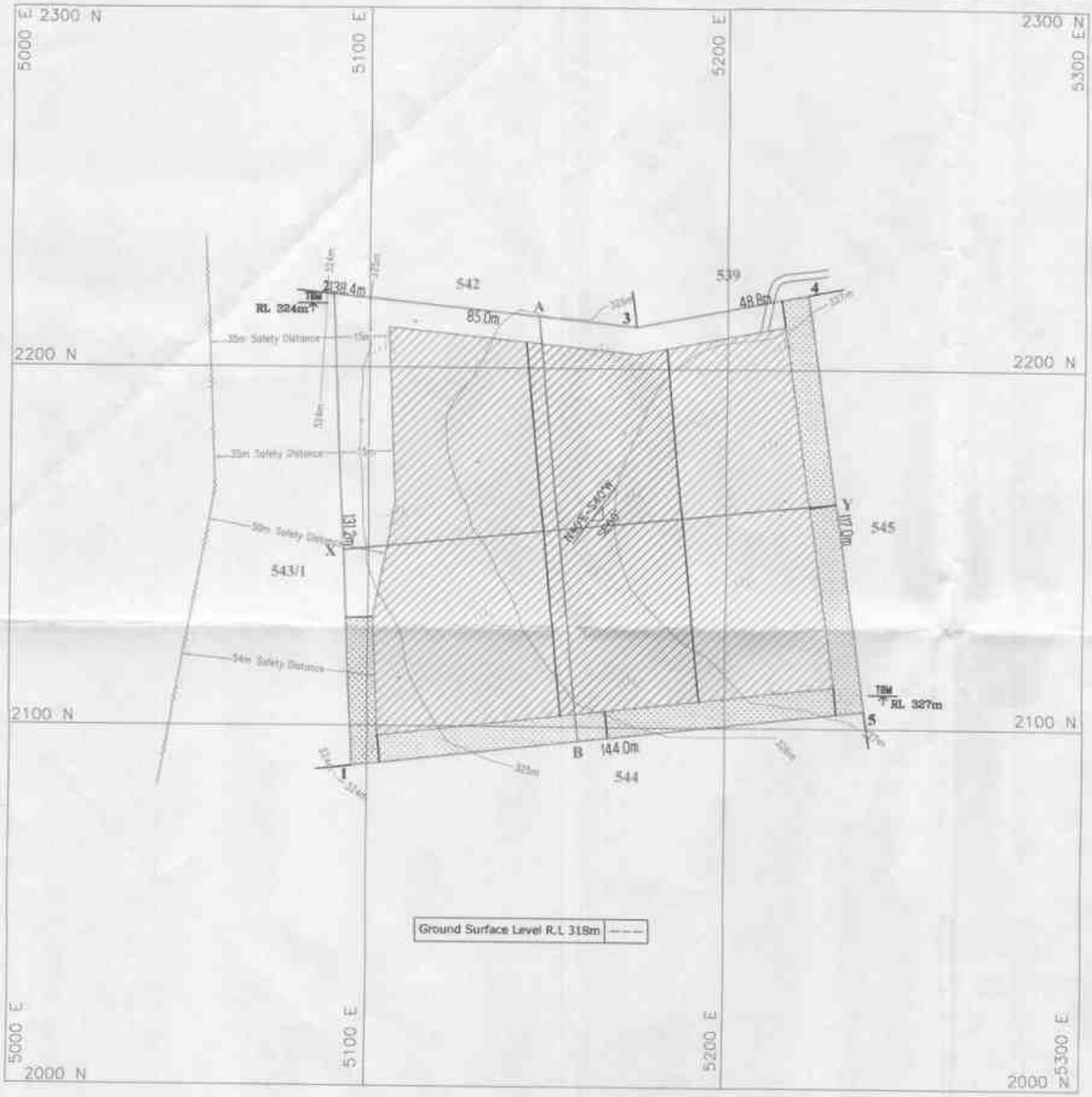
- Q.L. APPLIED AREA BOUNDARY
- 7.5m &50m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH ROAD
- GRAVEL
- SCRUB
- STRIKE AND DIP
- HT TOWER LINE
- ROUGH STONE
- WEATHERED ROCK
- CONTOUR

GEOLOGICAL
PLAN & SECTIONS
SCALE 1 : 1000

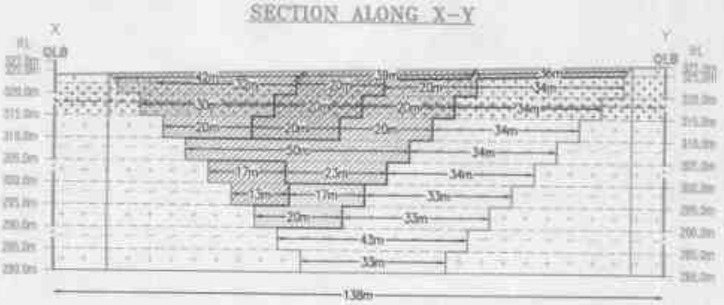
PREPARED BY:

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

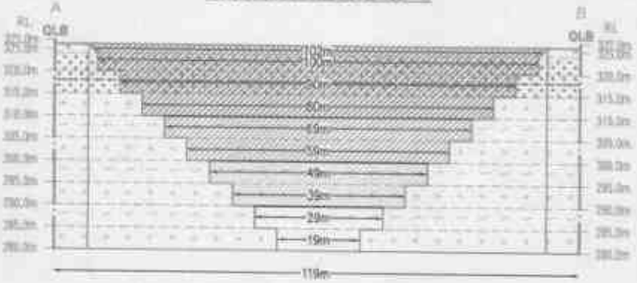
P. ARUNACHALAM, M.Sc.,Ph.D.,
QUALIFIED PERSON
(10)(a)and(b)of MCR,2016.



SECTION ALONG X-Y



SECTION ALONG A-B



I Yr PROPOSED EXCAVATION	
II Yr PROPOSED EXCAVATION	
III Yr PROPOSED EXCAVATION	
IV Yr PROPOSED EXCAVATION	
V Yr PROPOSED EXCAVATION	

I Yr PROPOSED PLANTATION	
II Yr PROPOSED PLANTATION	
III Yr PROPOSED PLANTATION	
IV Yr PROPOSED PLANTATION	
V Yr PROPOSED PLANTATION	

PLATE NO. IV-A

DATE OF SURVEY :27.07.2024

APPLICANT :

M.V.K.P.ENGINEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2,
EXTENT : 1.64.3B Hq.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

Q.L. APPLIED AREA BOUNDARY	
7.5m &50m SAFETY DISTANCE	
TEMPORARY BENCH MARK	TBM
APPROACH ROAD	
GRAVEL	
SCRUB	
STRIKE AND DIP	
HT TOWER LINE	
ROUGH STONE	
WEATHERED ROCK	
CONTOUR	

TOPOGRAPHY,GEOLOGICAL , YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS FIRST FIVE YEAR

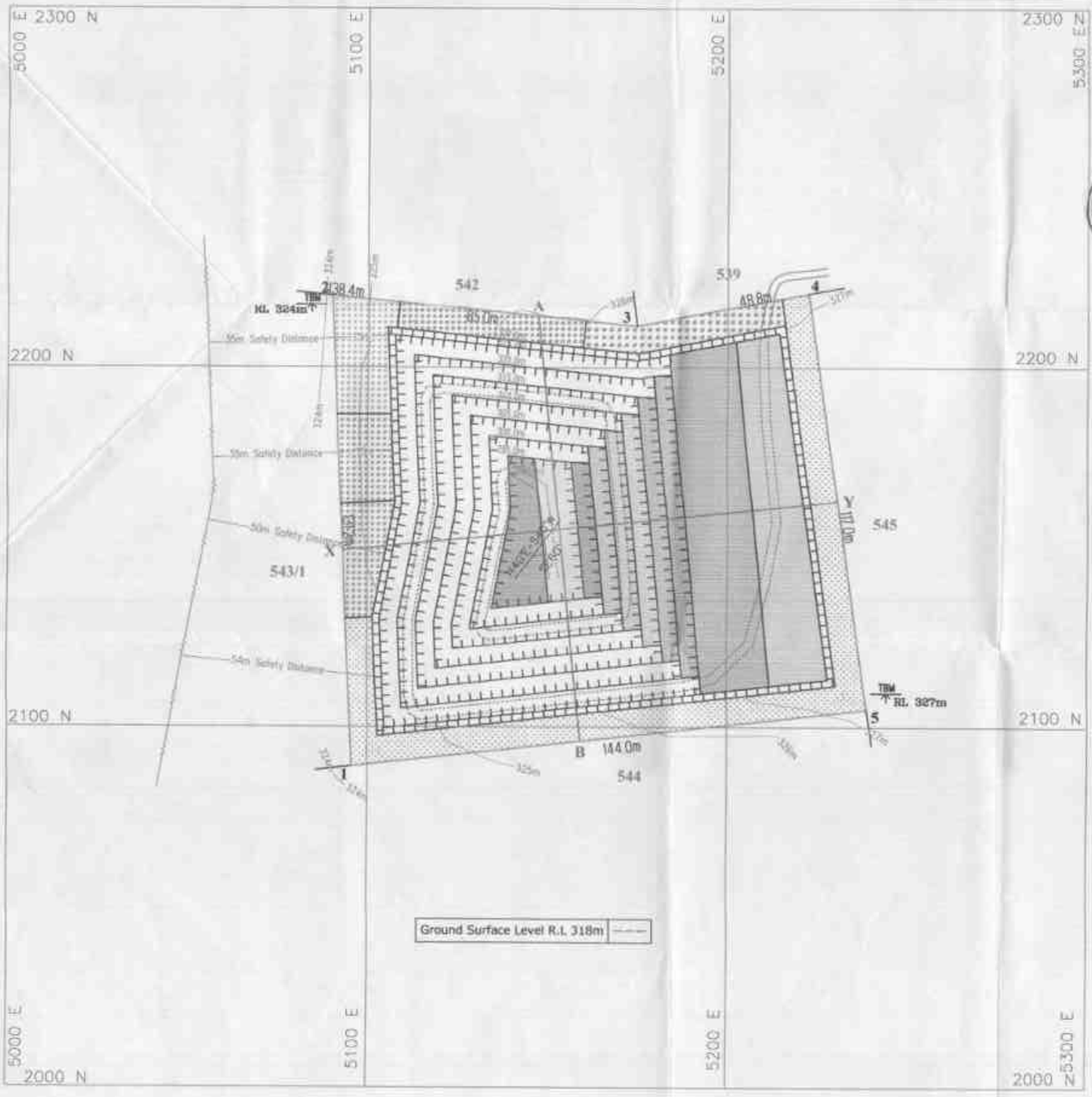
SCALE 1 : 1000

PREPARED BY:

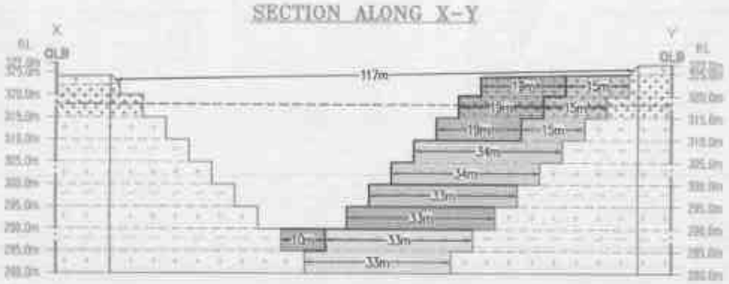
THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

ASSISTANT DIRECTOR ★ GEOLOGY AND MINING ★ TIRUPUR

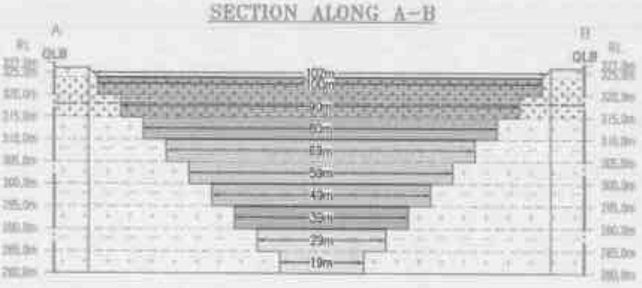
134 A



SECTION ALONG X-Y



SECTION ALONG A-B



1st V Year Proposed Pit Dimension
117m(L)X102m(W)X37m(d)
Above Ground Level 9m
Below Ground Level 28m

I – V YEAR PLANTATION

VI Yr PROPOSED EXCAVATION
VII Yr PROPOSED EXCAVATION
VIII Yr PROPOSED EXCAVATION
IX Yr PROPOSED EXCAVATION
IX Yr PROPOSED EXCAVATION

VI Yr PROPOSED PLANTATION
VII Yr PROPOSED PLANTATION
VIII Yr PROPOSED PLANTATION
IX Yr PROPOSED PLANTATION
X Yr PROPOSED PLANTATION

PLATE NO. IV-C

DATE OF SURVEY :27.07.2024

APPLICANT :

M/s V.K.P.ENGINEERING (NI) PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2,
EXTENT : 1.64.38 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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- HT TOWER LINE
- ROUGH STONE
- WEATHERED ROCK
- QUARRY PIT
- QUARRY ROAD
- CONTOUR

TOPOGRAPHY, GEOLOGICAL, YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS SECOND FIVE YEAR

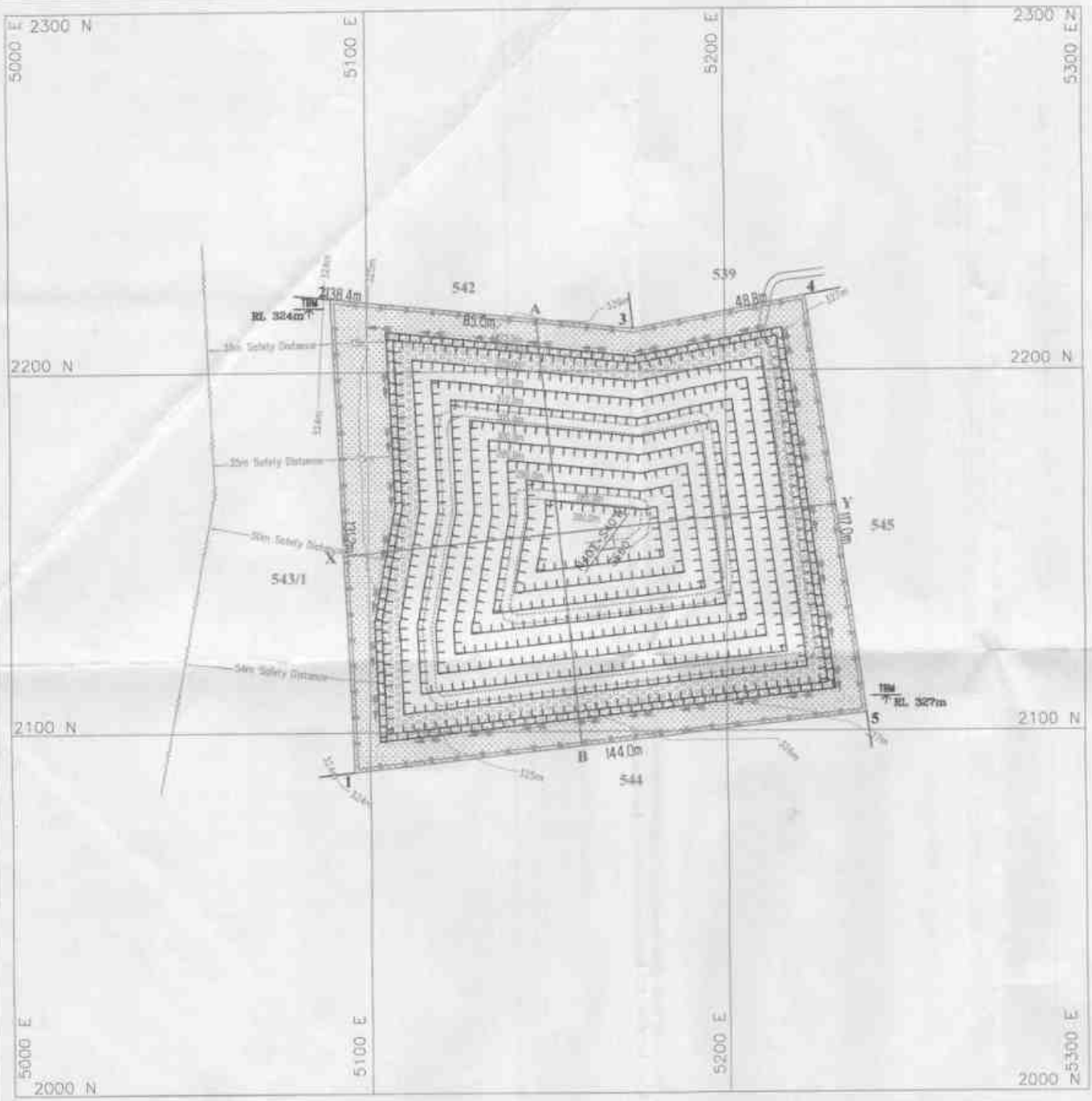
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QUALIFIED PERSON

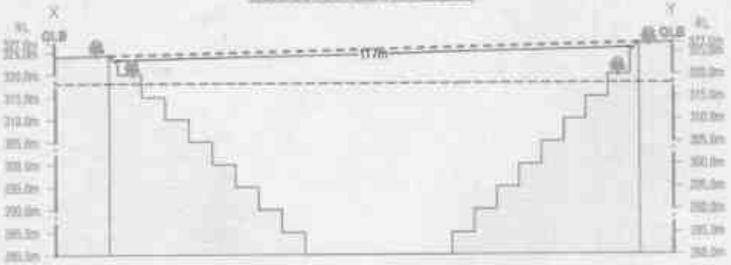
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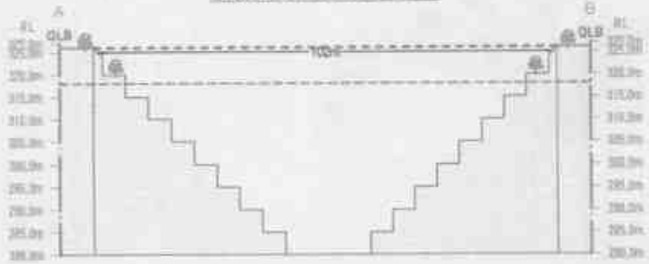




SECTION ALONG X-Y



SECTION ALONG A-B



PRESENT & POST LAND USE PATTERN

DESCRIPTION	AREA TO BE REQUIRED AT THE PRESENT MINING PLAN PERIOD(Ha)	AREA AT THE END OF THIS QUARRYING PERIOD (Ha)
AREA UNDER QUARRYING	1.22.70	1.22.70
INFRASTRUCTURE	NIL	NIL
ROADS	0.01.00	0.01.00
GREEN BELT	0.21.48	0.40.68
UN-UTILIZED AREA	0.19.20	NIL
GRAND TOTAL	1.64.38	1.64.38

Notes: Present Area Virgin

Ground Surface Level R.L 318m

Proposed Pit Dimension
117m(L)X102m(W)X47m(d)
Above Ground Level 9m
Below Ground Level 38m

I - X YEAR PLANTATION

PLATE NO. V-A

DATE OF SURVEY: 27.07.2024

APPLICANT :

M/s.V.K.P.ENGINEERING IND PRIVATE LIMITED,
DIRECTOR: THIRU.P.JEGATHEESAN,
11/132,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2.
EXTENT : 1.64.38 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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- STRIKE AND DIP
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- QUARRY PIT
- QUARRY ROAD
- CONTOUR
- TREES
- EXISTING LANDFORM
- OLD SURFACE LEVEL
- FINISHED SURFACE LEVEL
- FENCING
- PROPOSED GARLAND DRAIN
- REHABILITATED LANDFORM

PROGRESSIVE QUARRY CLOSURE PLAN AND SECTIONS

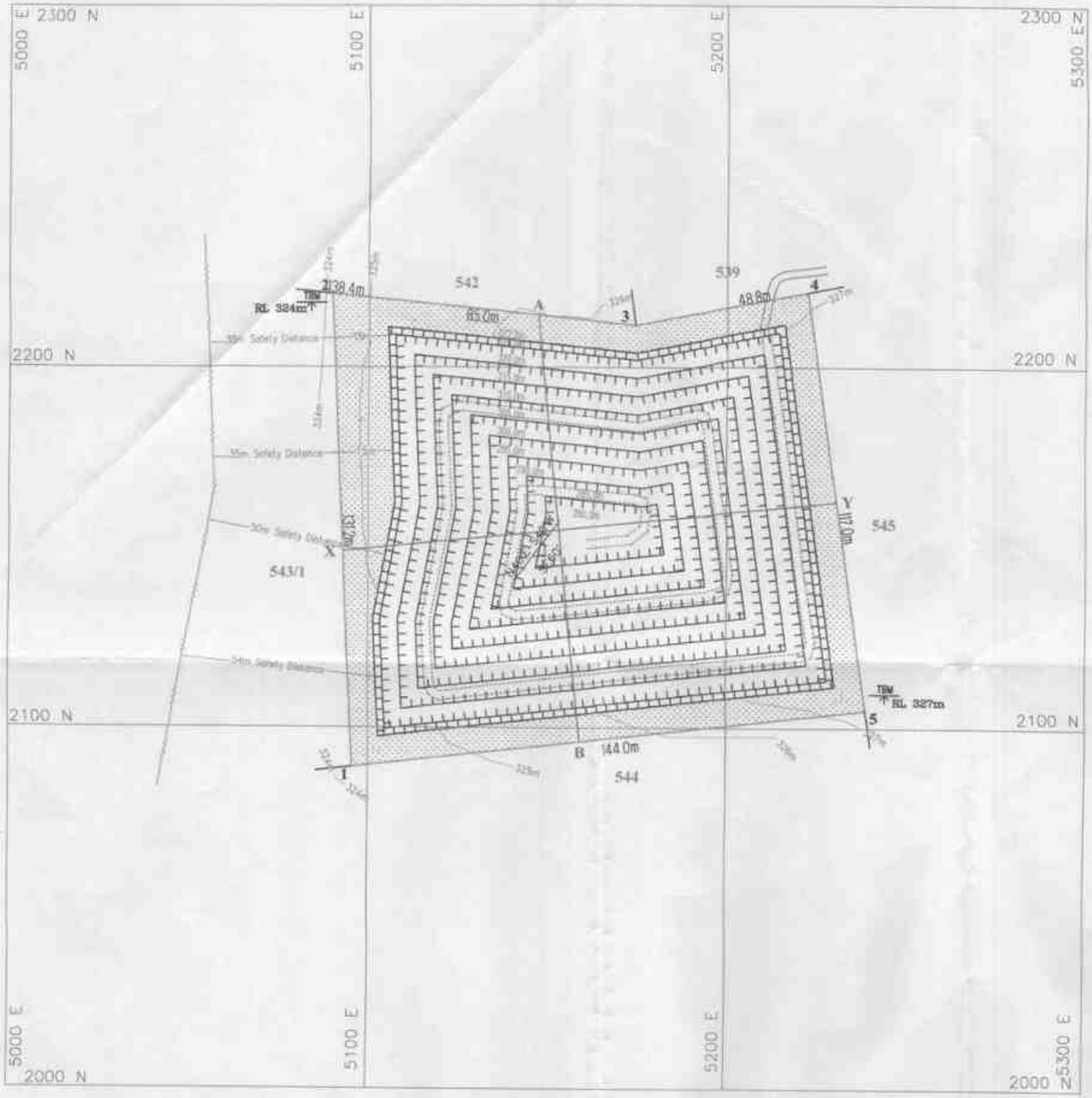
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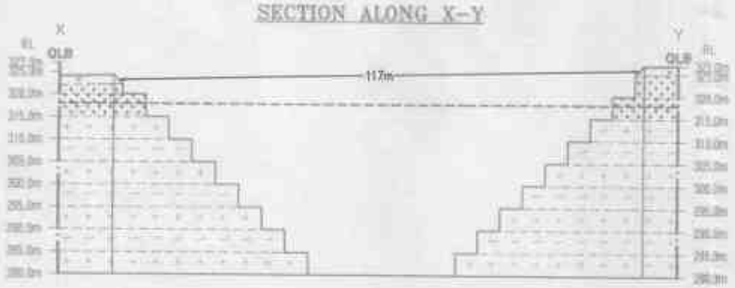
Dr.P.THANGARAJU, M.Sc.,Ph.D.,
QUALIFIED PERSON
Rule 13(3)(a)and(3)(b) of MCR,2018

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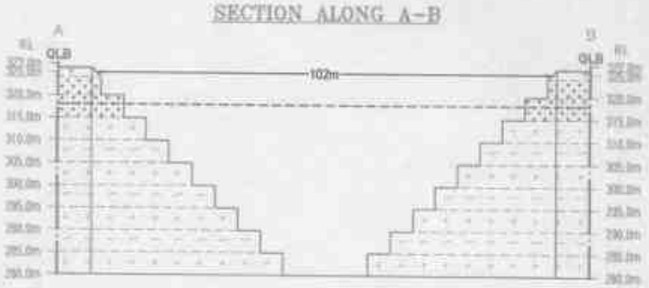


ASSISTANT DIRECTOR ★ GEOLOGY AND MINING ★ TIRUPUR

SECTION ALONG X-Y



SECTION ALONG A-B



Ground Surface Level R.L 318m ----

Ultimate Pit Dimension
117m(L)X102m(W)X47m(d)
Above Ground Level 9m
Below Ground Level 38m

I – X YEAR PLANTATION

PLATE NO. VI-A

DATE OF SURVEY :27.07.2024

APPLICANT :

M/s.V.K.P.ENGINEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE(TAMILNADU) - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2.
EXTENT : 1.64.38 Ha.
VILLAGE : PERUNTHOLUVU.
TALUK : TIRUPPUR SOUTH.
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

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- ROUGH STONE
- WEATHERED ROCK
- QUARRY PIT
- QUARRY ROAD
- CONTOUR

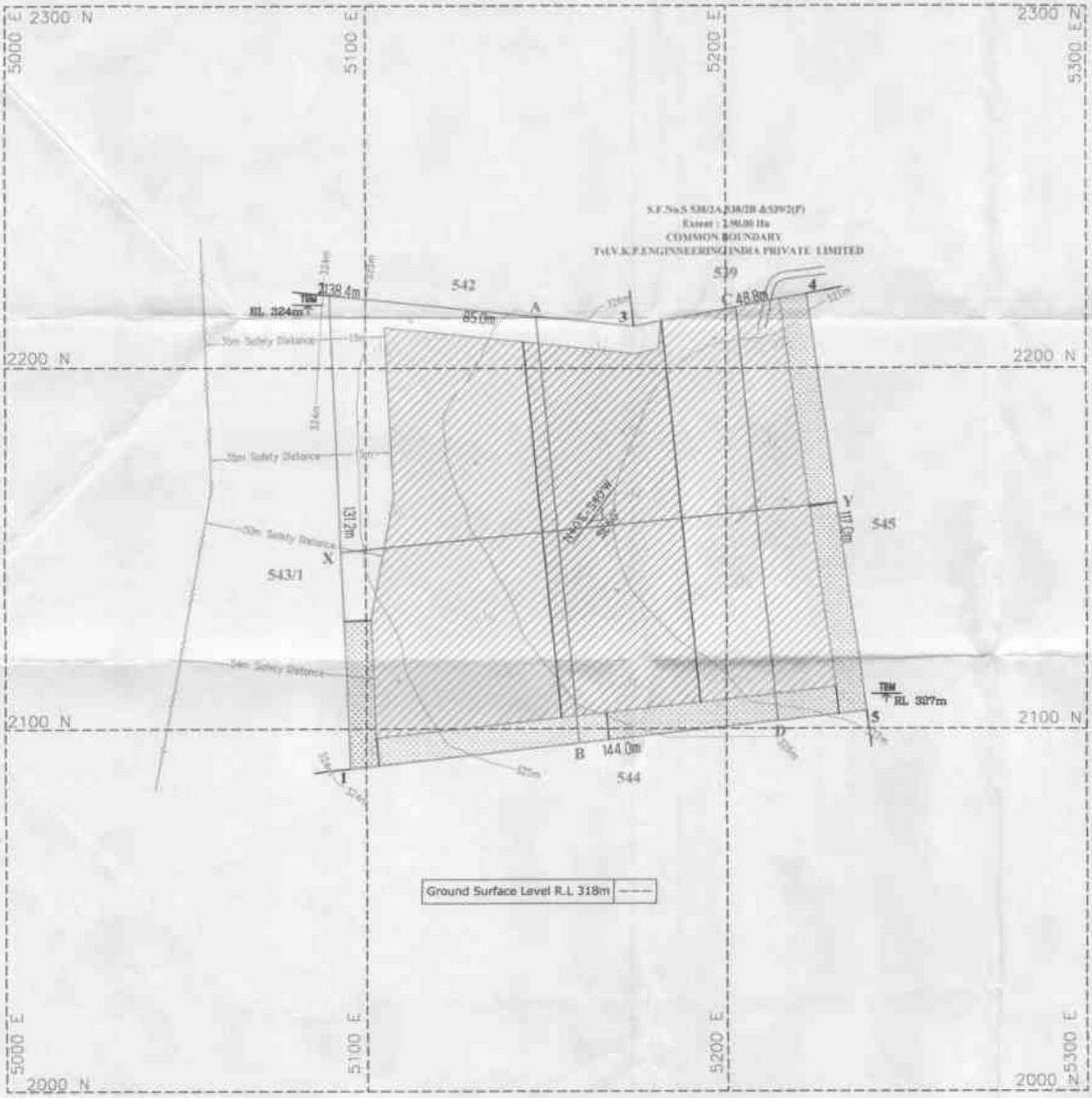
CONCEPTUAL PLAN AND SECTIONS
SCALE 1 : 1000

PREPARED BY:

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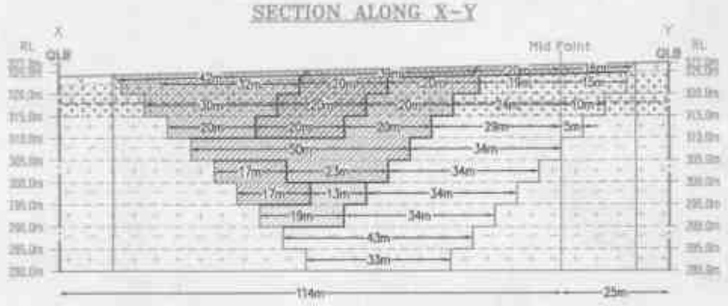
M.VENKATARAJU, M.Sc., Ph.D.,
RECOGNISED PERSON
As Per Rule 10(2)(e)and(b)of MCR,2018

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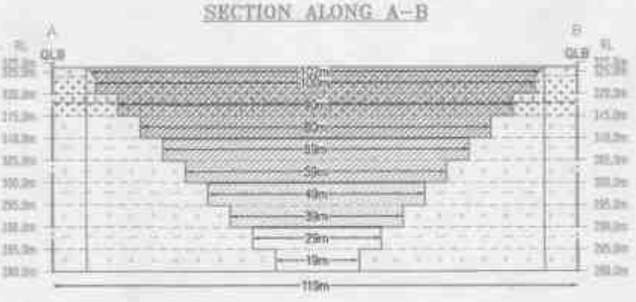
SECTION ALONG X-Y



I Yr PROPOSED EXCAVATION	
II Yr PROPOSED EXCAVATION	
III Yr PROPOSED EXCAVATION	
IV Yr PROPOSED EXCAVATION	
V Yr PROPOSED EXCAVATION	

I Yr PROPOSED PLANTATION	
II Yr PROPOSED PLANTATION	
III Yr PROPOSED PLANTATION	
IV Yr PROPOSED PLANTATION	
V Yr PROPOSED PLANTATION	

SECTION ALONG A-B



SECTION ALONG C-D

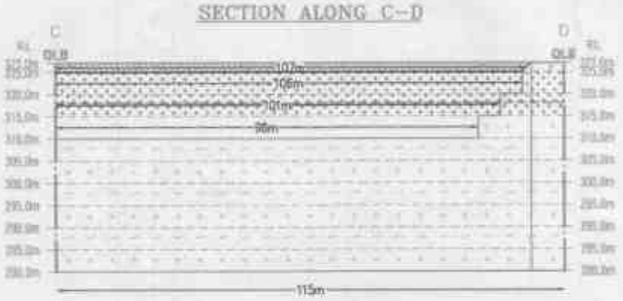


PLATE NO. IV

DATE OF SURVEY :27.07.2024

APPLICANT :

TnV.K.P.ENGINNEERING IND PRIVATE LIMITED.
DIRECTOR, SHRI.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 053.

LOCATION OF Q.L.A AREA:

S.F.No	: 543/2,
EXTENT	: 1.64.38 Ha.
VILLAGE	: PERUNTHOLUVU,
TALUK	: TIRUPPUR SOUTH,
DISTRICT	: TIRUPPUR,
STATE	: TAMIL NADU.

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- WEATHERED ROCK
- CONTOUR

TOPOGRAPHY, GEOLOGICAL , YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS FIRST FIVE YEAR

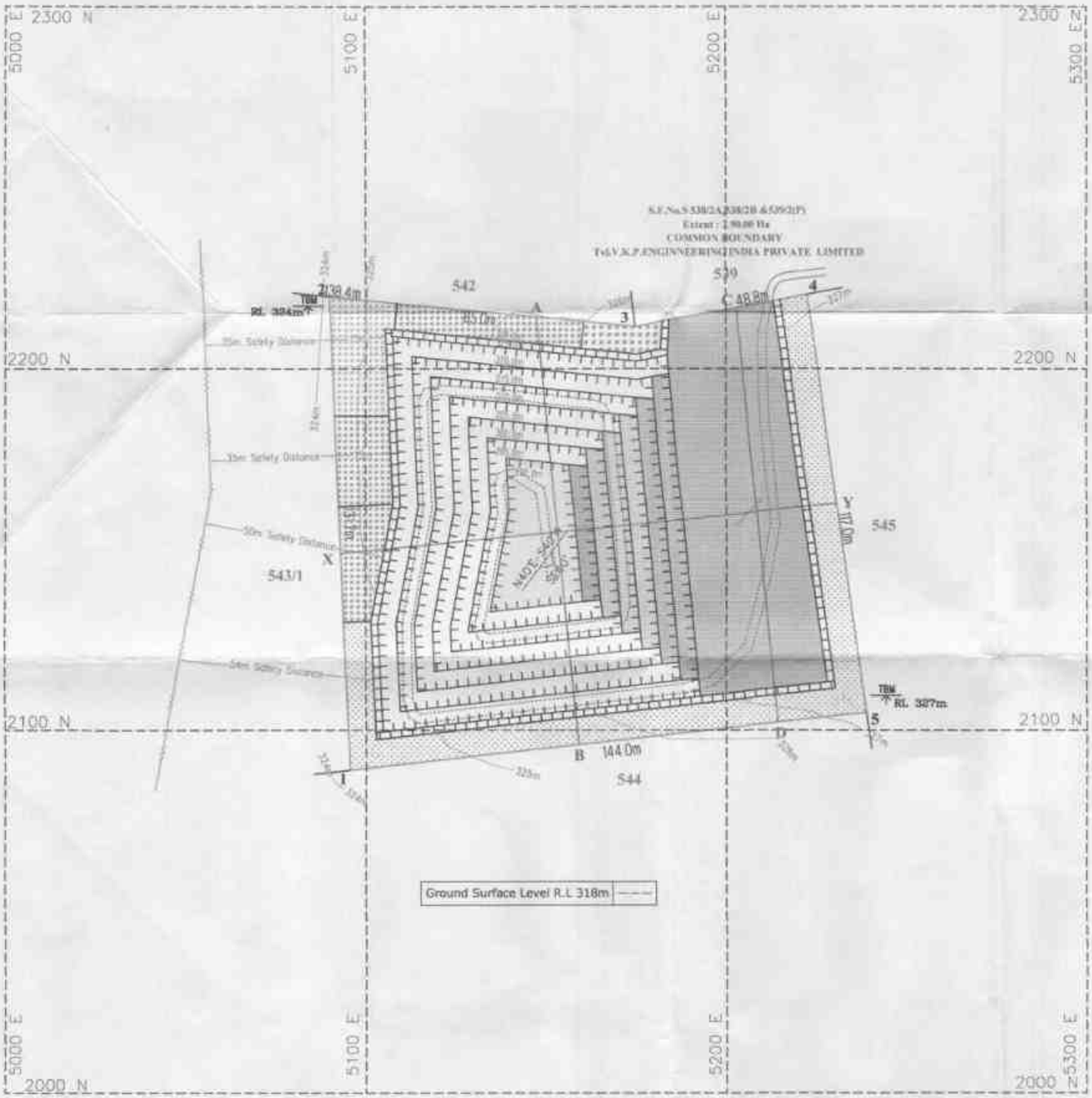
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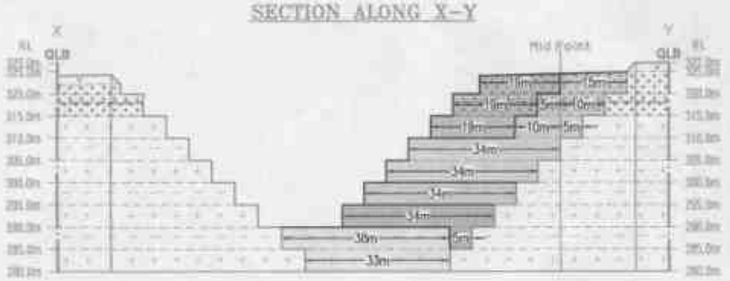
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QUALIFIED PERSON

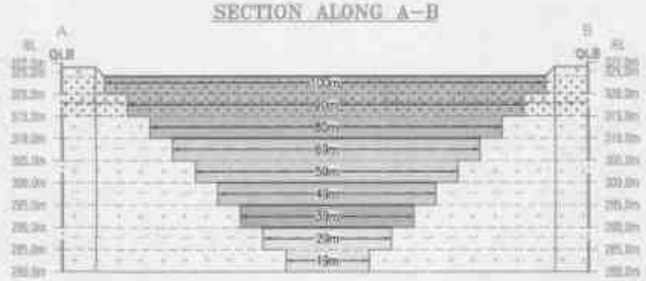
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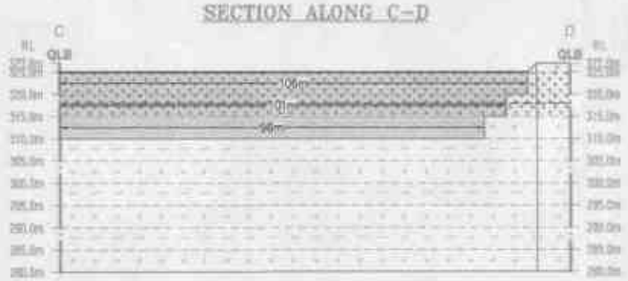
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



- VI Yr PROPOSED EXCAVATION
- VII Yr PROPOSED EXCAVATION
- VIII Yr PROPOSED EXCAVATION
- IX Yr PROPOSED EXCAVATION
- X Yr PROPOSED EXCAVATION

1st V Year Proposed Pit Dimension
117m(L)X107m(W)X37m(d)
Above Ground Level 9m
Below Ground Level 28m

I - V YEAR PLANTATION

- VI Yr PROPOSED PLANTATION
- VII Yr PROPOSED PLANTATION
- VIII Yr PROPOSED PLANTATION
- IX Yr PROPOSED PLANTATION
- X Yr PROPOSED PLANTATION

PLATE NO. IV-B

DATE OF SURVEY :27.07.2024

APPLICANT :

T+LV.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/232,VITTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2,
EXTENT : 1.64.38 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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- WEATHERED ROCK
- CONTOUR
- QUARRY PIT
- QUARRY ROAD

TOPOGRAPHY, GEOLOGICAL, YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS SECOND FIVE YEAR

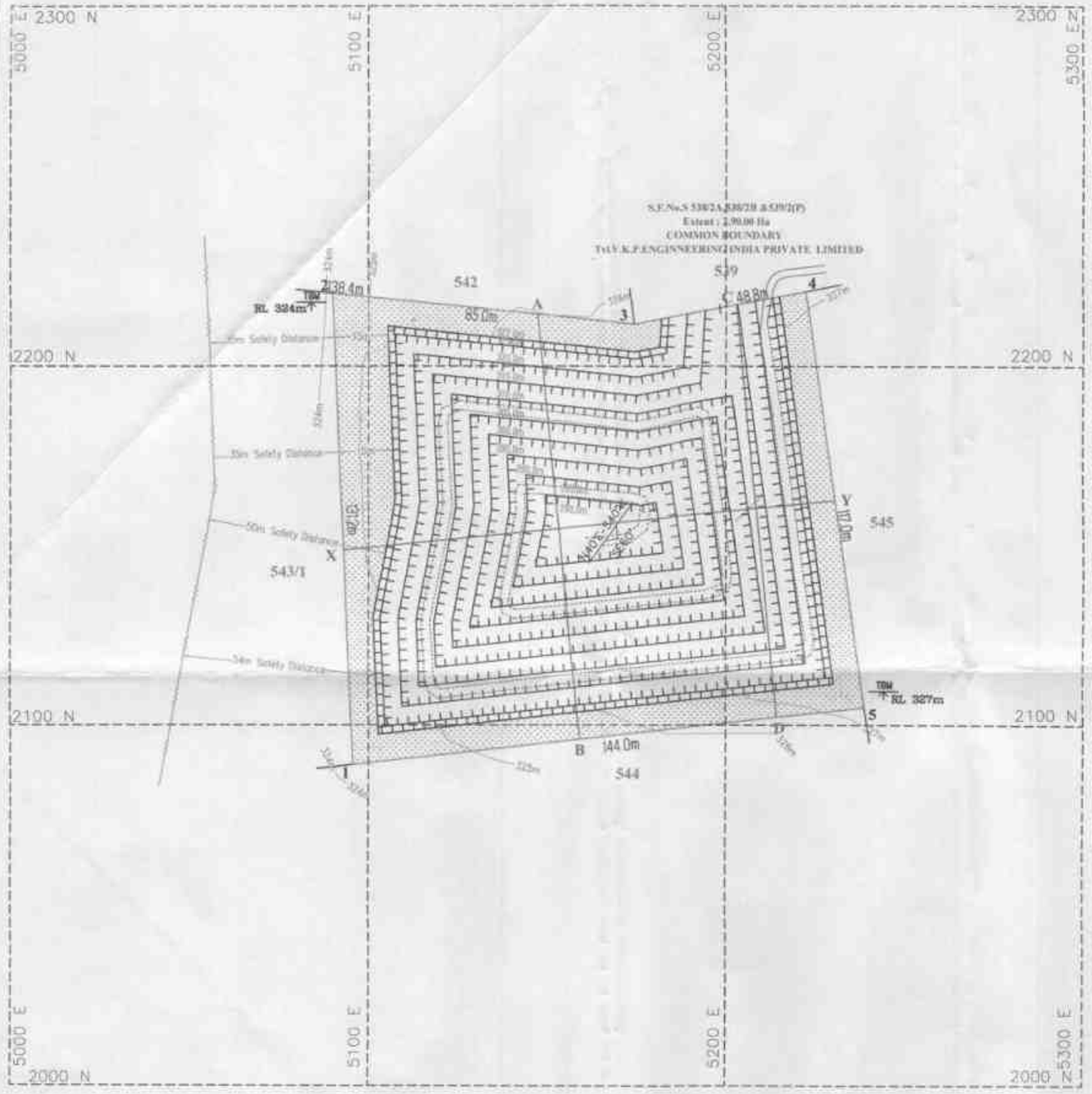
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Dr.P.THANGAVELU, M.Sc.,Ph.D.,
QUALIFIED PERSON
As per rule 15(1)(a)and(b)of MCR,2015)

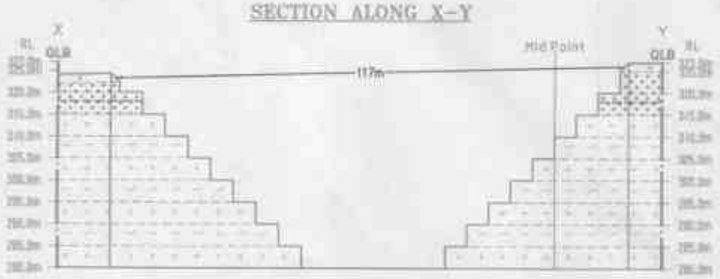
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SECTION ALONG X-Y

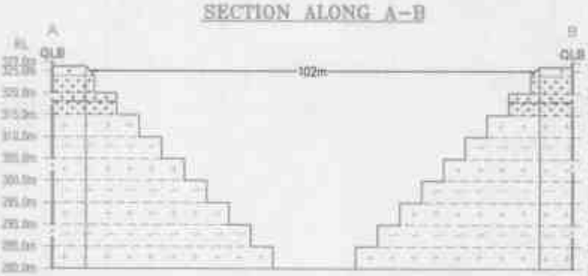


Ground Surface Level R.L 318m

Ultimate Pit Dimension
117m(L)X107m(W)X47m(d)
Above Ground Level 9m
Below Ground Level 38m

I – X YEAR PLANTATION

SECTION ALONG A-B



SECTION ALONG C-D

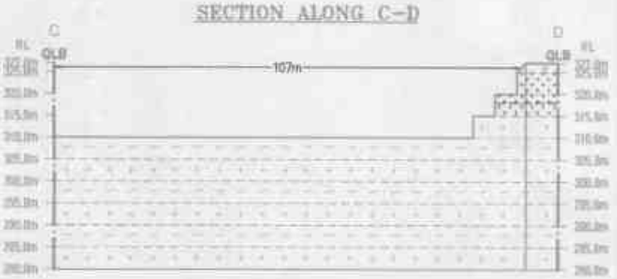


PLATE NO. VI

DATE OF SURVEY :27.07.2024

APPLICANT :

M/s.V.K.P. ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/3D,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 543/2,
EXTENT : 1.64.38 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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- HT TOWER LINE
- ROUGH STONE
- WEATHERED ROCK
- CONTOUR
- QUARRY PIT
- QUARRY ROAD

CONCEPTUAL PLAN AND SECTIONS
SCALE 1 : 1000

PREPARED BY:

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

[signature]

[illegible] M.Sc.,Ph.D.,
QUALIFIED PERSON
[illegible] 1500(a)and(e)of MCR,2018

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HYDRO - GEOLOGICAL STUDIES AT M/S. VKP ENGINEERING IND PVT., LTD., ROUGH STONE AND GRAVEL QUARRY PERUNTHOLUVU VILLAGE, TIRUPPUR SOUTH TALUK, TIRUPPUR DISTRICT, TAMILNADU.

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HYDRO - GEOLOGICAL STUDIES AT M/S. VKP ENGINEERING IND PVT., LTD., ROUGH STONE AND GRAVEL QUARRY PERUNTHOLUVU VILLAGE, TIRUPPUR SOUTH TALUK, TIRUPPUR DISTRICT, TAMILNADU.

1. INTRODUCTION

Proprietor of **M/s. VKP Engineering Ind Pvt., Ltd.,** in Rough Stone and Gravel Quarry Over an extent of 1.64.38 hectares of patta land in S.F. No's. 543/2 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State on the hydrological regime of the area, the above area has been studied & investigated for finding out Ground water level and aquifer thickness and water quality in and around mine lease area. The electrical resistivity method, TEM study in rough stone and gravel quarry and genesis rock with determine the shallow and deeper freshwater aquifer in the proposed mining area in M/S. VKP Engineering Ind Pvt., Ltd., Peruntholuvu Village.

1.1. Scope of Study

In the present study, the main aim of the shallow and deeper aquifer investigation through electrical resistivity VES, Method is used to measure the apparent resistivity of the Study area. The present study is estimating the ground water level in Peruntholuvu village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu village proposed leasehold area and their surrounding area. The study area is mostly covered by Water level, type of sand, type of rock and their basement rock characters. The main aim of the study is to determine the water table and flow movement of this Lease and surrounding area **(Fig.1).**

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1.2. Profiles in the Study Area.

Name of the Lessee	: **M/s. VKP Engineering Ind Pvt., Ltd.,**
Survey No	: 543/2.
Extent	: 1.64.38 hectares.
Village	: Peruntholuvu,
Taluk	: Tiruppur South,
District	: Tiruppur,
State	: Tamil Nadu

2. STUDY AREA DESCRIPTION



Figure.1. Shows proposed mine lease area

The lease applied area is located about 13km Southeastern side of Tiruppur, 3km Northeastern side of Peruntholuvu village. The lease applied area falls in the Toposheet No: **58 E/08** Latitude between: **11°03'17.1620"N** to **11°03'21.4317"N** and Longitude between: **77°27'40.3163"E** to

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77°27'45.1877"E on WGS datum – 1984.

	11km		3km	
Tiruppur	⟶	Peruntholuvu	⟶	Lease applied area
	Southeast		Northeast	

2.1 Topography of the Lease Area and Its Surrounding Environments:

The lease applied area is exhibits undulated topography. The area has gentle sloping towards Northwestern side and altitude of the area is 327m to 324m above from Mean Sea Level. The area is covered by 2m thickness of Gravel, 10m thickness of Weathered Rock and followed by Massive Charnockite which is clearly inferred from the nearby existing quarry pit. **(Fig.2).**

The Water level in the surrounding area is 93m - 96m below from general ground profile which is observed from the nearby bore wells. The Normal rainfall is about 619mm.



Figure 2. Topography in the lease area

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3. REGIONAL GEOLOGY OF TIRUPPUR DISTRICT.

The oldest lithology found in the district are amphibolite of Satyamangalam Group and meta-ultramafite of Sargur Group which is Archaean in age. The lithologies of Sittampundi-Mettupalaiyam Complex like pyroxenite, Gabbro, Anorthisitic gabbro which are from Archean in age are found at NE of Tiruppur, west of Padiyar and at south of Perumanalhin. The Archaean granite gneiss are present in and around Sevur, Kunnattur and at the north of Tiruppur which is the part of Peninsular Gneissic complex I Group. Hornblende biotite gneiss is the major lithology occurs in the district, which is of Migmatite Group and covers most part of the district except northern part. The Charnockite Group contains charnockite, pyroxene granulite, amphibolite and banded magnetite quartzite. The charnockite are occurs as throughout the district areas in the form of patches while pyroxene granulite occurs at east of Tayampalaiyam.

The banded magnetite quartzite is occurring in a patches at north of Avanashipalyaiyam. The Migmatite Group contains hornblende biotite gneiss, pink migmatite and pink granite gneiss. The pink migmatite occurs at south of Perumanalhin and in and around Karattohivu in the form of patches, while pink granite gneiss is occurs as patches at north of Perumanalhin, south of Manupparm and Kolinjivadi. The Neoproterozoic, Chalk Hill Formation contains pyroxenite which is famous for magnesite deposit occurs in the district at east of Tayampalaiyam. The Neoproterozoic, Alkali Complex Group contain Sivamalai Syenite which contains different types of syenites bodies occurs at south of Padiyur.

The Neoproterozoic Acid intrusives contains major lithologies like quartz veins & reefs, pegmatites and granite, which forms at the end phase of magmatism. The large granitic bodies are intruded into granite gneiss of PGC-I at north of Sevur, west of Tiruppur and in the hornblende-biotite gneiss of Charnockite Group at south of Padiyur, east of Avanshipalaiyam, and at north of Kolinjivadi. The Cenozoic calcrete occurs as small patches in Gudimangalam to Kolinjivadi sector. The gypseous clay of Coimbatore - Palladam Formation of Late Holocene in age are occurs at west and south of Gudimangalem north of Karattohivu and west of Tayampalaiyam and contains gypsum deposits.

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3.1 Geology of the Lease Area

Peninsular gneiss forms the oldest rock formation, in which the massive formation of Charnockite lies over with accumulation of recent quaternary formation. On regional scale of the Charnockite body is N40º E – S40º W with dipping towards SE60º.

The general geology sequence of the rocks in this area are given below:

AGE		FORMATION
Recent	-	Quaternary Formation (Gravel)
----------Unconformity----------		
Archaean	-	Charnockite
		Peninsular Gneissic Complex

4. HYDROGEOLOGY

Geohydrologically major rock type covered large part of the district are migmatitic gneiss along with charnockite and fluvial alluvium are present as patches with it. The shallow water table viz., 0-2 m. BGL (below ground level) is occurred in the northern and at southern parts of the district and it occurs in the patches. The medium water table 2-5 m. BGL is occurs at central and northern part of the district. The deep-water table 5 m to 20 m. BGL are occurs in the large part of the district area particularly near the Tiruppur town. The depth to water table is upto 5 m is occurs due to the fluvial alluvium present in the southern part of the district. The fluoride and uranium concentration are occurring >1.5 and 40 (mg/l) respectively in the central part of the district.

5. METHODOLOGY OF STUDY

1. Open well and bore well water level measurement, depth of water level diameter of open well, agriculture land survey.
2. Geophysical survey for deep aquifer in nearby site Rock and soil geology also collected for the aquifer characteristic study.
3. Aquifer thickness and quality measurement study in nearby proposed mine site areas of the study area.

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6.1 Geophysical Investigation

6.1.1 Vertical Electrical resistivity sounding for aquifer study.

The electrical resistivity study is used to determine aquifer and occurred rock in the proposed site. The DDR 3 equipment was used for data collection **(Fig.3)**

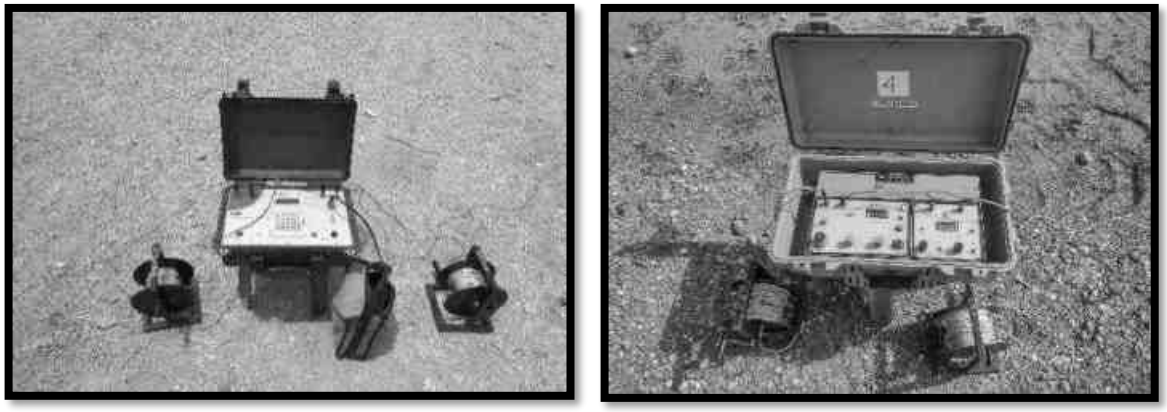


Figure 3. Electrical resistivity survey in the mine lease area.

6.1.2 Basic Principles

The electrical properties of rocks in the upper part of the earth's crust are dependent upon the lithology, porosity, and the degree of pore space saturation and the salinity of the pore water. Saturated rocks have lower resistivity than unsaturated and dry rocks. The higher the porosity of the saturated rock, or the higher the salinity of the saturating fluids, the lower is the resistivity. The presence of clays and conductive minerals also reduces the resistivity of the rock.

The resistivity of earth materials can be studied by measuring the electrical potential distribution produced at the earth's surface by an electric current that is passed through the earth. Current is moved through the subsurface from one current electrode to the other and the potential difference is recorded as the current passes. From this information, resistivity values of various layers are acquired and layer thickness can be identified.

The apparent resistivity values determined are plotted as a log function versus the log of the spacing between the electrodes. These plotted curves identify thickness of layers. If there are multiple layers (more than 2), the acquired data is compared to a master curve to determine layer thickness.

This method is least influenced by lateral in-homogeneities and capable of providing higher

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depth of investigation.

The resistance R of a certain material is directly proportional to its length L and cross-sectional area A, expressed as:

$$R = Rs * L/A \text{ (in Ohm)}$$

Where Rs is known as the specific resistivity (characteristic of the material and independent of its shape or size)

With Ohm's Law,

$$R = dV/I \text{ (Ohm)}$$

Where dV is the potential difference across the resistor and I is the electric current through the resistor. The specific resistivity may be determined by:

$$Rs = (A/L) * (dV/I) \text{ (in Ohm m)}$$

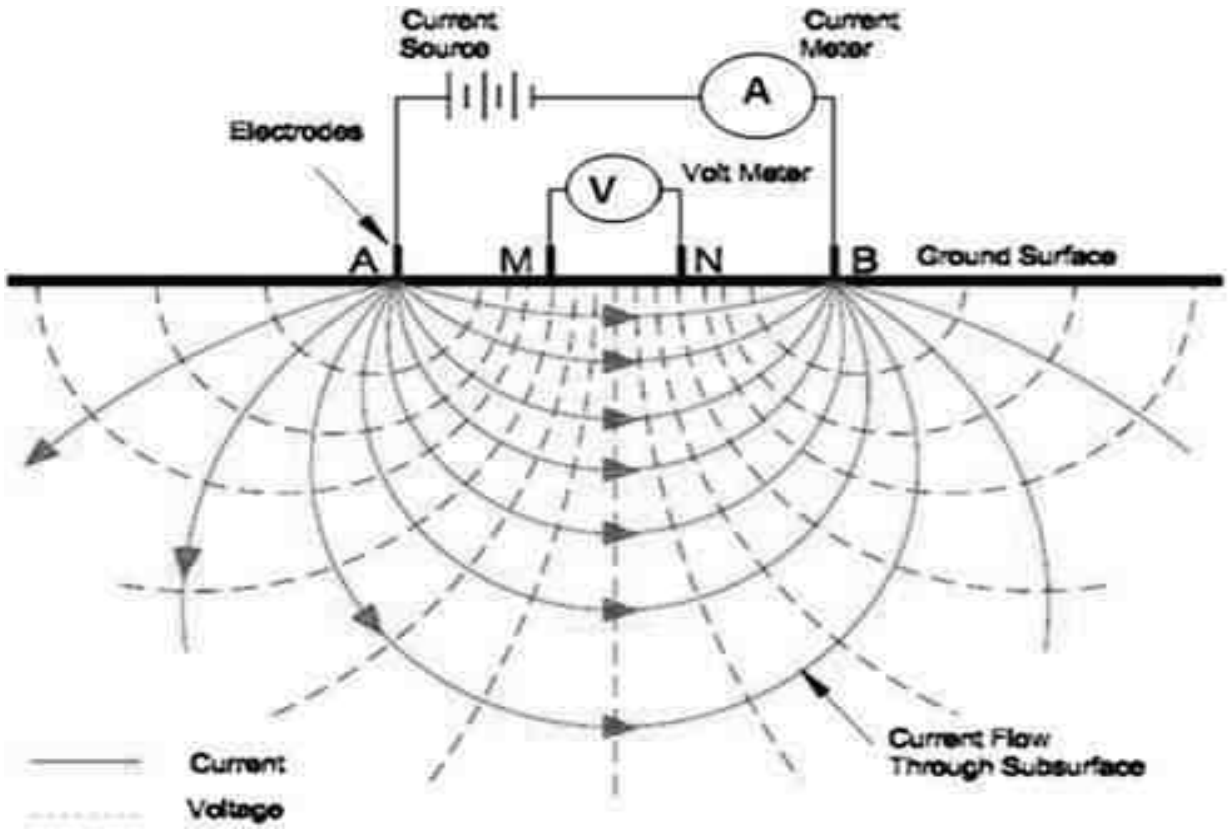


Figure 4. Schematic Diagram of Electrical resistivity principle

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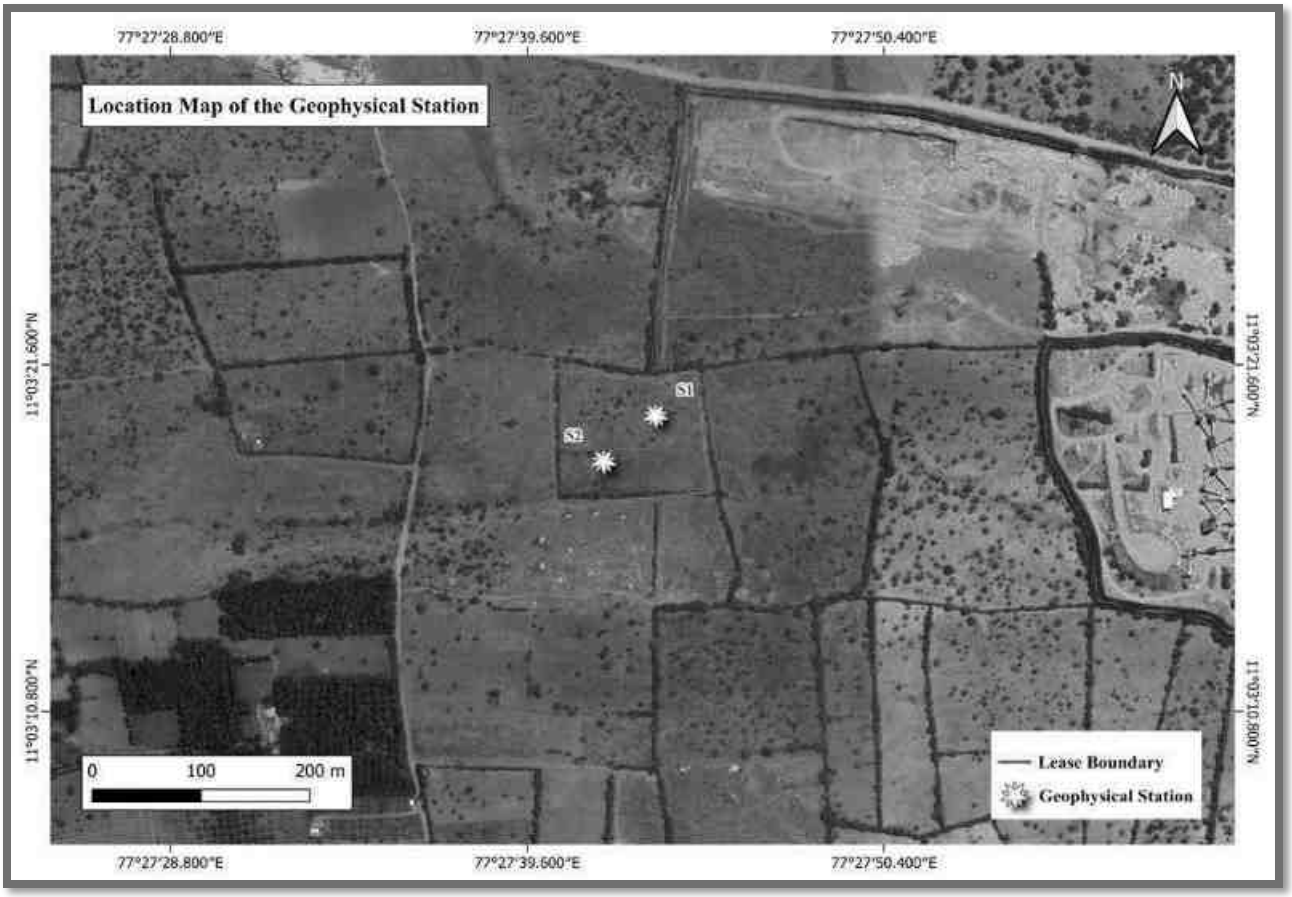


Figure 5. Geophysical survey location in the lease area

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6. GEOPHYSICAL DATA INTERPRETATION & GRAPH

Table 1 Geophysical data of Station 1

STATION-1				
AB/2 (m)	MN/2 (m)	Geometric Factor (K)	Resistance (R) Ohm	Apparent Resistivity Rho Ohm-meter
2	1	4.7	8.31	39.16
5	1	37.7	2.1	79.17
10	1	155.5	0.774	120.36
10	5	23.6	3.87	91.18
15	5	62.8	2.56	160.85
20	5	117.8	2.07	243.87
30	5	274.9	1.69	464.56
40	5	494.8	1.35	667.98
50	5	777.5	1.12	870.85
60	5	1123.1	0.95	1066.97
70	5	1531.5	0.68	1041.44
80	5	2002.8	0.61	1221.69
90	5	2536.8	0.58	1471.37
100	5	3133.7	0.5	1566.87

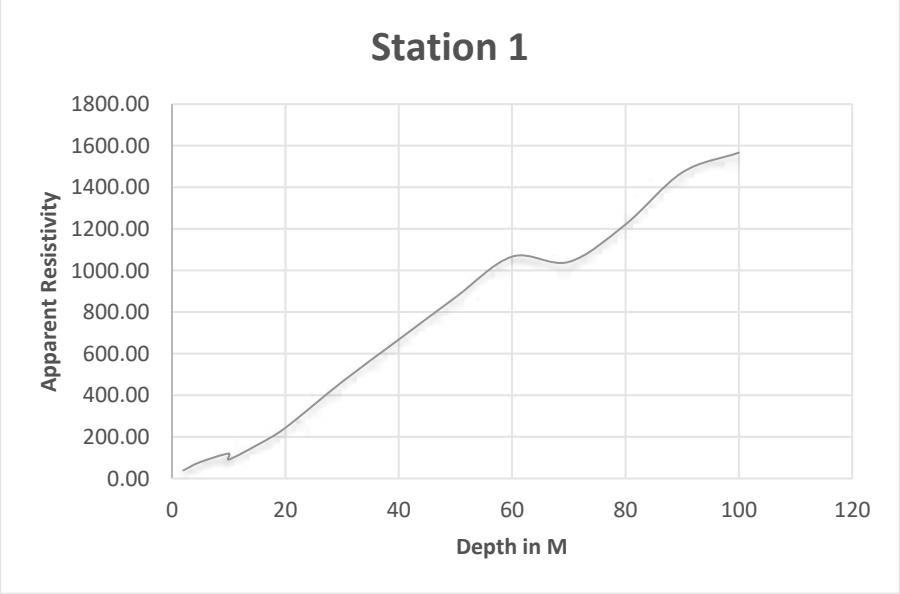


Figure 6 Graphical Representation of Geophysical data Station 1

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Table 2 Geophysical data of Station 2

STATION-2				
AB/2 (m)	MN/2 (m)	Geometric Factor (K)	Resistance (R) Ohm	Apparent Resistivity Rho Ohm-meter
2	1	4.7	4.38	20.64
5	1	37.7	2.88	108.57
10	1	155.5	1.45	225.49
10	5	23.6	6.24	147.03
15	5	62.8	3.79	238.13
20	5	117.8	2.54	299.24
30	5	274.9	2.18	599.26
40	5	494.8	1.86	920.33
50	5	777.5	1.4	1088.56
60	5	1123.1	1.09	1224.20
70	5	1531.5	0.95	1454.95
80	5	2002.8	0.81	1622.24
90	5	2536.8	0.74	1877.26
100	5	3133.7	0.7	2193.62

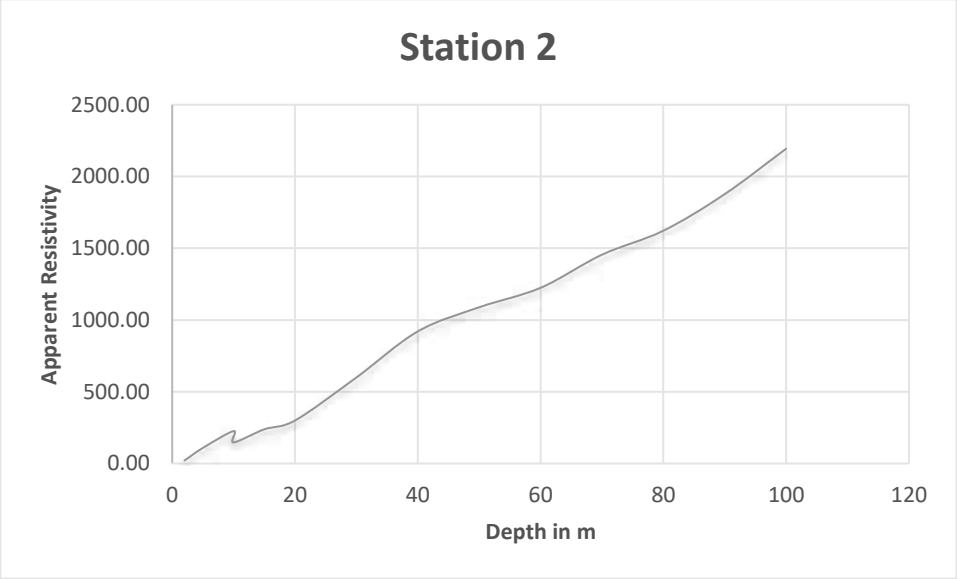


Figure 7 Graphical Representation of Geophysical data Station 2

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Table 3 Geophysical data of Station 3

STATION-3				
AB/2 (m)	MN/2 (m)	Geometric Factor (K)	Resistance (R) Ohm	Apparent Resistivity Rho Ohm-meter
2	1	4.7	3.97	18.71
5	1	37.7	1.78	67.10
10	1	155.5	0.96	149.29
10	5	23.6	2.64	62.20
15	5	62.8	2.17	136.35
20	5	117.8	1.9	223.84
30	5	274.9	1.77	486.56
40	5	494.8	1.63	806.53
50	5	777.5	1.5	1166.32
60	5	1123.1	1.12	1257.90
70	5	1531.5	0.96	1470.27
80	5	2002.8	0.85	1702.35
90	5	2536.8	0.75	1902.63
100	5	3133.7	0.59	1848.91

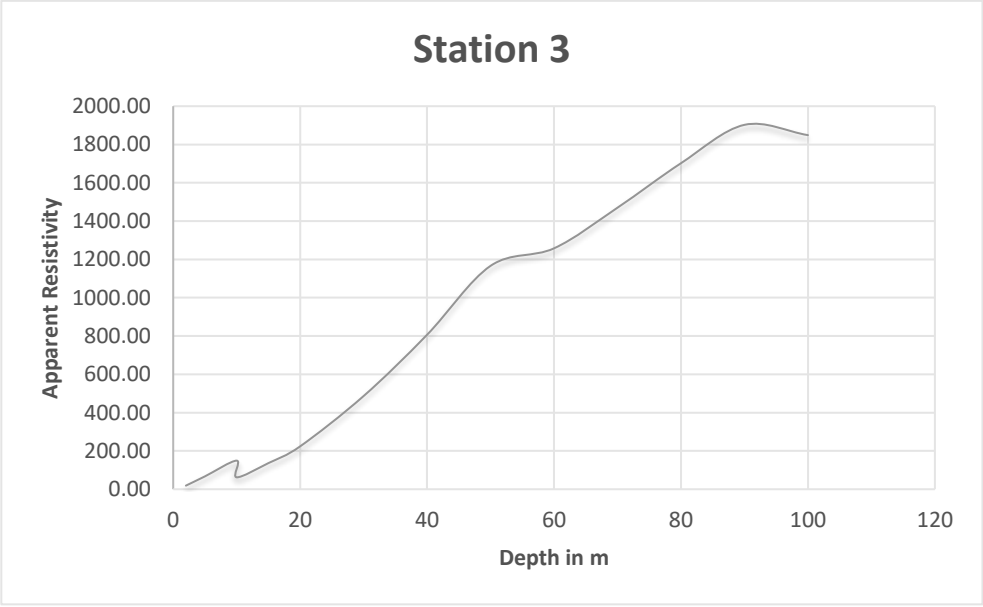


Figure 8 Graphical Representation of Geophysical data Station 3

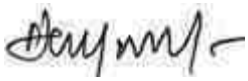
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7. CONCLUSION

- The lease applied area is exhibits undulated topography. The area has gentle sloping towards Northwestern side and altitude of the area is 327m to 324m above from Mean Sea Level.
- The geological study of the given area covered by gravel and rough stone in the area. The discharge of the groundwater controlled by the massive charnockite rock
- The study area exhibit 60°SE dipping and massive charnockite formation. So, it acts as a barrier and restrict the groundwater flow movement.
- Based on the geophysical investigation, Vertical Electrical Sounding (VES) were conducted to determine the subsurface water table and rock types up to depth of 100 m.
- The subsurface formation up to this depth can be categorized as follows,
    - **0m to 2m (Average) – Gravel.**
    - **2m to 10m (Average) – Weathered Rock.**
    - **10m to 37m (Average) – Hardrock Formation.**
- Water level from open and bore in nearby proposed site –open well having recharge water in the Shallow perched aquifer well built by the rainwater.
- In this mine lease area, groundwater occurs at deeper depths, depending on the intensity of weathering and its development is much less compared to gneissic formation. The mine area such no major intersections of water table are expected up to 50m.
- The aquifer is found within the weathered / fractured metamorphic terrain. Currently the aquifers are located at **93 to 96** meters below ground level (BGL). However, considering the approved mining plan depth, which is **47 meters [9m AGL and 38m BGL]**. It will not impact the groundwater table.

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- To obviate the impact due to catchment of rainwater as surface runoff management, effective measures like construction of peripheral garland drain, settling pond and ensuring water flow to the nearby downstream users are devised and will be implemented during the course of mining.
- From the above study it can be concluded there will be no adverse effect on the hydrological regime, water drainage, environment, and livelihood. Agricultural activity in the region.



Dr. P. Thangaraju, M.Sc., Ph.D.,

Govt. Approved Hydro Geologist

M/s. Geo Exploration and Mining Solutions,

Regd. Office: No. 17, Advaitha Ashram Road,

Alagapuram, Salem – 636 004, Tamil Nadu

Ph: 04294 - 251991
Cell : 99425 54963

SRI SELVANAYAGI EXPLOSIVES

Ad. Office :
4/152, Pudupalayam East,
Karaikuthukadu,
Murungatholuvu (Post),
CHENNIMALAI - 638 051.

Magazine :
No.422/B1, Keeranur Village,
Keeranur.
Form - 22 EX.L.No.E/SC/TN/22/432(E-23992)

Date :.....

To

VKP Engineering Ind (P) Ltd.,
No.151/260, Bhavani Road,
Perundurai Taluk,
Erode District,
Tamil Nadu- 638052.

Ref: Your Letter dated

Sub: Regarding blasting work using explosives in your proposed quarry.

Sir,

We are having explosives licence in Form 22 holding No:E/SC/TN/22/432 (E 23992) situated in Survey No.422/B1, Keeranur Village, Keeranur, Tirupur District. Our office functions at Address - M/S. Sri Selvanayagi Explosives, 4/152, Pudhupalayam East, Karaikuthukadu, Murungatholuvu-Post, Chennimalai, Erode District, Pin Code-638051.

We are enacting 2 explosives vans for transporting detonators and class 2 separately for our Magazine to our work site and well experienced and licenced blasters and shot firer for safe Blasting work since 15s years without untoward incident.

We are willing to undertake work on contract basis at your SF.No.543/2 in Peruntholuvu Village, Tirupur South Taluk, Tirupur District.

Thanking You,

For Sri Selvanayagi Explosives

(Proprietor)

Enclosure:- 1. Licence Copy

2. Short Firer Licence Copy

अनुज्ञप्ति प्ररुप एल. ई.-3 | LICENCE FORM LE-3

(विस्फोटक नियम, 2008 की अनुसूची 4 के भाग 1 के अनुच्छेद 3(क) से (घ) देखिए।)

(See article 3(a) to (d) of Part 1 of Schedule IV of Explosives Rules, 2008)

(ग) उपयोग के लिए एक समय पर वर्ग 1,2,3,4,5 या वर्ग 7 के विस्फोटक या किसी मैगजीन में वर्ग 6 के विस्फोटक रखने के लिए अनुज्ञप्ति

Licence to possess : (c) for use,explosives of class 1, 2,3,4,5,6 or 7 in a magazine

अनुज्ञप्ति सं. (Licence No.) : E/SC/TN/22/432(E23992)

वार्षिक फीस रुपए (Annual Fee Rs): 3600/-

1. Licence is hereby granted to

Sri Selvanayagi Explosives (अधिभोगी / Occupier : Sri D.selvaraju.), 4/152 Pudupalayam East, Karaikuthukadu, Murungatholuvu Post,Chennimalai, Town/Village - Keeranur (Post), District-ERODE, State-Tamil Nadu, Pincode - 638051



को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : **Individual**

3. अनुज्ञप्ति निम्नलिखित प्रयोजनों के लिए विधिमान्य है।
Licence is valid only for the following purpose. : possess for use of **Nitrate Mixture, Safety Fuse, Detonating Fuse, Electric and/or Ordinary Detonators,** - के उपयोग के लिए

4. अनुज्ञप्ति विस्फोटकों के निम्नलिखित किस्मों, प्रकार और मात्रा के लिए विधिमान्य है।
Licence is valid for the following kinds and quantity of explosives: -- (क) (a)

क्र Sr. No.	नाम और विवरण Name and Description	वर्ग और प्रभाग Class & Division	उप-प्रभाग Sub-division	मात्रा किसी एक समय में Quantity at any one time
1.	Nitrate Mixture	2 ,0	0	1000 Kg.
2.	Safety Fuse	6 ,1	0	10000 Mtrs
3.	Detonating Fuse	6 ,2	0	5000 Mtrs
4.	Electric and/or Ordinary Detonators	6 ,3	0	20000 Nos.

(ख) किसी एक कलैंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञप्ति के लिए]
(b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)] : : **15 times as above.**

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्त परिसर की पुष्टि होती है।
The licensed premises shall conform to the following drawing(s): . : रेखाचित्र क्र. (Drawing No.) E/SC/TN/22/432(E23992)
दिनांक (Dated) 06/01/2006

6. अनुज्ञप्ति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:
Survey No(s). 422/B1 , ग्राम (Town/Village) : **Keeranur**

जिला (District) **ERODE** **पुलिस थाना (Police Station) : KANGAYAM**
दूरभाष (Phone) राज्य (State) **Tamil Nadu** पिनकोड (Pincode)
ई. मेल (E-Mail) फैक्स (Fax)

7. अनुज्ञप्ति परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।
The licensed premises consist of following facilities. : **MAIN MAGAZINE, DETONATOR MAGAZINE AND A LOBBY**

8. अनुज्ञप्ति समय – समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधो, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबद्धों के अधीन रहते हुए अनुदत्त की जाती है।
The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and the following Annexures.
   1. उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, सन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुए)।
   Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
   2. अनुज्ञप्ति प्राधिकारी व्दारा हस्ता.क्षरित इस अनुज्ञप्ति की शर्तें और अतिरिक्ति शर्तें।
   Conditions and Additional Conditions of this licence signed by the licensing authority.
   3. दूरी प्ररूप DE-2 | Distance Form DE-2.

9. यह अनुज्ञप्ति तारीख **31 मार्च 2007** तक विधिमान्य रहेगी। This licence shall remain valid till **31st day of March 2007.**
यह अनुज्ञप्ति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट सेट-VII के अधीन तथा उपवर्णित इस अनुज्ञप्ति की शर्तों का अधिक्रमण करने या यदि अनुज्ञप्त परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंहृत की जा सकती है, जहां वह लागू हो।
This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attached hereto.

तारीख | The Date - 06/01/2006

Sd/-
संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
South Circle, Chennai

Amendments :
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 27/09/2011
- Change in Postal Address dated : 04/04/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 23/02/2022

नवीनीकरण के पृष्ठांकन के लिए स्थान
Space for Endorsement of Renewal

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
06/02/2024	31/03/2029	Jt. Chief Controller of Explosives, South Circle, Chennai

<u>कानूनी चेतावनी</u> : विस्फोटकों को गलत ढंग से चलाने या उनका दुरूपयोग विधि के अधीन गंभीर दांडिक अपराध होगा।
<u>Statutory Warning</u> : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANULINGAM
Reason: Licence No. : E/SC/TN/22/432
Location:Chennai [E23992]

भारत सरकार | Government of India
वाणिज्य और उद्योग मंत्रालय | Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो) | Petroleum & Explosives Safety Organisation (PESO)
पूर्व नाम- विस्फोटक विभाग | Formerly- Department of Explosives
A और D - विंग, ब्लॉक 1-8, दूसरा तल, शास्त्री भवन| A & D - Wing, Block 1-8, IInd Floor, Shastri Bhawan
26 हड्डोज रोड, नुंगमबक्कम चेन्नै | 26 Haddows Road, Nungambakkam Chennai 600006
फोन (Phone):- 28281023 | फैक्स (Fax):- 28284848
ई-मेल | Email: jccecchennai@explosives.gov.in

संख्या | No: P/SC/TN/30/2560(E150224)

सेवा में| To,
S.MANIKANDAN S/O SAKTHIVEL,
BALAJI GARDEN, PERIYA SADAIYAM PALAYAM, RICE MILL ROAD, ERODE
Distt. ERODE, State. Tamil Nadu, Pincode-638002

दिनांक | Dated

विषय | Subject: **श्री: S.MANIKANDAN S/O SAKTHIVEL, BALAJI GARDEN, PERIYA SADAIYAM PALAYAM, RICE MILL ROAD, ERODE को विस्फोटक नियम, 2008 के अंतर्गत LE-10 में जारी शॉर्ट फायर कर्ता प्रमाण-पत्र संख्या. E/SC/TN/30/2560(E150224) - प्रमाण-पत्र जारी करने के संबंध में |**
Shotfirer's Certificate No. E/SC/TN/30/2560(E150224) issued to S.MANIKANDAN S/O SAKTHIVEL, BALAJI GARDEN, PERIYA SADAIYAM PALAYAM, RICE MILL ROAD, ERODE in Form LE-10 of Explosives Rules, 2008 - Issue of Certificate regarding.

महोदय | Sir,
कृपया आपके पत्र संख्या. 97096 दिनांक 31/08/2023 तथा दिनांक 04/09/2023 को आयोजित अनुवर्ती परीक्षण का संदर्भ ग्रहण करें | विस्फोटक नियम 2008 के नियम 107 के प्रावधानों के अनुसार
वर्ग:(ख), श्रेणी: सामान्य जमीन के ऊपर, जमीन के ऊपर ब्लास्टिंग आपरेशन
के प्रयोजन के लिए शॉर्ट फायर कर्ता प्रमाण-पत्र संख्या. E/SC/TN/30/2560(E150224) इस पत्र के साथ संलग्न किया जा रहा है जो दिनांक 04/09/2028 तक वैध है |
Please refer to your letter No. 97096 dated 31/08/2023 and the subsequent examination held on 04/09/2023. Please find enclosed herewith Shotfirer's Certificate No.E/SC/TN/30/2560(E150224) valid upto 04/09/2028 for the purpose of
Class : (B), Category : General aboveground, All phases of aboveground blasting operation
as per the provisions of Rule 107 of Explosives Rules, 2008.

कृपया नोट करें कि उपरोक्त प्रमाण-पत्र के बल पर कोई भी विस्फोटक ना खरीदा जाए | यह सुझाव दिया जाता है कि ब्लास्टिंग आपरेशन करते समय, विस्फोटक नियम, 2008 के नियम 89 से 98 का सख्ती से पालन किया जाए | It may please be noted that no explosives should be purchased on the strength of the above certificate. You are advised to strictly follow **Rules 89 to 98 of Explosives Rules 2008** while undertaking blasting operations.

- प्रमाण-पत्र की वैधता बढ़ाने के मामले में, निम्नलिखित दस्तावेजों के साथ आवेदन प्रस्तुत किया जाए :
- In case of validity of the certificate to be extended , application with following documents shall be submitted :

1. फॉर्म एई-10 में आवेदन. | Application in Form AE-10.
2. फॉर्म एलई-10 में मूल शॉर्ट फायर कर्ता प्रमाण-पत्र. | Original Shot firer's Certificate in Form LE-10.
3. विस्फोटक नियम, 2008 के तहत ऑनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान सुविधा के माध्यम से पुनर्वैधीकरण का संवीक्षा शुल्क रू. 400/-, ऑनलाइन जमा किया जाना है।
Scrutiny fee of revalidation Rs. 400/-. To be submitted online through e-payment facility available on online application portal under the Explosives Rules, 2008.
4. 'सामने' 'काले रंग अमिट स्याही' से विधिवत हस्ताक्षरित, धारक के कलर पासपोर्ट साईज फोटो की पांच प्रतियां. | Five copies of holder's colour passport size photographs duly singed 'in front' by 'black color indelible ink'.
5. पंजीकृत चिकित्सक द्वारा जारी शारीरिक स्वस्थता प्रमाण पत्र. | A physical fitness certificate from Registered medical practitioner.
6. फॉर्म एलई-3 में अनुज्ञप्ति धारक वर्तमान नियोक्ता से सहमति पत्र जो प्रमाण पत्र धारक से सेवा लेने का इच्छुक है. | A consent letter from the present employer holding Licence in Form LE-3 and intending to hire the services of certificate holder.
7. शॉर्ट फायर कर्ता प्रमाण पत्र धारक को पुनरीक्षण/पुनर्वैधीकरण प्राधिकारी के समक्ष स्वयं को प्रत्यक्ष रूप से प्रस्तुत करना होगा. | The shot firer certificate holder has to present himself physically before reviewing/revalidating Authority.
8. ब्लास्टिंग आपरेशन के दौरान विस्फोटक नियम, 2008 के प्रावधानों का उल्लंघन करने के परिणामस्वरूप मानवीय जीवन के नुकसान होने से, इस प्रमाण पत्र को वापस ले लिया/रद्द किया जा सकता है .
This certificate is liable to be cancelled/withdrawn on contravention of provisions of Explosive Rules, 2008 committed during blasting operations, resulting in loss of human life.

भवदीय / Yours faithfully,
(डा.टी.एल.धनुलिंगम | Dr. T. L. THANULINGAM
संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle

प्रतिलिपि प्रेषित | Copy Forwarded to:
1. **Superintendent of Police, ERODE, Tamil Nadu with reference to his Noc No: S6062300289750 Dated: 09/08/2023**

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle

| अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट http://peso.gov.in देखें |
For more information regarding status, fees and other details, please visit our web site http://peso.gov.in|

Note :- This is system generated document does not require physical signature. Applicant may take printout for the records.

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Reason: Licence No. : E/SC/TN/30/2560
Location:Chennai [E150224]
Date:04-09-2023 13:42:32 PM

अनुज्ञप्ति प्ररूप एल.ई. -10 | Form LE-10
शॉर्ट फायर कर्ता प्रमाण-पत्र | Shot Firer's Certificate
(अनुसूची IV के भाग I का अनुच्छेद 10 देखें | See article 10 of Part I of Schedule IV)
[विस्फोटक नियम, 2008 का नियम 107(5) देखें | see rule 107(5) of Explosives Rules, 2008]

(खान अधिनियम,1952 के अधीन न आने वाले क्षेत्र में विस्फोट करने के लिए सक्षमता प्रमाणपत्र)
(Certificate of competency to carry out blasting of explosives in area not coming under the Mines Act, 1952)

संख्या | No.: E/SC/TN/30/2560(E150224)



प्रमाणित किया जाता है कि ***श्री S.MANIKANDAN S/O SAKTHIVEL,***
जिनका जन्म 03/01/2000 को हुआ था, जो BALAJI GARDEN, PERIYA SADAIYAM PALAYAM, RICE MILL ROAD, ERODE, ERODE, Tamil Nadu - 638002 के निवासी
है ने संयुक्त मुख्य विस्फोटक नियंत्रक,चेन्नै द्वारा तारीख 04/09/2023 को आयोजित शॉर्ट फायर की परीक्षा तारीख को 04/09/2023 उत्तीर्ण कर ली है और वह विस्फोटक अधिनियम, 1884 और उसके अधीन विरचित नियमों के उपबंधों के अधीन रहते हुए खान अधिनियम,1952की परिधि के अधीन आनेवाले खानों से अन्यथा क्षेत्र में नीचे यथा उल्लिखित विस्फोटकों का उपयोग करते हुए विस्फोट प्रचालन करने के लिए प्राधिकृत है ।
This is to certify that *Shri S.MANIKANDAN S/O SAKTHIVEL,*
born on 03/01/2000 ,resident of BALAJI GARDEN, PERIYA SADAIYAM PALAYAM, RICE MILL ROAD, ERODE, ERODE, Tamil Nadu - 638002 passed the shotfirer's examination held on 04/09/2023 conducted by Joint Chief Controller of Explosives, Chennai and is authorised to conduct blasting operations as mentioned below using explosives in areas other than mines coming under the purview of the Mines Act 1952, subject to the provisions of the Explosives Act, 1884 and the rules framed thereunder.

विस्फोट करने के प्राधिकृत वर्ग, प्रवर्ग और प्रकार :
वर्ग:(ख), श्रेणी: सामान्य जमीन के ऊपर, जमीन के ऊपर ब्लास्टिंग आपरेशन

Authorised class, category and type of blasting :
Class : (B), Category : General aboveground, All phases of aboveground blasting operation
[नियम 107 का उप-नियम (5) का स्पष्टीकरण देखें | See explanation of sub-rule (5) of rule 107]

यह प्रमाणपत्र 04/09/2028 (जारी करने की तारीख से पांच वर्ष) तक विधिमान्य होगा |
This certificate shall remain valid till 04/09/2028 (five years from the date of issue)

यह प्रमाण-पत्र, अधिनियम या उसके अधीन विरचित नियमों अथवा इस प्रमाण-पत्र की शर्तों का कोई अतिक्रमण करने पर या यदि आवेदक द्वारा आवेदन प्ररूप में दी गई सूचना में कोई फर्क या विचलन होता है तो निलम्बित या अभिखंडित कर दिया जाएगा ।
This certificate is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this certificate or if there is any discrepancy or deviation in the information or suppression of facts furnished by the applicant in his application form.

स्थान | Place : **चेन्नै | Chennai**
दिनांक | Date: **04/09/2023**

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

पुनर्विधिमान्यनकरण के लिए पृष्ठांकन | Endorsement for revalidation

पुनर्विधिमान्यनकरण की तारीख Date of Revalidation	समाप्ति की तिथि Date of Expiry	अनुज्ञप्ति प्राधिकारी के हस्ताक्षर Signature of licensing authority

कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरूपयोग विधि के अधीन गंभीर दांडिक अपराध होगा ।
Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANUSINGAM
Reason: Licence No. : E/SC/TN/30/2560
Location:Chennai [E150224]
Date:04-09-2023 13:42:19 PM

(सेटConditions | Conditions)

शॉर्ट फायर कर्ता प्रमाण-पत्र के लिए प्ररूप एल.ई.-10 में विस्फोटक नियंत्रक व्दारा प्रदान किए जानेवाले प्रमाण-पत्र संख्या E/SC/TN/30/2560(E150224) की शर्तें निम्नलिखित हैं।

The following are the conditions of licence number E/SC/TN/30/2560(E150224) to Shot Firer's Certificate in Form LE-10 granted by Controller of Explosives.

1. यह परमिट,परमिट धारक को ब्लास्टिंग करने के लिए तब तक अधिकृत करता है जब तक कि वह विस्फोटक नियम, 2008 के अंतर्गत फॉर्म एलई-3 में वैध अनुज्ञप्ति धारक (अनुज्ञप्ति संख्या E/SC/TN/22/432(E23992)). Sri Selvanayagi Explosives के नौकरी/अनुबंध के अधिन काम कर रहा है।
This permit authorizes the permit holder to conduct blasting so long as he is working under the employment/contract of Sri Selvanayagi Explosives holding valid licence (Licence No. E/SC/TN/22/432(E23992)) in Form LE-3 of Explosives Rules, 2008.
2. विस्फोटक सामग्री प्राप्त करने, उसके स्वामित्व परिवहन भंडारण, उठाई धराई और उपयोग करने के लिए सभी स्थानीय विधियों और विनियमों का अनुसरण किया जाएगा।
All local laws and regulations applicable for obtaining, owning, transporting, storing, handling and using explosive materials shall be followed.
3. विस्फोटक सामग्री को अप्राधिकृत कब्जे से संरक्षित किया जाएगा तथा उसे परित्यक्त नहीं किया जाएगा।
Explosive materials shall be protected form unauthorised possession and shall not be abandoned.
4. विस्फोटक सामग्री का उपयोग केवल ऐसे अनुभवी व्यक्तियों व्दारा किया जाएगा जो उसमें अंतर्ग्रस्त परिसंकट को जानते हों और जिनके पास अपेक्षित अनुज्ञापत्र हो।
Explosive materials shall be used only by experienced persons who are familiar with the hazards involved and who hold all required permits.
5. लदाई और फायरिंग या उसका पर्यवेक्षण केवल ऐसे व्यक्ति व्दारा किया जाएगा जिसके पास समुचित शाट फायरकरता प्रमाणपत्र और विस्फोट के लिए अनुज्ञापत्र हों।
Loading and firing shall be performed or supervised only by a person possessing an appropriate shot firer certificate and permit to blast.
6. प्रशिक्षार्थी सहायक और अन्य व्यक्ति, जिनके पास अपेक्षित शाट फायरकर्ता प्रमाणपत्र या अनुज्ञापत्र नहीं है, केवल ऐसे अनुज्ञापत्र धारण करने वाले व्यक्तियों के पर्यवेक्षण के अधीन काम करेंगे।
Trainees helpers and other persons who do not hold the required shot firer certificate or permits shall work only under the supervision of persons holding such permits.
7. ऐसे स्थान पर कोई विस्फोटक सामग्री अवस्थित या भंडारित नहीं की जाएगी जहां अत्यधिक गर्मी या उसके प्रभाव से उनका विस्फोट हो सकता है।
No explosive materials shall be located or stored where they may be exposed to flame excessive heat sparks or impact.
8. ऐसे स्थापन के 15 मीटर के भीतर धूम्रपान करने की अनुमति नहीं दी जाएगी जहां विस्फोटकों को जमा किया गया है या उनका उपयोग किया गया है।
No smoking shall be permitted within 15 metre of any location where explosive are being handled or used.
9. कोई व्यक्ति ऐसे स्थान के 15 मीटर के भीतर कोई माचिस, बिजली या अन्य प्रकार की अग्नि या ज्वाला नही जलाएगा, जहां विस्फोटकों को जमा किए गए है या उनका उपयोग किया जा रहा है। तथापि इस अपेक्षा से सुरक्षित फ्यूज जलाने के लिए उपयुक्त युक्तियों को छूट प्राप्त होगी।
No person with in 15 metres of any location where explosive are being handled or used shall carry any matches open light or other fire or flame. However, suitable devices for lighting safety fuse are exempted form this requirement.
10. मादक, शराब, स्वापक या अन्य खतरनाक औषधियों से प्रभावित किसी व्यक्ति को विस्फोटक सामग्री के उपयोग की अनुज्ञा नहीं होगी।
No person under the influence of intoxicating liquors narcotics or other dangerous drugs shall be allowed to handle explosive materials.
11. भंडारण मैगजीन और विस्फोट स्थान के बीच परिवहन के दौरान विस्फोटक सामग्री बंद अनुमोदित पात्र या पैकेज में रखे जाएंगे।
Explosive materials shall be kept in close approved containers or packages while being transported between the storage magazine and the blasting site.
12. विस्फोट करने का शाट फायरकर्ता प्रमाणपत्र और अनुज्ञापत्रधारक व्दारा प्राप्त की गई और फायर की गई या इससे निबटाई गई सभी विस्फोटक सामग्री का दैनिक अभिलेख रखेगा। ऐसा अभिलेख पांच वर्ष तक प्रतिधारित किया जाएगा।
A holder of a shot firer certificate and Permit to Blast shall keep a daily record of all explosive materials received and fired or otherwise disposed of by the permit holder. Such records shall be retained for five years.
13. शॉर्ट फायरकर्ता और कर्मचारी आपातकाल के दौरान बरती जानेवाली प्रक्रिया से अवगत होंगे।
The shot firer and the employee shall be conversant with procedure to be taken during the emergency.
14. शॉर्ट फायरकर्ता प्रमाण-पत्र का धारक जो सुरक्षा के हित में नियंत्रक व्दारा समय-समय पर दिए गए उन सभी या किन्हीं निदेशों का पालन करेगा।
The holder of the shot firer certificate shall comply with all or any of the directions as may be given by the Controller from time to time in the interest of safety.
15. अग्नि या विस्फोटक के कारण होने वाली दुर्घटना और विस्फोटकों की हानि,कमी या चोरी के बारे में निकटतम पुलिस स्टेशन और अनुज्ञापन प्राधिकारी तथा अनुज्ञापन प्राधिकारी के स्थानीय कार्यालय में तुरंत रिपोर्ट की जाएगी।
Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the Controller of Explosives having jurisdiction over the area.

कृते संयुक्त मुख्य विस्फोटक नियंत्रक,
For Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

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Reason: Licence No. : E/SC/TN/30/2560
Location:Chennai [E150224]
Date:04-09-2023 13:42:06 PM

அறிக்கை

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம் 10, பெருந்தொழுவு கிராமம் ரீ.ச. எண் 543/2 (1.64.38 ஹெக்டர்) காளைக்கு 500 மீட்டர் சுற்றளவில் வழிபாட்டுத்தளங்களோ, புராதானச் சின்னங்களோ, அரசு கட்டிடங்களோ, பள்ளிக்கூடங்களோ ஏதுமில்லை பின்னும் 1.0 கி.மீ சுற்றளவில் காப்புக்காடுகள் ஏதுமில்லை என்பதை இதன் மூலம் தெரிவித்துக் கொள்கிறேன்.

// அலுவலக உபயோகம் மட்டும் //

(கணிம வளத்துறைக்கு மட்டும்)

3/3/2025

கிராம நிர்வாக அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17 பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

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TOPOGRAPHICAL VIEW OF PERUNTHOLUVU ROUGH STONE AND GRAVEL QUARRY LEASE APPLIED AREA



Name of the Applicant	:	**M/s. VKP Engineering Ind Pvt., Ltd.,**
		Thiru. P. Jagadeesan, Director,
Address	:	No.11/32, Vettukattu Valasu,
		Ingur, Perundurai,
		Erode District,
		Tamil Nadu State– 638 052.

Location:

S.F.No.	:	543/2
Extent	:	1.64.38 Ha
Village	:	Peruntholuvu
Taluk	:	Tiruppur South
District	:	Tiruppur

Signature of the Applicant
M/s. VKP Engineering Ind Pvt., Ltd.,

(P. Jagadeesan)
Director

J. [illegible] 3/3/2025
கிராம நிர்வாக அலுவலர்
[illegible]
(Village Administrative officer)
பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்
Attestation

162 A

File No: 11957
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), TAMIL NADU)
***

Dated **03/06/2025**

To,

Thiru.P Jagadeesan
vkp engineering ind private limited
No. 11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District. ,TAMIL NADU, 638052
vkpeindpvtltd@gmail.com

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

Sir/Madam,

Sub:SEIAA, Tamil Nadu – Terms of Reference along with Public Hearing (ToR) for the Proposed Rough Stone and Gravel Quarry lease over an extent 2.90.0 Ha at S.F.Nos. 538/2A, 538/2B and 539/2 (P), Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu by Tvl. VKP Engineering Ind Pvt Ltd – "B1" and Schedule S.No.1(a) – ToR issued along with Public Hearing-preparation of EIA report – Regarding.
Ref:
1. Online proposal No. SIA/TN/MIN/529466/2025, Dated: 14/03/2025.
2. Your application submitted for Terms of Reference dated: 14.03.2025.
3. Minutes of the 562nd Meeting of SEAC held on 09.05.2025.
4. Minutes of the 830th Meeting of Authority held on 28.05.2025.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO25B0108TN5253360N
(ii) File No.	11957
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	VKP Engineering Ind Pvt Ltd., Extent: 2.90.0ha, Rough Stone and Gravel Quarry Project.
(viii) Name of Company/Organization	vkp engineering ind private limited
(ix) Location of Project (District, State)	TIRUPPUR, TAMIL NADU
(x) Issuing Authority	SEIAA

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(xii) Applicability of General Conditions no
(xiii) Applicability of Specific Conditions no

1.In view of the particulars given in the Para 1 above, the project proposal interalia 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 28.05.2025 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 Tvl. VKP Engineering Ind Pvt Ltd 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 Principal Secretary to Government, Environment and Forests Department, Tamil Nadu.
3. The Additional Chief Secretary to Government, Natural Resources Department, Tamil Nadu.
4. The Additional Principal Chief Conservator of Forests, Regional Office (SZ), 34, HEPC Building, 1st& 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
6. The Chair Person, TNPC Board,76, Mount Salai, Guindy, Chennai-32
7. The District Collector, Tiruppur District,.
8. The Commissioner of Geology and Mines, Guindy, Chennai-32
9. Assistant Director, Department of Geology & Mining, Tiruppur District,
10. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
11. File Copy.

Annexure 1

Specific Terms of Reference for (Mining Of Minerals)

1. Seac Standard Conditions

S. No	Terms of Reference
1.1	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:

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S. No	Terms of Reference
	(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, 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.

S. No	Terms of Reference
	· 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

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S. No	Terms of Reference
	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.

2. Seiaa Specific Conditions:

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S. No	Terms of Reference
2.1	The authority noted that the subject was placed in the 561st SEAC-II meeting held on 08.05.2025. After detailed discussions, the Authority accepts the recommendation of SEAC-II and decided to grant Terms of Reference (ToR) along with Public Hearing for the quantity of 7,43,195m^3 of Rough Stone and 48,292m^3 of gravel upto the depth of 87m (9m AGL+ 78m BGL) 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 following conditions and conditions as recommended by SEAC-II & normal conditions & the conditions mentioned below.

Standard Terms of Reference for (Mining of minerals)

1.

S. No	Terms of Reference
1.1	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
1.2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given
1.3	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
1.4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the areashould 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)
1.5	Information should be provided in Survey of India Toposheet 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
1.6	Details about the land proposed for mining activities should be givenwith 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
1.7	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

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S. No	Terms of Reference
1.8	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
1.9	The study rea 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
1.10	Land use of the study rea 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
1.11	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
1.12	A 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
1.13	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
1.14	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
1.15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given
1.16	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
1.17	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 Wildlifeand copy furnished
1.18	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 alongwith budgetary provisions for

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S. No	Terms of Reference
	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
1.19	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 Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered
1.20	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 w.r.t 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)
1.21	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
1.22	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
1.23	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
1.24	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
1.25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided
1.26	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

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S. No	Terms of Reference
1.27	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
1.28	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 State Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished
1.29	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
1.30	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
1.31	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
1.32	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
1.33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report
1.34	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
1.35	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
1.36	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
1.37	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

S. No	Terms of Reference
	may be given with time frames for implementation
1.38	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
1.39	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
1.40	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given
1.41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out
1.42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report
1.43	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
1.44	Besides the above, the below mentioned general points are also to be followed:- a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) 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. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF 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. g) 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. h) 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. i) 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

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SEIAA STANDARD CONDITIONS:

Cluster Management Committee

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.

Agriculture & Agro-Biodiversity

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.

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Forests

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.

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 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:

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.

Energy

28. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy 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.

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.

Mine Closure Plan

32. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.

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.

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.

Risk Assessment

35. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.

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.

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.

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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.

A. 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

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and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

5) 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.

6) 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.

7) 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.

8) 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.

9) 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.

10) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

11) 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.

12) 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.

13) 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.

15) 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.

16) 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).

17) 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.

18) 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.

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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.

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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 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.

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17. Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./ private land, status of is acquisition, nearby (in 2-3 km.) water body, population, with in 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.

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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 -l1013/77/2004-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 willtake 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.

Signature Not Verified

Digitally Signed by : A R Rahul Nadh IAS
Member Secretary, SEIAA

Date: 03/06/2025

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From

Thiru.V.Sasikumar, M.Sc.,
Deputy Director (i/c),
Geology and Mining,
Tiruppur

To

Tvl.V.K.P.Engineering Ind Pvt Ltd.,
Thiru.P.Jagadeesan, Director,
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District.

R.c. No.669/ Mines / 2023 dated: 29.07.2024

Sub: Mines and Minerals – Minor Mineral – Rough Stone and Gravel- Tiruppur District – Tiruppur South Taluk – Peruntholuvu Village- S.F.Nos. 538/2A (0.92.95), 538/2B(0.92.25), 539/2B(1.05.50)– totally over an extent of 2.90.0 Hectares of patta land- Quarry lease for Rough Stone and Gravel - Application preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., - Precise area communicated for the proposed grant of quarry lease - Mining Plan Approved - details of quarries located within 500 mts radius called for - details furnished – Regarding.

Ref:
1. Application for grant of Rough Stone and Gravel quarry lease preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., dated: 09.10.2023
2. G.O. Ms. No. 79 / Industries (MMC 1) Department dated 06.04.2015.
3. The Deputy Director (i/c), Geology and Mining, Tiruppur letter R.C. No.669/Mines/2023 dated 24.07.2024
4. Tvl.V.K.P.Engineering Ind Pvt Ltd., letter dated:nil received on 26.07.2024.
5. This office letter in even no. dated.29.07.2024 (Mining Plan approved)

****

In the reference 4th cited above, Tvl.V.K.P.Engineering Ind Pvt Ltd., has requested to furnish details of other quarry leases of expired, existing and proposed within 500mtr radius from the proposed rough stone and gravel lease over an extent of 2.90.0 Hect. in S.F.Nos538/2A (0.92.95), 538/2B(0.92.25), 539/2B(1.05.50) in Peruntholuvu village, Tiruppur South Taluk, Tiruppur District for the period of 10 years.

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As requested by the applicant, the details of existing, proposed and expired quarries situated within the radius of 500 meters from the subject area are furnished as follows:-

1. Existing quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Collector's proceedings No. & Date	Lease period
1	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	538/1(P), 539/1(P), 539/2(P)	4.94.95	738/ Mines/2019 dated 19.06.2020 & 285/2021/Mines dated 26.02.2021	19.06.2020-18.06.2030

2. Proposed quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Lease period
1	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	538/2A (0.92.95), 538/2B(0.92.25), 539/2B(1.05.50)	2.90.00	Proposed quarry
2	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0)	4.51.00	Proposed quarry
3	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	543/2	1.64.38	Proposed quarry

3. Lease expired quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Collector's proceedings No. & Date	Lease period
----Nil-----						

Deputy Director (i/c)
Geology and Mining,
Tiruppur

Copy to : State Level Environment Impact Assessment Authority-Tamil Nadu,3rd Floor, Panagal Maaligai,No.1 Jeenis Road, Saidapet, Chennai-15

29/7/24

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From

Thiru.V.Sasikumar, M.Sc.,
Deputy Director (i/c),
Geology and Mining,
Tiruppur

To

Tvl.V.K.P.Engineering Ind Pvt Ltd.,
Thiru.P.Jagadeesan, Director,
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District.

R.c. No. 667/ Mines / 2023 dated: 29.07.2024

Sub: Mines and Minerals – Minor Mineral – Rough Stone and Gravel- Tiruppur District – Tiruppur South Taluk – Peruntholuvu Village- S.F.Nos. 538/2A (0.92.95), 538/2B (0.92.25), 539/2B (1.05.50)– totally over an extent of 2.90.0 Hectares of patta land- Quarry lease for Rough Stone and Gravel - Application preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., - Precise area communicated for the proposed grant of quarry lease - Mining Plan Submitted for approval - Approved - regarding.

Ref:
1. Application for grant of Rough Stone and Gravel quarry lease preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., dated: 13.09.2023
2. G.O. Ms. No. 79 / Industries (MMC 1) Department dated 06.04.2015.
3. The Deputy Director (i/c), Geology and Mining, Tiruppur letter R.C. No.669/Mines/2023 dated 24.07.2024
4. Tvl.V.K.P.Engineering Ind Pvt Ltd., letter dated:nil received on 26.07.2024

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Tvl.V.K.P.Engineering Ind Pvt Ltd., has preferred an application for the grant of Rough Stone and Gravel quarry lease over an extent of 4.51.0 Hectares of Patta land in S.F.Nos. 538/2A (0.92.95), 538/2B(0.92.25), 539/2B(1.05.50) of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District vide the reference 1st cited and the precise area was communicated to the applicant vide the reference 3rd cited with a direction to submit the approved mining plan and Environmental Clearance.

As directed, the applicant submitted three copies of mining plan for approval vide the reference 4th cited. The Mining Plan has been verified and found that,

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Yearwise production after leaving safety distance and benches for the second five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
6th Year	31920	-
7th year	9635	-
8th year	9635	-
9th year	10850	-
10th year	9940	-
Total	**71980**	-

Yearwise production excluding common mine boundary for the first five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
1st Year	49600	10880
2nd year	48000	11200
3rd year	185600	26212
4th year	40800	-
5th year	52800	-
Total	**376800**	**48292**

Yearwise production excluding common mine boundary for the second five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
6th Year	40515	-
7th year	189765	-
8th year	48800	-
9th year	52825	-
10th year	34490	-
Total	**366395**	-

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Special Condition:

Only after obtaining appropriate permission for common boundary from the Directorate General of Mines Safety under Regulation 111(3) of the Metaliferous Mines Regulations,1961, the lessee shall work in the areas of common boundary between the proposed roughstone quarry in 538/2A (0.92.95), 538/2B (0.92.25), 539/2B(1.05.50) and Rough stone quarry existing in S.F.Nos. 538/1(P), 539/1(P), 539/2(P) and Rough stone quarry applied in S.F.Nos.536, 537/1, 537/2, 537/3 and 543/2 of Peruntholuvu Village. No quarry works shall be extended into the common boundary unless permission for the effect is obtained from the Directorate General of Mines Safety and submitted the same to the Deputy Director, Department of Geology and Mining, Tiruppur.

Encl.: Approved Mining Plan.

Deputy Director (i/c),
Geology and Mining,
Tiruppur

29/7/24

29/7/24

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MINING PLAN AND PROGRESSIVE QUARRY CLOSURE PLAN FOR PERUNTHOLUVU ROUGH STONE AND GRAVEL QUARRY

(PREPARED UNDER RULES 41 & 42 AS PER THE AMENDED UNDER TAMIL NADU MINOR MINERAL CONCESSION RULES, 1959)

Patta Land/ Lease period = Ten years

IN

LOCATION OF THE QUARRY LEASE APPLIED AREA

ASSISTANT DIRECTOR * GEOLOGY & MINING * TIRUPUR

EXTENT	: 2.90.0 Ha
S.F.Nos.	: 538/2A, 538/2B AND 539/2 (P),
VILLAGE	: PERUNTHOLUVU
TALUK	: TIRUPPUR SOUTH
DISTRICT	: TIRUPPUR
STATE	: TAMIL NADU

FOR

APPLICANT

Tvl. VKP Engineering Ind Pvt., Ltd.,

Thiru. P. Jagadeesan, Director

No.11/32, Vettukattu Valasu,

Ingur, Perundurai,

Erode District,

Tamil Nadu State– 638 052.

PREPARED BY

B. Vengadagiri, M.Sc.,

Qualified Person

No.105, 5th Cross, Alagapuram,

Salem District – 636 010,

Mobile No.: +91 86953 32233.

E-Mail: vengatb6@gmail.com

ABBREVIATIONS

- EIA - Environmental Impact Assessment
- SEAC - State Expert Appraisal Committee
- SEIAA - State Level Environment Impact Assessment Authority
- MoEF&CC - Ministry of Environment, Forest and Climate changes
- MSL - Mean Sea Level
- CPCB - Central Pollution Control Board
- TNPCB - Tamil Nadu Pollution Control Board
- S.F.No. - Survey Field Number
- DMS - Director of Mines Safety
- DGMS - Director General of Mines Safety
- MMR - Metalliferous Mines Regulations
- MCR - Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules
- TNMMCR - Tamil Nadu Minor Mineral Concession Rules
- EMP - Environment Management Plan
- NONEL - Non Electric
- PPV - Peak Particle Velocity
- CRZ - Coastal Regulatory Zone
- HACA - Hill Area Conservation Authority
- QP - Qualified Person
- AGL - Above Ground Level
- BGL - Below Ground Level

ASSISTANT DIRECTOR * TIRUPUR * GEOLOGY AND MINING

Tvl. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR *

CONSENT LETTER FROM THE APPLICANT

The Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholavu Rough Stone and Gravel Quarry lease applied area over an extent of 2.90.0 Hectares Patta lands in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared by

B. Vengadagiri, M.Sc.,
Qualified Person

We have entrust the works to prepared the Mining Plan based upon the production requirements to me as per the Mines Acts, Rules, Regulations and Amendments as on date. We request to the Deputy Director (i/c), Department of Geology and Mining, Tiruppur District, Tamil Nadu State to make further correspondence regarding the modification of the Mining Plan with the said Qualified Person at his following address.

B. Vengadagiri, M.Sc.,
No.105, 5th Cross, Alagapuram,
Salem District – 636 010,
Mobile No.: +91 86953 32233.

We hereby undertake that all the responsibilities of contents in the Mining Plan and if any corrections made in the Mining Plan by the Qualified Person may be deemed to have been made with our knowledge and consent and shall be acceptable to me and binding on me in all respects. If there is any substantial change during operation we will carried out a Modified Mining plan and seek its approval from concerned Authorities.

Signature of the Applicant
Tvl. VKP Engineering Ind Pvt., Ltd.,

P. Jagadeesan
(Director)

Place: Erode
Date: 25.07.2024

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Tvl. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

DECLARATION OF THE APPLICANT

The Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholavu Rough Stone and Gravel Quarry lease applied area over an extent of 2.90.0 Hectares Patta lands in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared in full consultation with me.

I have understood its contents and agree to implement the same in accordance with Laws, Rules and Act applicable to quarry from time to time as per Tamil Nadu Minor Mineral Concession Rules, 1959.

Signature of the Applicant
Tvl. VKP Engineering Ind Pvt., Ltd.,

P. Jagadeesan
(Director)

Place: Erode
Date: 30.07.2024

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ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

CERTIFICATE

Certified that I am, **B. Vengadagiri, M.Sc.,** residing at No.105, 5th Cross, Alagapuram, Salem District – 636 010, Tamil Nadu, holding a Post Graduate Degree in Geology (M.Sc., Applied Geology) from Annamalai University, Chidambaram and I worked in the field of Mining in a role of Geologist.

Rule 15(I)(a) and (b) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 stipulates the eligibility for preparing Mining plans as "(I)(a) a degree in mining engineering or a post-graduate degree in geology granted by a university established" and (I)(b) "Professional experience of five years of working in a supervisory capacity in the field of mining after obtaining the degree". Since my qualification and experience are satisfied the Rule (I)(a) and (I)(b) of 15 of the said Rules, I am eligible to prepare Mining Plans for both Major and Minor Minerals.

Accordingly, I prepared this Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholavu Rough Stone and Gravel Quarry over an extent of 2.90.0 Hectares Patta lands in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District for **Tvl. VKP Engineering Ind Private Limited,** Thiru. P. Jagatheesan is a director, residing at No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District, Tamil Nadu State– 638 052. Since the Mining Plan is prepared as per the provisions contained in Rule 15(I)(a) and (I)(b) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016.

Signature of the Qualified Person

B. Vengadagiri, M.Sc.,

Place: Salem

Date: 30.07.2024

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B. Vengadagiri, M.Sc.,
No.105, 5th Cross, Alagapuram,
Salem District – 636 010,
Mobile No.: +91 86953 32233.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

CERTIFICATE FROM THE QUALIFIED PERSON

This is to certify that the Provisions of Prepared under Rules 41 & 42 as Amended in Tamil Nadu Minor Mineral Concession Rules, 1959. The preparation of Mining Plan and Progressive Quarry Closure Plan for Peruntholavu Rough Stone and Gravel Quarry lease applied area over an extent of 2.90.0 Hectares Patta lands in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared for

Tvl. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

Whenever specific permissions / exemptions / relaxations and approvals are required, the applicant will approach the concerned authorities of the Deputy Director (i/c), Department of Geology and Mining, Tiruppur District, Tamil Nadu State for such permissions / exemptions / relaxations and approvals.

It is also certified that information furnished in the above Mining Plan are true and correct to the best of my knowledge.

Signature of the Qualified Person

B. Vengadagiri, M.Sc.,

Place: Salem
Date: 30.07.2024

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B. Vengadagiri, M.Sc.,
No.105, 5th Cross, Alagapuram,
Salem District – 636 010,
Mobile No.: +91 86953 32233.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

CERTIFICATE FROM THE QUALIFIED PERSON

Certified that the Provisions of Mines Act, Rules and Regulations or Orders made there under have been observed in the preparation of Mining Plan and Progressive Quarry Closure Plan for Peruntholavu Rough Stone and Gravel Quarry lease applied area over an extent of 2.90.0 Hectares Patta lands in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared for

Tvl. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

Whenever specific permissions / exemptions / relaxations and approvals are required, the Applicant will approach the concerned authorities of Director of Mines Safety (DMS), No.5, II Street, Block–AA, Anna Nagar, Chennai-40, Tamil Nadu State for such permissions / exemptions / relaxations and approvals.

It is also certified that information furnished in the Mining Plan are true and correct to the best of my knowledge.

Signature of the Qualified Person

B. Vengadagiri, M.Sc.,

Place: Salem
Date: 30.07.2024

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ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

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ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

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MINING PLAN ALONG WITH PROGRESSIVE QUARRY CLOSURE PLAN FOR PERUNTHOLUVU ROUGH STONE AND GRAVEL.

(PREPARED UNDER RULES 41 & 42 AS PER THE AMENDMENT OF TAMIL NADU MINOR MINERAL CONCESSION RULES, 1959)

INTRODUCTION AND EXECUTIVE SUMMARY

The Company **M/s. VKP Engineering Ind Private Limited,** Thiru. P. Jagadeesan is a director, residing at No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District, Tamil Nadu State– 638 052 has entrust and given consent to preparation of Mining plan and Progressive Mine Closure Plan as per the provisions of Mines Act, Rules, Regulations and as amended till date.

The Company has applied quarry lease for quarrying of Rough stone and Gravel over an extent of 2.90.0 Hectares Patta lands in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State for a period of ten years under Rules 19 of Tamil Nadu Minor Mineral Concession Rules, 1959. The following are the statutory requirements with respect to Rough stone and Gravel quarry (Refer Annexure No. I).

1. Tvl. VKP Engineering Ind Private Limited, Director: Thiru. P. Jagadeesan residing at No. 11/32, Vettukadu Valasu, Ingur, Perundurai, Erode District applicant application Dated: 13.09.2023.
2. Deputy Director(i/c), Department of Geology and Mining, Tiruppur, letter Rc.No. 668/Mines/2023 dated: 22.09.2023.
3. The Tashildar, Tiruppur South letter R.C.No.3643/2024/A1 dated: 15.02.2024.
4. The Sub Collector(i/c), Tiruppur, Letter மு.மு.No.5664 Roc. No.5664/2023/A3 dated: 05.05.2024.
5. The Block Development Officer (கி.ஊ), Pongalur letter R.c.No.1200/2024/A2 dated:23.05.2024.
6. Assistant Geologist, Department of Geology and Mining, Tiruppur, inspection report dated: 11.06.2024.
7. Other related Documents.

The application was examined, Scrutinized, Inspected and processed by the Deputy Director(i/c), Department of Geology and Mining, Tiruppur and issued a Precise Area Communication letter vide letter **R.C. No. 669/Mines/2023, dated: 24.07.2024** for preparation of Mining plan as per the Rule 41 & 42 of Tamil Nadu Minor Mineral Concession Rules, 1959 within 90 days and getting approval from the Department of Geology and Mining, Tiruppur to obtain Environmental Clearance from the State Level Environment Impact Assessment Authority (SEIAA), Tamil Nadu, with the following conditions to provide (Refer Annexure No. I):

General Conditions:

- The quarried out minerals should be transported after paid the necessary seniorage fee as per Appendix- II of Tamil Nadu Minor Mineral Concession Rules, 1959.
- A safety distance of 7.5 meters should be provided to the adjacent patta lands from the lease applied area.
- Quarrying should be carried out using low explosives with qualified blaster.
- The applicant should submit the DGPS survey report for the area applied for lease area.
- Explosives should be carried out by experienced explosives operators using low power explosives without No Encroachment shall be caused to the adjacent Government Poramboke lands and Patta lands while quarry operation.
- As per the rules, approved mining plan should be submitted within due time.
- The applicant should submit the Mining plan and Environmental Clearance before grant of quarry lease.

Specific conditions as prescribed in the precise area communication letter:

- The High Voltage tower is situated in 135m to the western side of the Survey Number 539/2B it is informed that permit will be issued only after obtaining and submitting a clearance certificate from the Electrical Inspector of Mines as per CEA Rules, Sl.No.65 (2). Also, quarrying should be done so that there is no damage to the tower.

This Mining Plan along with Progressive Mine closure Plan is prepared in full consultation with **M/s. VKP Engineering Ind Private Limited,** Thiru. P. Jagadeesan is a director, residing at No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District, Tamil Nadu State – 638 052 for Rough stone and Gravel quarry over an extent of 2.90.0 Hectares Patta lands in S.F.Nos. 538/2A, 538/2B and 539/2(P) of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State under Rules 19 of Tamil Nadu Minor Mineral Concession Rules, 1959 with obtained full consent as per the application and Production schedule in preparation of Mining plan as per the provisions of Mines Act, Rules, Regulations as on date.

The Mining plan has been prepared after carrying the field survey, collection of Primary & secondary data, environmental setting, geological features and tentatively estimated the Resources & Reserves, depth of mining as identified in the field with best our knowledge and experience. This mining plan is prepared by considering the Rule 41 & 42 as Amended in Tamil Nadu Minor Mineral Concession Rules, 1959 and as per the EIA Notification 2006 and its subsequent Amendments.

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In order to ensure compliance of the order of the Honourable Supreme Court Dated: 27.02.2012 in I.A.No.12-13 of 2011 in Special Leave Petition (SLP) (C) No 19628-19629/2009, it has been now decided that all mining projects of minor minerals including their renewal is require prior environmental clearance. As per amendment in EIA Notification 2006 vide S.O. 1886(E), Dated:20.04.2022 "All mining lease area in respect of minor mineral mining leases and ≤ 250 ha mining lease area in respect of major mineral mining lease other than coal" would be treated as category B and will be considered by the state notified by Ministry of Environment, Forest and Climate Change as prescribed procedure under EIA notification 2006.

The field survey carried out by the Qualified Person and Team as on 27.07.2024.

Short Notes of Mining plan:

a. Village Panchayat - Peruntholuvu

b. Panchayat Union - Pongalur

c. Total extent of the lease applied area is 2.90.0Ha.

d. Topography of the area - The area is exhibits Undulated topography (The Ground Surface Level is R.L.318m).

e. The Company intends to apply and obtain permission from Director of Mines Safety, Chennai for amalgamating the mine boundaries with the three adjacent mine lease boundaries on the North, East and Southern side of this lease applied area belongs to the same Company Tvl. VKP Engineering Ind Private Limited one is existing quarry over an extent 4.94.95 Ha of Patta land in S.F.Nos. 538/1(P), 539/1(P) and 539/2(P) Situated on the Northern side, second proposed quarry lease area for over an extent 4.51.0 Ha of Patta land in S.F.Nos. 536, 537/1, 537/2 and 537/3 Situated on the Eastern side and third proposed quarry lease area for over an extent 1.64.38 Ha of Patta land in S.F.Nos. 543/2 situated on the southern side of this lease applied area under Regulation 111(3) of Metalliferous Mines Regulations, 1961. This relaxation will be applied and obtained after execution of lease deed. The mineral reserves locked up under safety distance and benches will be removed only after obtained permission and approval from the competent authority. Hence, the mineable reserves are calculated with two categories, one is Amalgamating the mine boundaries on the North, East and Southern side as requested by the company (Refer Plate No. III and III-B) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. III-A and III-C).

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f. The Estimated Reserves and Resources are given table below:

Table – 1

Description			Rough stone in (m^3)	Weathered Rock in (m^3)	Gravel (m^3)	Depth in m
Estimated Geological Resources			2044880	275320	55064	87m (9m AGL + 78m BGL)
Tentative Mineable Reserves	As per proposed amalgamating mine boundary on the North, East and South side		743195	228170	48292	87m (9m AGL + 78m BGL)
	After leaving safety distance and Bench loss		150770	173090	42192	42m (9m AGL + 33m BGL)
Proposed production for First Five years	As per Amalgamating mine Boundary	Total Proposal	376800	157600	48292	42m (9m AGL + 33m BGL)
		Peak Production	185600	84800	26212	
	After leaving safety distance and Bench loss	Total Proposal	78790	173090	42192	22m (9m AGL + 13m BGL)
		Peak Production	37620	74800	19686	
Proposed production for remaining five years	As per Amalgamating mine Boundary	Total Proposal	366395	70570	-	87m (9m AGL + 78m BGL)
		Peak Production	189765	70570	-	
	After leaving safety distance and Bench loss	Total Proposal	71980	-	-	42m (9m AGL + 33m BGL)
		Peak Production	31920	-	-	

The EIA and EMP will be prepared for maximum reserves and the Impact will be accounting an annual peak production value.

g. Lease Period = Ten years

h. Mining Plan Period = Five years

i. It is a fresh lease applied area, at present the area is virgin. Hence no existing pit.

j. Method of mining / level of mechanization.

Opencast mechanized method, the quarry operation involves shallow jack hammer drilling, slurry blasting with NONEL initiation.

k. Type of machineries proposed in the quarrying operation is given below.

Excavators attached with rock breaker and Bucket, Wagon drill machine, Tippers, Jack hammer, Compressor (Diesel drive) (4 Jack Hammer capacity.

l. No trees will be uprooted due to this quarry operation.

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m. The approach road from the main road to quarry will be constructed and same has been maintained in a good condition for the haulage of quarry materials and machineries.

n. There is No Export of this Rough stone and Gravel.

o. Topo sketch covering 10km and 1km radius around the proposed area with markings of habitations, water bodies including streams, rivers, roads, major structure like bridges, wells, archaeological importance and places of worships is marked and enclosed as Plate Nos. IA & IB.

p. The lease applied area is about 2.90.0Ha bounded by ten corners; the corners are designated as 1 – 10 clockwise from the Southwest corner and the Co – ordinates for all the corners are clearly marked in the Quarry Lease Plan and Surface Plan enclosed as Plate No. II.

q. The plans of proposed quarrying area showing the dimensions of the pit, their proposed depth and maximum area of proposed quarrying are enclosed as Plate Nos. III - III-C and IV.

r. General conditions will not applicable for the proposed area. The area applied for lease is 10Km away from the,

   i) Interstate Boundary,

   ii) Protected area under wild life protection ACT, 1972,

   iii) Critically polluted areas as identified by CPCB,

   iv) Notified Eco sensitive areas.

s. There is no waste anticipated during this quarry operation, hence waste dump is not proposed in the lease applied area.

t. Around 45 employees are proposed to deploying the quarrying operation.

u. Total Cost of the project is about **Rs.1,89,47,000/-**.

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1.0 GENERAL INFORMATION

1.1 Name of the Applicant	:	**M/s. VKP Engineering Ind Private Limited,**
		Thiru. P. Jagadeesan is a director,
Address	:	No.11/32, Vettukattu Valasu,
		Ingur, Perundurai, Erode District,
State with Pin Code	:	Tamil Nadu – 638 052.
Mobile No	:	+91 98428 30265 and +91 98422 30265.
Aadhaar No	:	7091 1371 8745
E-mail	:	vkpeindpvtltd@gmail.com

1.2 Status of the Applicant (Individual / Company / Firm):

The applicant is a Private Limited Company (Refer Annexure Nos. VIII). Thiru. P. Jagadeesan is the Director and he is an authorized person for signing all the documents on behalf of this company (Refer Annexure Nos. IX).

1.3 Mineral which the Applicant intends to mine:

The Applicant intends to quarry Rough stone and Gravel only.

1.4 Period of permission / lease to be granted:

Ten Years as mentioned in Precise area Communication letter.

1.5 Name and address of the Qualified Person who preparing the Mining Plan:

Name	:	**B. Vengadagiri, M.Sc.,**
		Qualified Person (Under Rule 15(I)(a) and (I)(b) of MCR, 2016)
Address	:	No.105, 5th Cross,
		Alagapuram,
		Salem District – 636 010.
Mobile	:	+91 86953 32233
Email	:	vengatb6@gmail.com

Name and Address of the Prospecting Agency:

State Geology and Mining Department, Government of Tamil Nadu, has carried out the regional prospecting and exploration in these areas during 1992 to 1993.

Geological Survey of India has carried out detailed regional exploration studies and geological mapping in Tamil Nadu. Besides, the Qualified Person and his team members made a detailed geological study of the proposed area and the Rough stone is clearly inferred from the nearby existing pit. No detailed Exploration has carried out.

1.6 Reference no. Date of grant/ Precise Area Communication received form the State Government:

The Precise area communication letter was received from the Deputy Director (i/c), Department of Geology and Mining, Tiruppur District vide **R.C. No. 669/Mines/2023, dated: 24.07.2024** to submit approved mining plan and to obtain Environmental Clearance from the Competent Authority, Tamil Nadu State and was given to us for the preparation of mining plan to meet out the applicant's production schedule (Refer Annexure No. I).

ASSISTANT DIRECTOR GEOLOGY AND MINING TIRUPPUR

2.0 LOCATION

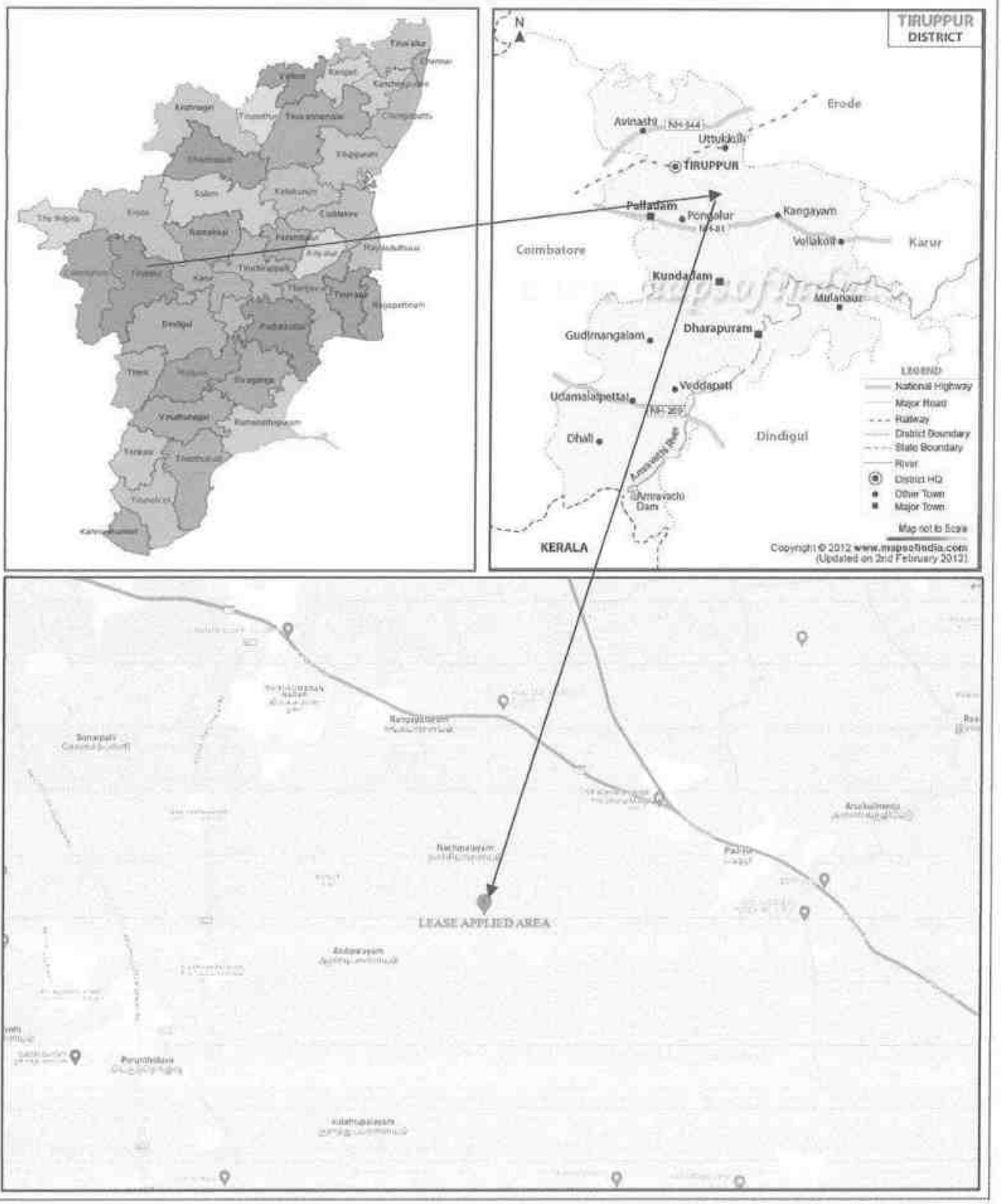
2.1 Details of the area with location map:

The lease applied area is about 13.2km Southeastern side of Tiruppur and 3.3km Northeastern side of Peruntholuvu Village.

Tiruppur —11km→ Peruntholuvu —3.3km→ Lease applied area

Southeast Northeast

Location Map of the Lease Applied area



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Table – 2

District	Taluk	Village	S.F. No.	Area (Ha.)	Patta No.
Tiruppur	Tiruppur South	Peruntholuvu	538/2A	0.92.25	2848
			538/2B	0.92.25	2849
			539/2(P)	1.05.50	2136
Total Extent				**2.90.0**	

Source: As per the FMB and 'A' register record furnished by the applicant.

2.2 Classification of the area (Ryotwari/ Poramboke / others):

It is Patta lands, classified as Punsei (Barren land) (Refer Annexure Nos. IV & VI).

2.3 Ownership / Occupancy of the applied area (surface right):

It is Patta lands, S.F.No. 538/2A registered in the name of Tmt. Sarojini, vide patta No. 2848, S.F.No. 538/2B registered in the name of Tmt. Sivagami vide patta No. 2849 and 539/2(P) registered in the name of Thiru. P. Jagadeesan Director of Tvl. VKP Engineering India Pvt, Ltd), Thiru. Mahendran, Tmt. Bhuvaneshwari and Gnanasundari vide patta No. 2136 (Refer Annexure Nos. IV & VI). The Company has obtained consent form the Pattadhar (Refer Annexure No. VII).

2.4 Existence of public road / Railway line, if any nearby and approximate distance:

The approach road is situated on the Eastern side which is connects to the Village Road located on Eastern side of the lease area.

Road access is available from the quarry to State Highways and National Highway, no towns are enrooted hence the traffic density is not much more due to the transportation of Rough stone and Gravel.

The approach road from the quarry will be constructed and the same has been utilized for haulage and maintained during the entire lease period.

The Nearest Railway line is Coimbatore - Salem which is located about 10.8km on the Northwestern side of the area as per the GSI Toposheet and Google Map.

2.5 Toposheet No. with latitude and longitude:

The lease applied area falls in the Toposheet No: **58 E/08** Latitude between: **11°03'21.1292"N to 11°03'25.9847"N** and Longitude between: **77°27'43.0986"E to 77°27'55.1858"E** on WGS datum-1984. Please refer the Plate Nos. I to II as per the GSI Toposheet.

ASSISTANT DIRECTOR GEOLOGY AND MINING

PART – A

3.0 GEOLOGY AND MINERAL RESERVES

3.1 Brief description of the Topography and general Geology of the area (with plans):

The lease applied area is exhibits undulated topography. The area has gentle sloping towards Northwestern side and altitude of the area is 327m to 324m above from Mean Sea Level. The area is covered by 2m thickness of Gravel, 10m thickness of Weathered Rock and followed by Massive Charnockite which is clearly inferred from the nearby existing quarry pit. The Water level in the surrounding area is 93m – 96m below from general ground profile which is observed from the nearby bore wells. The Normal rainfall is about 619mm.

Peninsular gneiss forms the oldest rock formations, in which the massive formation of Charnockite lies over with rich accumulation of recent quaternary formation. On regional scale of the Charnockite body is N40°E – S40°W with dipping towards SE60°.

The general geological sequences of the rocks in this area are given below:

AGE		FORMATION
Recent	-	Quaternary formation (Gravel)
---------Unconformity----------		
Archaean	-	Charnockite
		Peninsular Gneissic complex

3.2 Details of exploration already carried out if any:

State Geology and Mining Dept, Govt. of Tamil Nadu, has carried out the regional prospecting and exploration in these areas during 1992 to 1993.

Geological Survey of India has carried out detailed mapping in Tiruppur District. Besides, the Qualified Person and his team members made a detailed geological study of the proposed area. The Rough stone formation is clearly inferred from the nearby existing quarry pit.

3.3 Estimation of Reserves:

a) Geological Resources with geological sections on a scale of 1:1000 / 1:2000

As far as Rough stone (Charnockite) is concerned, the only practical method is the systematic geological mapping and delineation of Rough stone within the field and careful evaluation of body luster, physical properties, engineering properties, commercial aspects etc.,

Totally four sections have been drawn, two cross sections are drawn length wise as (X-Y & X1-Y1) and another two cross sections are drawn as Width wise (A-B and C-D) to cover the maximum area considered for lease upto a maximum depth of 87m (2m Gravel + 10m Weathered Rock + 75m Rough stone).

The Topographical, Geological plan and sections demarcated the commercial marketable Rough stone (Charnockite) deposit has been prepared in the scale of 1:1000 (Refer the Geological plan and sections Plate Nos. III). As the sale of Rough stone are in terms of cubic metres (Volume) only and not in terms of tonnage. No Exploration has been carried out.

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Estimation of Geological Resources (Plate No. III):

The Geological Resources of Rough Stone and Gravel are calculated upto a depth of 87m [9m above ground level and 78m below ground level]. The total **Geological Resources are calculated by cross sectional method**. The total geological resources are given table below:

TABLE – 3

GEOLOGICAL RESERVES							
Section	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Geological Resources of Rough stone in (m^3) 100%**	**Weathered Rock in (m^3)**	**Gravel (m^3)**
XY-AB	i	160	110	2	-	-	35200
	ii	160	110	5	-	88000	-
	iii	160	110	5	-	88000	-
	iv	160	110	5	88000	-	-
	v	160	110	5	88000	-	-
	vi	160	110	5	88000	-	-
	vii	160	110	5	88000	-	-
	viii	160	110	5	88000	-	-
	ix	160	110	5	88000	-	-
	x	160	110	5	88000	-	-
	xi	160	110	5	88000	-	-
	xii	160	110	5	88000	-	-
	xiii	160	110	5	88000	-	-
	xiv	160	110	5	88000	-	-
	xv	160	110	5	88000	-	-
	xvi	160	110	5	88000	-	-
	xvii	160	110	5	88000	-	-
	xviii	160	110	5	88000	-	-
Total					**1320000**	**176000**	**35200**
X1Y1-CD	i	191	52	2	-	-	19864
	ii	191	52	5	-	49660	-
	iii	191	52	5	-	49660	-
	iv	114	52	5	29640	-	-
	v	191	52	5	49660	-	-
	vi	191	52	5	49660	-	-
	vii	191	52	5	49660	-	-
	viii	191	52	5	49660	-	-
	ix	191	52	5	49660	-	-
	x	191	52	5	49660	-	-
	xi	191	52	5	49660	-	-
	xii	191	52	5	49660	-	-
	xiii	191	52	5	49660	-	-
	xiv	191	52	5	49660	-	-
	xv	191	52	5	49660	-	-
	xvi	191	52	5	49660	-	-
	xvii	191	52	5	49660	-	-
	xviii	191	52	5	49660	-	-
Total					**724880**	**99320**	**19864**
Grand Total					**2044880**	**275320**	**55064**

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The Geological Resources of Gravel : **55,064m³**

The Geological Resources of Weathered Rock : **2,75,320m³**

The Geological Resources of Rough Stone : **20,44,880m³**

Geological Resources has been computed based on the physical investigation and filed survey data.

Estimation of Mineable Reserves:

The Company intends to apply and obtain permission from Director of Mines Safety, Chennai for amalgamating the mine boundaries with the three adjacent mine lease boundaries on the North, East and Southern side of this lease applied area belongs to the same Company **Tvl. VKP Engineering Ind Private Limited**, one is existing quarry over an extent 4.94.95 Ha of Patta land in S.F.Nos. 538/1(P), 539/1(P) and 539/2(P) Situated on the Northern side, second proposed quarry lease area for over an extent 4.51.0 Ha of Patta land in S.F.Nos. 536, 537/1, 537/2 and 537/3 Situated on the Eastern side and third proposed quarry lease area for over an extent 1.64.38 Ha of Patta land in S.F.No. 543/2 situated on the Southern side of this lease applied area under Regulation 111(3) of Metalliferous Mines Regulations, 1961. This relaxation will be applied and obtained after execution of lease deed. The mineral reserves locked up under safety distance and benches will be removed only after obtained permission and approval from the competent authority.

Hence, the mineable reserves are calculated with two categories, one is Amalgamating the mine boundaries on the North, East and Southern side as requested by the company (Refer Plate No. III and III-B) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. III-A and III-C).

TABLE – 4

MINEABLE RESERVE - AFTER LEAVING SAFETY DISTANCE AND BENCHES

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Mineable Reserves of Rough stone in (m^3) 100%	Weathered Rock in (m^3)	Gravel (m^3)
XY-AB	i	146	93	2	-	-	27156
	ii	144	91	5	-	65520	-
	iii	134	81	5	-	54270	-
	iv	124	71	5	44020	-	-
	v	114	61	5	34770	-	-
	vi	104	51	5	26520	-	-
	vii	94	41	5	19270	-	-
	viii	84	31	5	13020	-	-
	ix	74	21	5	7770	-	-
	Total				**145370**	**119790**	**27156**
X1Y1-CD	i	179	42	2	-	-	15036
	ii	178	40	5	-	35600	-
	iii	118	30	5	-	17700	-
	iv	108	20	2.5	5400	-	-
	Total				**5400**	**53300**	**15036**
Grand Total					**150770**	**173090**	**42192**

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The Tentative mineable reserves have been computed as **1,50,770m³** of Rough stone at the rate of 100% recovery, **1,73,090m³** of Weathered Rock and **42,192m³** of Gravel as per after leaving safety distance and benches on all sides for a period of Ten years upto a depth of 42m (9m above ground level + 33m below ground level) (Refer Plate No. III-A).

Table – 5

MINEABLE RESERVE AS PER PROPOSED AMALGAMATING MINE BOUNDARIES ON THE NORTH, EAST AND SOUTHERN SIDE							
Section	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Mineable Reserves of Rough stone in (m^3) 100%**	**Weathered Rock in (m^3)**	**Gravel (m^3)**
XY-AB	i	160	102	2	-		32640
	ii	160	101	5	-	80800	-
	iii	160	96	5	-	76800	-
	iv	160	91	5	72800	-	-
	v	160	86	5	68800	-	-
	vi	160	81	5	64800	-	-
	vii	160	76	5	60800	-	-
	viii	160	71	5	56800	-	-
	ix	160	66	5	52800	-	-
	x	160	61	5	48800	-	-
	xi	160	56	5	44800	-	-
	xii	160	51	5	40800	-	-
	xiii	160	46	5	36800	-	-
	xiv	160	41	5	32800	-	-
	xv	160	36	5	28800	-	-
	xvi	155	31	5	24025	-	-
	xvii	149	26	5	19370	-	-
	xviii	144	21	5	15120	-	-
	Total				**668115**	**157600**	**32640**
X1Y1-CD	i	182	43	2	-		15652
	ii	181	42	5	-	38010	-
	iii	176	37	5	-	32560	-
	iv	114	32	5	18240	-	-
	v	165	27	5	22275	-	-
	vi	156	22	5	17160	-	-
	vii	137	17	5	11645	-	-
	viii	96	12	5	5760	-	-
	Total				**75080**	**70570**	**15652**
Grand Total					**743195**	**228170**	**48292**

The tentative Mineable Reserves of Gravel : **48,292m³**

The tentative Mineable Reserves of Weathered Rock : **2,28,170m³**

The tentative Mineable Reserves of Rough stone @ 100% : **7,43,195m³**

The EIA and EMP will be prepared for the maximum reserves. Hence, the tentative mineable reserves have been computed as **7,43,195m³** of Rough stone at the rate of 100% recovery, **2,28,170m³** of Weathered Rock and **48,292m³** of Gravel as per proposed amalgamating mine boundaries on the North, East and Southern side for a period of Ten years upto a depth of 87m (9m above ground level + 78m below ground level) (Refer Plate No. III).

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Summary of Reserves and Resources:

Table – 6

Description	Rough stone (m^3)	Weathered Rock in (m^3)	Gravel (m^3)
Geological Resources	20,44,880	2,75,320	55,064
Mineable Reserve - as per amalgamating the mine Boundary	7,43,195	2,28,170	48,292
Mineable Reserves After leaving safety and Benches	1,50,770	1,73,090	42,192

4.0 MINING

4.1. Method of mining (opencast / underground):

Open cast Mechanized Mining is being carried out with 5.0 meter vertical bench with a bench width is not less than the bench height.

However, as far as the quarrying of Rough Stone is concerned, observance of the provisions of Regulation 106 (2) (b) is available with Director General of Mines Safety. If the applicant intends to modify the dimensions of benches, relaxation and permission are available with Director General of Mines Safety under 106 (2) (b) of Metalliferous Mines Regulations, 1961.

The company intends to apply and obtain permission from Director of Mines Safety, Chennai for amalgamating the mine boundaries with adjacent existing and proposed quarry lease under Regulation 111(3) of Metalliferous Mines Regulations, 1961. The relaxation will be applied and obtained after execution of lease deed/ commencement of quarry operation. In such a scenario if there is any drastic change in the Resources and Reserves a modified plan will be submitted to the concerned authority for necessary relaxation, clearance and permission.

4.2. Mode of working (mechanized/ manual):

The Rough Stone is proposed to quarry at 5m bench height & width with conventional Opencast Mechanized Method.

The quarry operation involves shallow jack hammer drilling, slurry explosives in blasting, excavation, Loading and transportation of Rough stone to the needy crusher.

The production of Rough stone in this quarry involves the following method which is typical for Rough Stone quarrying in contrast to other major mineral mining.

Splitting of rock mass of considerable volume from the parent rock mass by shallow jackhammer drilling, Wagon Drill machine and blasting, hydraulic excavators are used for loading the Rough Stone from pithead to the needy crushers.

Occasionally hydraulic excavators are attached with rock breakers for fragmentation to avoid secondary blasting. The primary boulders thus splitted are removed from the pits by excavators and further made to smaller sizes by rock breakers attached in excavators. It is a conventional opencast mechanized method of mining.

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4.3. Proposed Bench Height and Width:

The bench height is proposed 5.0meter vertical bench the width of the bench is not less than the Height. After obtaining relaxation as per 106 2(b) and 111(3) of Metalliferous Mines Regulations, 1961 from the DMS, the realignment of benches will be carried out.

4.4. Indicate the overburden / mineral production expected pit wise as detailed below (composite plan and section showing pit layout, dumps, disposal of waste if any etc.):

The yearwise proposed production are arrived with two categories based on the company's requirement, one is Amalgamating the mine boundaries on the North, East and Southern side as requested by the company (Refer Plate No. III and III-B) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. III-A and III-C).

The overburden in the form of Gravel and Weathered Rock, the Gravel and Weathered Rock will be directly loaded into Tippers for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fee to the Government. The excavated rough stone will be directly loaded into Tippers to the needy customers. The Composite year wise Development and production plan and sections indicating the pit lay out and green belt development are shown in Plate No. III to III-C.

Year wise Development and Production after leaving safety distance and benches

TABLE – 7

YEARWISE DEVELOPMENT AND PRODUCTION FOR FIRST FIVE YEARS								
Year	**Section**	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Recoverable Reserve of Rough stone in (m^3) 100%**	**Weathered Rock in (m^3)**	**Gravel (m^3)**
I	XY-AB	i	66	93	2	-	-	12276
		ii	64	91	5	-	29120	-
		iii	54	81	5	-	21870	-
		iv	20	71	5	7100	-	-
		v	10	61	5	3050	-	-
		Total				**10150**	**50990**	**12276**
II	XY-AB	i	55	93	2	-	-	10230
		ii	55	91	5	-	25025	-
		iii	55	81	5	-	22275	-
		iv	15	71	5	5325	-	-
		v	15	61	5	4575	-	-
		Total				**9900**	**47300**	**10230**
III	XY-AB	i	25	93	2	-	-	4650
		ii	25	91	5	-	11375	-
		iii	25	81	5	-	10125	-
		iv	57	71	5	20235	-	-
		v	57	61	5	17385	-	-
	X1Y1-CD	i	179	42	2	-	-	15036
		ii	178	40	5	-	35600	-
		iii	118	30	5	-	17700	-
		Total				**37620**	**74800**	**19686**

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IV	XY-AB	iv	16	71	5	5680		
		v	16	61	5	4880	-	-
		Total				**10560**	-	-
V	XY-AB	iv	16	71	5	5680	-	-
		v	16	61	5	4880	-	-
		Total				**10560**	-	-
Grand Total						**78790**	**173090**	**42192**

The Recoverable reserves have been computed as **78,790m³** of Rough stone at 100% recovery for first five years, **1,73,090m³** of Weathered Rock and **42,192m³** of Gravel for first three years upto a depth of 22m (9m above ground level + 13m below ground level) (Refer Plate No. III-A). The peak production capacity in the quarry is 37,620m³ of Rough stone on 3rd year and the proposed production schedule is arrived as per company's requirement

Table – 7A

YEARWISE PRODUCTION FOR REMAINING FIVE YEARS						
Year	**Section**	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Recoverable Reserve of Rough stone in (m³) 100%**
vi	XY-AB	vi	104	51	5	26520
	X1Y1-CD	iv	108	20	2.5	5400
		Total				**31920**
vii	XY-AB	vii	47	41	5	9635
		Total				**9635**
viii	XY-AB	vii	47	41	5	9635
		Total				**9635**
ix	XY-AB	viii	70	31	5	10850
		Total				**10850**
x	XY-AB	viii	14	31	5	2170
		ix	74	21	5	7770
		Total				**9940**
Grand Total						**71980**

The Recoverable reserves have been computed as **71,980m³** of Rough stone only at 100% recovery to a depth of 42m (9m above Ground level + 33m below ground level) for remaining five years of the lease period (Refer Plate No. III-C).

The Recoverable reserves have been computed as **1,50,770m³** of Rough stone at the rate of 100% recovery, **1,73,090m³** of Weathered Rock and **42,192m³** of Gravel as per after leaving safety distance and benches on all sides for a period of Ten years upto a depth of **42m (9m above ground level + 33m below ground level).**

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Year wise Development and Production as per Amalgamating the mine boundaries on the North, East and Southern side

Table – 8

YEARWISE DEVELOPMENT AND PRODUCTION FOR FIRST FIVE YEARS								
Section	**Year**	**Bench**	**Length in (m)**	**Width in (m)**	**Depth in (m)**	**Recoverable Reserve of Rough stone in (m^3) 100%**	**Weathered Rock in (m^3)**	**Gravel (m^3)**
I	XY-AB	i	160	34	2	-	-	10880
		ii	160	33	5	-	26400	-
		iii	160	28	5	-	22400	-
		iv	160	23	5	18400	-	-
		v	160	18	5	14400	-	-
		vi	160	13	5	10400	-	-
		vii	160	8	5	6400	-	-
		Total				**49600**	**48800**	**10880**
II	XY-AB	i	160	35	2	-	-	11200
		ii	160	15	5	-	12000	-
		iii	160	15	5	-	12000	-
		iv	160	15	5	12000	-	-
		v	160	15	5	12000	-	-
		vi	160	15	5	12000	-	-
		vii	160	15	5	12000	-	-
		Total				**48000**	**24000**	**11200**
III	XY-AB	i	160	33	2	-	-	10560
		ii	160	53	5	-	42400	-
		iii	160	53	5	-	42400	-
		iv	160	53	5	42400	-	-
		v	160	53	5	42400	-	-
		vi	160	53	5	42400	-	-
		vii	160	53	5	42400	-	-
		viii	160	20	5	16000	-	-
	X1Y1-CD	i	182	43	2	-	-	15652
		Total				**185600**	**84800**	**26212**
IV	XY-AB	viii	160	51	5	40800	-	-
		Total				**40800**	-	-
V	XY-AB	ix	160	66	5	52800	-	-
		Total				**52800**	-	-
Grand Total						**376800**	**157600**	**48292**

The Recoverable reserves have been computed as **3,76,800m^3** of Rough stone at 100% recovery for first five years, **1,57,600m^3** of Weathered Rock and **48,292m^3** of Gravel for first three years upto a depth of 42m (9m above ground level + 33m below ground level) (Refer Plate No. III). The peak production capacity in the quarry is 1,85,600m^3 of Rough stone on 3rd year and the proposed production schedule is arrived as per company's requirement.

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TABLE – 8A

YEARWISE PRODUCTION FOR REMAINING FIVE YEARS

Section	Year	Bench	Length in (m)	Width in (m)	Depth in (m)	Recoverable Reserve of Rough stone in (m^3) 100%	Weathered Rock in (m^3)
VI	X1Y1-CD	ii	181	42	5	-	38010
		iii	176	37	5	-	32560
		iv	114	32	5	18240	-
		v	165	27	5	22275	-
		Total				**40515**	**70570**
VII	X1Y1-CD	vi	156	22	5	17160	-
		vii	137	17	5	11645	-
		viii	96	12	5	5760	-
	XY-AB	x	160	61	5	48800	-
		xi	160	56	5	44800	-
		xii	160	51	5	40800	-
		xiii	160	26	5	20800	-
		Total				**189765**	-
VIII	XY-AB	xiii	160	20	5	16000	-
		xiv	160	41	5	32800	-
		Total				**48800**	-
IX	XY-AB	xv	160	36	5	28800	-
		xvi	155	31	5	24025	-
		Total				**52825**	-
X	XY-AB	xvii	149	26	5	19370	-
		xviii	144	21	5	15120	-
		Total				**34490**	-
Grand Total						**366395**	**70570**

The Recoverable reserves have been computed as **3,66,395m³** of Rough stone only at 100% recovery and **70,570m³** of Weathered Rock to a depth of 87m (9m above Ground level + 78m below ground level) for remaining five years of the lease period (Refer Plate No. III-B).

The EIA and EMP will be prepared for the maximum reserves. Hence, the Recoverable reserves have been computed as **7,43,195m³** of Rough stone at the rate of 100% recovery, **2,28,170m³** of Weathered Rock and **48,292m³** of Gravel as per proposed amalgamating mine boundaries on the North, East and Southern side for a period of Ten years upto a depth of **87m (9m above Ground level + 78m below ground level).**

The Annual peak production capacity in the quarry is 32,035m³ of Rough stone on 3rd year, 29,500m³ of Weathered Rock and 8,568m³ of Gravel on 1st year and the proposed production schedule is arrived as per company's requirement and the EIA & EMP will be prepared an annual peak production.

The company ensures the total quantity proposed in the benches will not exceed during the quarrying operation. Besides the rough stone locked up in benches will be exploited after obtaining necessary permission from the office of Director of Mine Safety, Chennai region by submitting relevant documents, appropriate safety plans and its Mitigation measures.

One lorry load	=	6m³ (approx.)
Total No of Working days	=	300 Days per year
Total quantity to be removed during the ten years lease period	=	7,43,195m³
Peak production capacity during the 3rd year	=	1,85,600m³
Hence total Lorry loads per day	=	1,85,600m³/6m³
	=	30,933 Lorry loads
	=	30,933/300 days
Rough Stone (Maximum)	=	**103 Lorry loads per day**
One lorry load	=	6m³ (approx.)
Total No of Working days	=	300 Days per year
Total quantity to be removed during the ten years lease period	=	2,28,170m³
Peak production capacity during the 3rd year	=	84,800m³
Hence total Lorry loads per day	=	84,800m³/6m³
	=	14,133 Lorry loads
	=	14,133/300 days
Weathered Rock (Maximum)	=	**47 Lorry loads per day**
Total Gravel to be removed during the first three years	=	48,292m³
Peak production capacity during the 3rd year	=	26,212m³
Hence total Lorry loads per day	=	26,212m³/6m³
	=	4,369 Lorry loads
	=	4,369/300 days
Gravel (Maximum)	=	**14 – 15 Lorry loads per day**

Working hours = 9.00 am to 6.00 pm (with 1.00-2.00 P.M. lunch break).

4.5. Machineries to be used:

For Mining:

The following machineries are utilized on rental basis for the development and production work at this quarry.

TABLE – 9

I. DRILLING MACHINE:

S. No.	Type	Nos	Dia Hole mm	Size Capacity	Motive power
1	Jack-Hammer	4	32	1.2m to 2.0m	Compressed air
2	Compressor	1	-	400 psi	Diesel Drive
3	Wagon Drill Machine	1	110	3m to 9m	Diesel Drive

II. EXCAVATION & LOADING EQUIPMENT:

S. No.	Type	Nos	Capacity	Motive Power
1	Excavator with Bucket and Rock Breaker	5	300	Diesel Drive

III. HAULAGE WITHIN THE MINE & TRANSPORT EQUIPMENT

S. No.	Type	Nos	Capacity	Motive Power
1	Tippers	10	20 tonnes	Diesel Drive
2	Water Sprinkling Tanker	1	10,000 litres	Diesel Drive

4.6. Brief note on conceptual mining plan for the entire lease period base on the geological, mining and environmental considerations:

Conceptual mining plan is prepared with an object of long-term systematic development of benches, layouts, selection of permanent structures, depth of quarrying and ultimate pit dimensions, selection of sites for construction of infrastructure, etc.,

The ultimate pit size is designed based on certain practical parameters such as economical depth of mining, safety zones, permissible area, etc.,

As the company has applied quarry lease for Ten years, the ultimate pit limit (dimension) at the end of this mining plan period is given below (Refer Plate No. VI-A):

Table – 10

Section	Length (Max) (m)	Width (Max) (m)	Depth (Max) (m)
XY-AB	146	93	42m (9m AGL + 33m BGL)
X1Y1-CD	179	42	17m (9m AGL + 8m BGL)

After obtained permission from the Director of Mines safety, Chennai for working under Common mine boundary, the ultimate pit dimensions are modified as given table below (Refer Plate No. VI):

Table – 10A

Section	Length (Max) (m)	Width (Max) (m)	Depth (Max) (m)
XY-AB	160	102	87m (9m AGL + 78m BGL)
X1Y1-CD	182	43	37m (9m AGL + 28m BGL)

All the base line information studies like Air quality monitoring, Noise and vibration monitoring, Water analysis studies will be carried out every year as per the MoEF & CC Norms. Please refer Plate Nos. IV to IV-C & V. As per the NGT orders the applicant is directed to plant 500 trees per hectares along the quarry site and in the haul road either at the regular or the phased manner by planting native species.

There is no waste anticipated during the entire life of quarry. Hence, backfilling is not proposed in this Rough stone quarry. After completion of quarry operation the quarried out pit will be allowed to collect the seepage and rainwater and the water storage will be kept as temporary reservoir for charging the nearby wells and the water will be utilized for Green belt development purpose. The quarry area will be fenced with barbed wire fencing also safety bund constructed around the quarry to prevent inadvertent entry of public and cattle (Refer Plate No. V and VI). The Conceptual Mining is based upon the entire ROM proposed for the life of the quarry.

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5.0 BLASTING

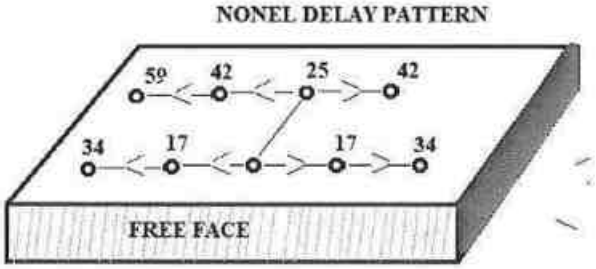
5.1 Blasting pattern:

The Selection of drilling pattern for blasting varies with the type and size of the drills used, depth of hole, kind of rock, quantity, rapidity of the explosives and amount of steaming. The quarrying operation is proposed to carried out by Crawler mounted drill machine and Jack hammer drilling and blasting of shattering effect for loosen the Rough Stone with NONEL initiation. Wagon drilling machine will be proposed for primary Drilling and blasting for splitting the boulders from parent rock mass followed by rock breaker attached with excavator for secondary fragmentation of large size boulders to avoid secondary blasting. NONEL initiation provides reasonably good solution to fly rock problem. The main objectives of NONEL Blasting are to reduce the ground vibration, noise, flyrocks generated due to blasting operations. The overall cost of blasting in NONEL is very less compared to electrical blasting hence it optimizes the cost of blasting.

Drilling and blasting parameters are as follows:

Depth of Each hole	:	5m
Spacing between holes	:	3.5m
Burden for hole	:	3.0m
Diameter of hole	:	110mm
Pattern of hole	:	Staggered pattern
Inclination of holes	:	80°from horizontal
Use of delay detonators	:	NONEL
Hole to Hole	:	17 milli second delay (ms)
Row to Row	:	25 milli second delay (ms)

BLASTING PATTERN DRAWING



Spacing	=	**3.5m**
Burden	=	**3.0m**
Depth of the hole	=	**5m**
No of holes proposed per day (Peak Production)	=	**11 Holes**

5.2 Type of explosives to be used:

Small Dia. 25mm Slurry explosives are proposed to be used for shattering and heaving effect for removal and winning of Rough stone. No deep hole drilling or secondary blasting is proposed. NONEL blasting and muffle blasting may be adopted after permission from DGMS.

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5.3 Measures proposed to minimize ground vibration due to blasting:

The quarry is situated more than 300m away from the nearby villages, Controlled blasting measures by NONEL initiation is being adopt for minimizing ground vibration and fly rock. Wagon drill and Hand jackhammer drilling and blasting is proposed to be carried out with minimum use of explosive mainly to give heaving effect in rough stone for easy excavation and to control fly rock.

NONEL Delay detonators:

NONEL blasting permits for bottom initiation and lesser charge per delay.

The major advantages of NONEL blasting are:

- Reduction of ground vibration.
- Reduction in air blast.
- Reduction in over break.
- Improved fragmentation.
- Better control of fly-rock.

Blasting program for the production per day (As per Peak production capacity):

The Hydraulic excavators are attached with rock breakers for breaking the rock mass to reduce the blasting and explosive usage also to avoid secondary blasting. Anyhow, as per day's production schedule the maximum blasting program proposed as given below.

Peak production (3rd Year)	= 1,85,600m^3 x 2.6(Bulk Density) = 4,82,560Tons
No of Holes	= 11 Holes
Yield	= 1068 Tons
Powder factor	= 6 Tons/Kg of explosives
Total explosive required	= 268 Kg-Slurry explosives
Charge/ hole	= 25 Kg
Blasting at day time only	= 1.00 – 1.30 P.M. (whenever required)

Anticipated theoretical calculation of PPV

The empirical equation for assessment of peak particle velocity (PPV) is:

$$V = K\,[R/Q^{0.5}]^{-B}$$

Where –

V = peak particle velocity (mm/s)

K = site and rock factor constant

Q = maximum instantaneous charge (kg)

B = constant related to the rock and site (usually 1.6)

R = distance from charge (m)

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PREDICTED PPV VALUES DUE TO BLASTING

Table – 11

Maximum Charge per day (kg)	Number of Round Blast per day	Maximum Charge per Round (kg)	Number of holes blasted per round	Number of holes blasted per day	Maximum Charge blast at a time by NONEL (kg)	Nearest Infrastructure (m)	PPV (mm/s)
268	1	268	11	11	50 (2 Holes)	870	0.867

From the above table, the charge per blast of 268kg is well below the Peak Particle Velocity of 8 mm/s as per Directorate General of Mines Safety for safe level criteria through Circular No. 7 dated 29/8/1997. Anyhow, the company ensures that carry out the **blasting once a day** under the supervision of competent qualified statutory personnel employed. However, as per statutory requirement control measures will be adopted to avoid the impacts due to ground vibrations and fly rocks due to blasting.

5.4 Storage and safety measures to be taken while blasting:

The applicant will engage authorized explosive agency to carry out the small amount of blasting and it will be supervised by competent and statutory foreman/Permit Mines Manager. The explosives agencies should be having the valid Blaster certificate. He will blast holes in the quarry site. After the completion of Blasting the explosives Agencies will take it out back the remaining quantity of Explosives. The Competent Qualified Statutory personnel appointed by the applicant will maintain the records of Explosives as per the Indian Explosives Act.

6.0 MINE DRAINAGE

6.1 Depth of water table (based on nearby wells and water bodies):

The area is an undulated topography; since the lease applied area consists the most common type of dendritic drainage pattern. The water table in the area is about 93m – 96m which is observed from the existing private boreholes. The lease area is fully covered by Massive Charnockite formation. The quarry operation confined to well above the water table hence, the Ground Water problem will not arise. If water seepage may occur due to the fracture, the same will be used for Greenbelt. Anyhow, Garland drain will be constructed all along the boundary to prevent surface run-off water entering into the quarry.

TABLE – 12

Type	Distance & Direction	Location
Bore Well	620m Southeastern side	11° 03'18.70"N 77°28'15.32"E

6.2 Arrangements and places where the mine water is finally proposed to be discharged:

The quarry operations are confined to well above the water table during the entire lease period. If water is encountered at quarry due to rain water and seepage, the same will be pumped out by 5HP water pump and discharge to the Green belt development areas. Besides, the water will also be used for dust suppression on haul roads during Haulage of machineries.

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7.0 STACKING OF MINERAL WASTE AND DISPOSAL OF WASTE:

There is no waste anticipated during entire life of the quarry hence disposal of waste does not arise.

8.0 USE OF THE MINERAL:

The excavated rough stone (100%) will be directly loaded into Tippers as raw form to the needy nearby crushing unit to making Road metals and construction materials. The quarried out gravel and weathered rock will be directly loaded into Tippers for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fee to the Government.

9.0 OTHERs

9.1. PERMANENT STRUCTURES (also shown in the map)

TABLE – 13

S.No.	Description	Particulars	Aerial Distance & Direction
1	Nearest National Highway	(NH-381) Tiruppur – Oddanchatram	7.8km – West
2	State Highways	(SH-172) Tiruppur – Kangeyam	2.0km – NE
3	Village Road	Village Road	200m – West
4	Railway station	Uthukuli Railway station	10.9km – NW
5	Airport	Coimbatore Airport	46.2 km – SW
6	Nearest Habitation	870m – SW	
7	Nearest Town	Tiruppur	13.2 km – NW
8	Nearest Government School	Government school - Andipalayam	780m – SW
9	Government Hospital	Tiruppur	13.2 km – NW
10	Reserved Forest	No Reserve Forest within 60m Radius.	
11	Defense Installation/Historical Monuments/ Archaeological	Nil within 500m radius.	
12	Nearby Water Bodies	Nil within 50m radius.	
13	Interstate Boundary	Around 67.3km – SW (Kerala State Boundary)	
14	Critically Polluted areas identified by the CPCB	Around 54km – SW (Coimbatore – SIDCO)	
15	Protected areas Notified under wildlife (Protection) Act, 1972.	Around 29.2km – NE (Vellode birds Sanctuary) Around 11.1km – NW (Nanjarayan birds Sanctuary)	
16	Applicability of CRZ, Notification 2011 as amended.	Not Applicable	

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17	Applicability of Hill Area Conservation Authority (HACA) Clearance.	Not Applicable
18	Housing area, EB line (HT & LT Line)	There is no other EB-LT/HT line or Housing area situated within 50m radius from the lease area.
19	Boundaries of the permitted area.	The boundaries of the permitted areas are as follows (Refer Plate No. II): North - S.F.Nos. 539/2(P) and 538/1 East - S.F.Nos. 537 and 536 South - S.F.Nos. 543, 545 and 546 West - S.F.No. 542
20	Adjacent Patta lands / Govt. Land	

Direction	Classification	Safety Distance
North	Patta land	7.5m
East	Patta land	7.5m
South	Patta land	7.5m
West	Patta land	7.5m

STRUCTURE WITHIN **0 - 100m** Number of Structures - 2 Nos.					
Number of Structure	**Type of Structure**	**Usage Purpose**	**Commercial / industry/ residential/ farm house/ Govt. building**	**Occupants of Building/ Structure**	**Remarks**
Nil					
STRUCTURE WITHIN **100 - 200m** Number of Structures - 2 Nos.					
2	Crusher plant (1 No.)	Stone crushing	Industry	Owned by Applicant	No resident
2	Labour shed (1 No.)	Labour rest shed	Non residential	Owned by Applicant	Nil
STRUCTURE WITHIN **200 - 300m** Number of Structures – 2 No.					
1	Labour shed (2Nos)	Labour rest shed	Non residential	Owned by Applicant	Nil

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9.2. Employment potential (skilled, semi-skilled, un skilled):

TABLE – 14

Designation	Present Employment position	Employees Requirement	Total
a) Supervisory category			
Geologist	-	1	1
Mines manager	-	1	1
b) Skilled labour			
Mine Foreman	-	1	1
Blaster/Mate	-	1	1
Excavator – Operator	-	5	5
Wagon Drill Operator	-	1	1
Tipper Driver	-	10	10
Water sprinkler Driver	-	1	1
Jack-Hammer Drillers	-	8	8
c) Unskilled			
Security	-	2	2
Labour & Helper	-	4	4
Co-operator and Cleaner	-	10	10
Total	-	**45**	**45**

The proposed output per man shift:

TABLE – 15

Peak Production at 3rd year		1,85,600m^3
No. of days likely to be worked		300 days
Average ROM production per day		619m^3
OMS =	Average Production per day / Average employment per day	619m^3 / 45 = 13.8m^3

The above manpower is adequate to meet out the production schedule and the machinery strength envisaged in the mining plan and to comply with the statutory provisions of the Mines Safety Regulations. It is been ensured that the labour will not be employed less than 18 years, **No child labour** will engaged or entertained for any kind of quarrying operations. All the labours engaged for quarrying operations will be insured during the quarry lease period.

9.3. Welfare Measures:

a) Drinking Water:

Packaged drinking water is available from the nearby water vendors in Peruntholuvu which is located about 3.3km on the Southwestern side of the lease applied area.

b) Sanitary Facilities:

Hygienic modern Sanitary Facilities will be constructed in the safety area as semi-permanent structure and it will be maintained periodically.

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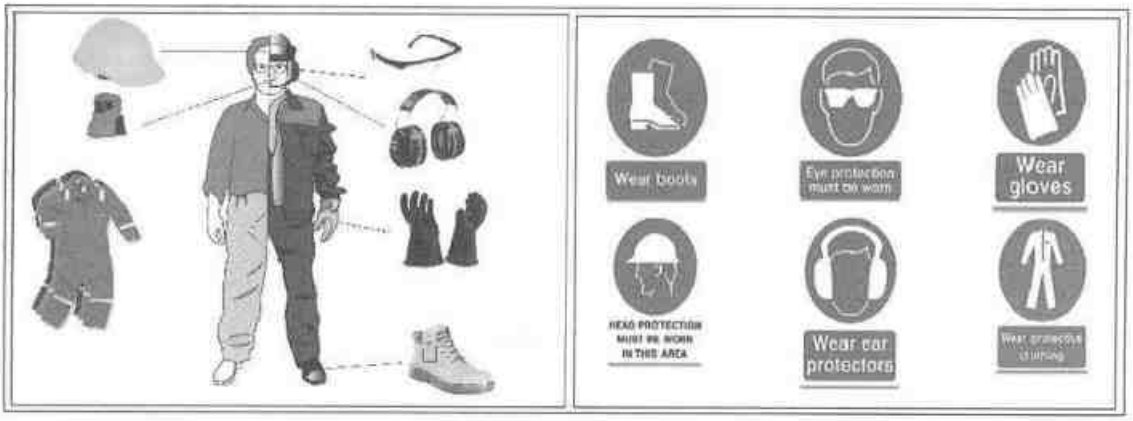
c) First aid facility:

First aid kits are kept in Mines office room, in case of such eventuality is the victim will be given first aid immediately at the site by the competent and statutory foreman/permit manager/mate will be in charge of first aid and injured person will be taken to the hospital by the company's vehicle. Hospital is available in Tiruppur located at a distance of 13.2km on the Northwestern side.

d) Labour Health:

Periodically medical check-up related to occupational health safety will be conducted to all the workers in company own cost.

e) Precautionary safety measures to the labourers:



- Helmets,
- Reflector Jackets,
- Dust mask,
- Mine Goggles,
- Ear plugs,
- Ear muffs,
- Safety Shoes,

All personnel protective equipment as per the DGMS standard will be provided as per the specification approved by Director of mines safety. Periodically medical check-up will be conducted for all workers for any mine health related problems. Proper training and vocational education will be given by qualified and experienced safety officer to all the employees about the safety and systematic Rough stone quarrying operations. The drillers and workers will be sent for vocational training periodically, to carry out the quarrying operations scientifically and to safe guard the men and machinery and to create awareness about conventional opencast quarrying operations.

10.0 MINERAL PROCESSING:

No mineral processing/beneficiation is involved.

PART – B

11.0 ENVIRONMENT MANAGEMENT PLAN

The EMP is prepared based on the Mines act, Rules & amendment from by state & central government. If the SEIAA/SEAC instructed the modification and alter the EMP the outcome of their recon would be final and the company is instructed to followed the EIA / EMP for its compliance as per the CPCB / TNPCB Norms.

Environment	Anticipated impact	Mitigation measure
Land Environment	i. Topography of the area will change due to mining activity.	i. No waste will be anticipated during entire life of quarry. Hence, backfilling is not proposed in this quarry operation. Anyhow, barbed wire fencing and safety bund will be constructed around the quarry to prevent inadvertent entry of public and cattle. ii. The excavated benches shall be developed for plantation with grasses, herbs and shrubs of local species to improve aesthetic of the area and to prevent any soil erosion and landslide. iii. Mining benches will not exceed beyond the approved height and width. iv. Leftover foreign material like polythene bag, jute bag and useless articles will not be allowed to litter and no ill managed dumping will be used for filling the excavated pits
	ii. Soil quality and it's fertility of adjacent lands will affected due to fugitive dust and Vehicular emissions during drilling, blasting, loading, unloading and haulage of men and machineries.	This is discussed in following Air Environment due to avoid repetition.

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Water Environment	Surface Mining can have direct impact on physico-chemical characteristics of the local drainage and groundwater resources. The detrimental effects, if any, to water resources resulting from surface mining are caused by following: i. Alteration of natural drainage pattern resulting from modification of topography. ii. Abnormal increase in the turbidity of the nearby stream and Gundar River. iii. The activities can also disrupt the ecological diversity in many ways. iv. Contamination of groundwater if mining intersects with the water table.	i. Construction of Garland drain with check dam and settling tank will be constructed around the quarry to collect the surface run off rain water and which will be discharge in to the natural drainage system and water bodies in manure as prescribed by TNPCB standards. ii. Further mining will be completely stopped during the monsoon for free flow of surface run off and allowing natural recharge of groundwater. iii. No wastewater shall be generated from the quarry activity. Proper drainage will be Maintained to eliminate inundation of working pits during rains from run-off water. iv. The mine pit water collected due to rain will be utilized for water spraying on the haul Roads and watering for plantations. v. Septic tanks and soak pits will be provided for the disposal of domestic/ washroom effluents. vi. The deposit will be worked from the top surface up to a depth of 87m and shall not in any case intersect and contaminate the ground water as the depth of the water table in the area is 93m – 96m.
Air Environment	In surface mining operations, the source of air pollution may cause deterioration of air quality due to the fugitive dust emissions from drilling/blasting, scooping, loading-unloading operation of extracted mineral and its transportation. Drilling/blasting and loading of quarry material would be associated with the fugitive dust emission in the active area whereas fugitive emission during transportation would affect the areas/villages situated adjacent to the road side. Another source of air pollution would be	i. Green belt will be developed in the safety zone with thick long leaves plant to arrest the fugitive dust and vehicular emissions on the surrounding environments. ii. Wet drilling with dust extractor unit will be carried out to minimize the dust generation. iii. Controlled blasting with Proper blasting pattern will be followed for effective rock fragmentation and generation of minimal fine dust to the atmosphere. iv. Quarry material will be handled under wet condition during loading and unloading to minimize the dust generation of proposition, besides loaded materials are covered by Tarpaulin until to reach the destination during transportation. v. Regular water sprinkling to the haul road to arrest the dust generation.

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	emission from the drilling machinery and excavators/tippers vehicles to be used for loading.	vi. Provision of dust filters/ mask to workers working at dust prone and affected areas. vii. Vehicular emission as a result of combustion of diesel generates small particulate matter (PM_{10} & $PM_{2.5}$), Nitrogen oxides and Sulphur dioxide (NO_2 & SO_2). High quality diesel will be used in the motor vehicles to control these pollutants. viii. PUC (Pollution under control) certified vehicles will be used for transportation. ix. CPCB Prescribed emission standards for the vehicles would be followed. x. All vehicles and their exhausts would be well maintained and regularly tested for pollutant concentrations.
Noise and Vibration	In the present mining activity for building material, noise will be generated from drilling machinery, blasting and vehicular movement. Noise level in the working environment is compared with the standards prescribed by Central Pollution Control Board as adopted and enforced by the Govt. of India through Noise Pollution (Regulation and Control) Rules, 2000.	i. Selection of new low – noise equipments for the quarry operation. ii. The noise levels shall be maintained within the permissible levels by involving all the noise regulating measures in vehicles and drilling/blasting operations. iii. To ensure minimum vibrations and noise due to blasting, Non-electric delay detonators in continuous sequence is proposed. iv. **Personnel Protective Equipment (PPE) like** earmuffs and earplugs shall be provided to the employees whose in critical operation like drilling, blasting and excavation as occupational safety measures. v. Proper maintenance done with regular interval by the Oiling and greasing for the machineries and vehicles to controle the Source of noise during operation and transportation. vi. Regular and proper maintenance of machinery and transportation vehicles shall be ensured. vii. Transporting vehicles are enforcing the speed limits of 20km/hour within quarry area and not exceed 40km per hour from quarry to destination to reduce Noise and vibration level. viii. There would be restrictions on mining activity and vehicular movement during night hours.

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Biological Environment	The area having main floras are Neem, Palm, Cocos nucifera, Palm, Senna auriculata, Calotropis, Casuarina, Teak, Acacia nilotica, Thorney bushes and shrubs. No plants of botanical interest or animals of zoological interest recorded within 500m radius. The anticipated impacts on biological environment as follows: i. Diversity of living insects in the overburden material. ii. Natural habitats of the existing faunas and its breeding will change due to the noise and vibration during operation. iii. Mining may drive away the nearby residents from their habitat. iv. Access roads crossing the riparian areas will have impact on the species disturbing the ecosystem. v. Diminution of the quality and quantity of habitat essential for aquatic and riparian species vi. Deposition of dust on the plant and crop leaves is affecting the photosynthesis, Pollination, ratio of growth and reduction in the yield of agriculture. vii. Excessive and unscientific surface mining results in the destruction of aquatic and riparian habitat through large changes in the channel morphology.	i. The natural habitats of the existing flora and fauna will not be disturbed. ii. No mining will be carried out during the monsoon season to minimize impact on aquatic life which is mainly breeding season for many species. iii. Fruit bearing trees will be planted to survive of the existing native faunas. iv. No clearance of vegetation will be done during the entire mining operations. v. Water sprinkling on haul roads would be reduces the dust emission, thus avoiding damage to the crops and plants. vi. No night hour mining will be carried out which may catch the attention of wildlife.

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Socio – Economic Environment	Any activity during mining will have adverse impact on Environment, careful mitigation measures are proposed to balance the impact on the existing environment and the company is always instruct to carry out safe, sustainable, eco-friendly mining operations at all times. The following positive impact on the society due to this mining activity. i. It is proposed to provide employment to about 45 persons for carrying out mining operations and give preference to the local people in providing employment. In addition, there will be opportunity for indirect employment to many people in the form of contractual jobs, business opportunities, service facilities etc. the economic status of the local people will be enhanced due to mining project. ii. The employment opportunities both direct and indirect will contribute to enhanced money incomes to job seekers with minimal skill sets especially among the local communities. iii. Improvement of Physical structure like Road Transport facilities, Communications, Medical, Educational and social benefits will be made available to the nearby civilian population in addition to the workmen employed in the mine. iv. The continuation of opportunity for the employments, the nearby villages, living peoples and their life style would be improved. v. The company is advised to invest the CER cost (@ 2% from the total Project Cost) to develop the local Panchayat.	Does not arise.

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11.1 Environmental impact assessment statement describing impact of mining for the next Ten years:

In the mining plan proposed for a production of Rough stone does not involve deep hole drilling and blasting. Such limited mining activity is not likely to cause any impact adversely on the environment. As far as pollution of air, water and noise concerned, the environmental impact studies will be conducted as per EIA notification issued by MoEF& CC. It is B Category mine. The compliance monitoring will be carried out for every six months as prescribed by the MOEF&CC and with state concerned authorities.

11.2 Proposal for waste management:

There is no waste anticipated in this Rough stone and Gravel quarrying operation. The entire quarried out materials will be utilized (100%). The maintenance of machineries & fuelling will be carried out as per the TNPCB Norms and the waste will be disposed in the Norms.

11.3 Proposal for reclamation of land affected during mining activities and at the end of mining (refilling / fencing etc.):

In the mining plan only to a maximum depth of 87m (9m above ground level + 78m below ground level) has been envisaged as workable depth for safe & economic quarrying operation during entire life of quarry. There is no waste generated hence, backfilling is not possible. After completion of quarry operation the quarried out pit will be allowed to collect the seepage and rainwater and the water storage will be kept as temporary reservoir for charging the nearby wells and the water will be utilized for Green belt development purpose. The quarry area will be fenced with Barbed wire fencing also safety bund constructed around the quarry to prevent inadvertent entry of public and cattle.

11.4 Programme of Greenbelt development (indicate extend, number, name of species to be afforested):

The safety zone along the boundary barrier has been identified to be utilized for Greenbelt development. Around 4,410m^2 area will be utilized for green belt development by planting 900 numbers along the safety zone during entire lease period also around 500 tree saplings in the approach road at first year of the plan period and 400 tree saplings from third year onwards in quarried out top benches with 2m height tree saplings with an anticipated survival rate of 80% with maintain atleast 1440 plants during the entire life of the quarry.

As per the SEIAA Recommendation the plantation will be carried out based on the output Environmental Clearance and the recommended species will be carried out for green belt development. Appropriate native species of trees will be planted in a phased manner as described below.

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TABLE – 16

Year	No. of tress proposed to be planted	Area to be covered (m^2)	Name of the species	Survival %	No. of trees expected to be grown
I	100	487	Neem, Pongamia Pinnata, Cordia dichotoma, Mango, Thespesia populnea, Mantharai, etc.,	80%	80
II	100	487		80%	80
III	100	487		80%	80
IV	100	486		80%	80
V	100	486		80%	80
VI	80	396		80%	64
VII	80	396		80%	64
VIII	80	395		80%	64
IX	80	395		80%	64
X	80	395		80%	64

11.5 Proposed financial estimate / budget for (EMP) environment management:

Budget Provision for the Mining Plan period:

TABLE – 17

A. Operational Cost / Project Cost / Investment:		**Cost (Rs.)**
i) Land cost	The Land value as per the Government Guideline land cost is about, **SF. Nos** / **Extent** / **Cost / Ha** / **Total Cost** 538/2A / 0.92.25 / 2224000 / 2051640 538/2B / 0.92.25 / 2051640 539/2 (P) / 1.05.50 / 2346320 **2.90.0** / **6449600** Round of Rs.64,50,000/- (Source: https://tnreginet.gov.in/portal/)	64,50,000
ii) Machinery cost	The machineries are proposed on rental basis to meet out the productions. The rental cost would be around (Including Fuel, oil, grease, spares, etc.,)	80,00,000
iii) Refilling/ Fencing	Fencing will be constructed around the quarry pit to prevent the inadvertent entry of public and cattle cost would be around (Total Peripheral length 950m x Rs. 300/meter)	2,85,000
iv) Labourers shed	Labour shed already constructed as semi-permanent structure. The cost is around	5,00,000
v) Sanitary facility	Adequate latrine and urinal accommodation has provided at conveniently accessible places the cost would be around	2,00,000
vi) Drinking water facility for the labourers	Packaged drinking water will be provided for all the Labours. Drinking water will be readily available at conveniently accessible points during the whole of the working shift the cost would be around.	3,00,000

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vii) Sanitary arrangement	The latrine and urinal will keep clean and sanitary condition. The maintenance cost would be around.	1,50,000
viii) Safety kit	All the Safety kit such as Helmet, Earmuffs, Goggles, Reflector Jackets, Safety shoes etc., will be provided to the workers by the company own cost which would be around.	2,00,000
Total Cost		**1,60,85,000**

B. EMP Cost:		**Cost (Rs.)**
1. Environmental Monitoring Program (Air Quality, Water Quality Sampling, Noise and Ground vibration test) Rs. 76,000/ year.		7,60,000
2. Water will be sprinkled in the haul roads by own water sprinkler for dust suppression. The cost would be around.		6,00,000
3. Construction of Garland drain with check dam to prevent surface run-off rain water entering to the quarry pit, the construction cost is around (Total Peripheral length 900m x Rs. 300/meter).		2,70,000
4. First aid room & accessories		1,00,000
5. Dust extractor unit for Jackhammer (4 Nos.)		4,00,000
7. Greenbelt development for dust suppression & Noise control measures	Greenbelt development and maintenance will be carried out in the boundary barriers the cost would be around (900 saplings x Rs. 200/sapling).	1,80,000
	Greenbelt development and maintenance will be carried out in the quarried out top benches (400 saplings x Rs. 200/sapling).	80,000
	Greenbelt development and maintenance will be carried out in the Panchayat Road (500 saplings x Rs. 200/sapling).	1,00,000
Total EMP Cost		**Rs. 24,90,000/-**

Description	**Cost (Rs.)**
A. Operational Cost	**Rs.1,60,85,000/-**
B. EMP Cost	**Rs.24,90,000/-**
Total Project Cost (A+ B)	**Rs.1,85,75,000/-**
C. The company Indents to involve corporate environment responsibilities (CER) activity like Water Purifier, Plantation, Books to Library, sanitary facility, Painting for class rooms and as per requirement to the nearby School at 2.0% from the total project cost. The Cost would be around **Rs.3,72,000/-.** If the concerned authority is directed to modify the CER cost and mode of utilization of the cost, the same will be implement by the company.	**Rs.3,72,000/-**
Total Cost (A+B+C)	**Rs.1,89,47,000/-**
The total cost would be around one crore eighty nine lakh and forty seven thousand only.	

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12.0 PROGRESSIVE QUARRY CLOSURE PLAN

12.1 Introduction:

The entire area is proposed for a short period of 10 years only hence, the progressive quarry closure plan may not be applicable to this quarry. Anyhow, during temporary discontinuance of quarry the following measures will be taken.

a. Barbed wire fencing will be constructed around the quarry.
b. Benches will be smoothening.
c. Quarry will be closed & sentries will be posted round the clock.
d. Green belt development will be maintained.
e. Machineries will be removed from pit and engaged in another site.

12.2 Present and Post Land use pattern:

LAND USE TABLE – 18

Description	Proposed Amalgamation		Leaving safety and Benches	
	Area to be required at the present mining plan period (Ha)	Area at the end of lease period (Ha)	Area to be required at the present mining plan period (Ha)	Area at the end of lease period (Ha)
Area Under Quarry	2.44.90	2.44.90	2.05.10	2.05.10
Site Services	#Nil	Nil	#Nil	Nil
Roads	0.01.00	0.01.00	0.01.00	0.01.00
Green Belt	0.24.33	0.44.10	0.34.80	0.83.90
Unutilized Area	0.19.77	Nil	0.49.10	Nil
Grand Total	**2.90.00**	**2.90.00**	**2.90.00**	**2.90.0**

Note: * Present Area is Virgin.
Site services are constructed in the Company's patta land.

12.3 Statutory obligations:

The company ensures to comply all the conditions stipulated in the precise area communication letter before grant of quarry lease and during the course of quarry operations as per the DGMS, Department of Geology and Mines, Labour Enforcement officer, controller of Explosives etc., circulars, Norms, Rules, Regulations and Act.

12.4 Progressive quarry closure plan preparation:

Name and address of the Qualified Person who prepared the progressive closure plan and name, address and register number of the executing agency who is involved in the Preparation of progressive quarry closure plan.

Name : **B. Vengadagiri, M.Sc.,**
Qualified Person (Under Rule 15(I)(a) and (I)(b) of MCR, 2016)
Address : No.105, 5th Cross,
Alagapuram,
Salem District – 636 010,
Mobile : +91 86953 32233
Email : vengatb6@gmail.com

The company will himself implement the closure plan; no outside agency will be involved.

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(i) Safety & Security:

Safety measures will be implemented to prevent access in the excavation area an un-authorized persons as per Mine Act 1952, MMR 1961.

- Safety measures will be implemented as per Mine Act 1952, MMR 1961, and Mines Rules 1955.
- Provisions of MMR 1961 shall be strictly followed and all roads shall be wider than the height of the bench or equal to the height of the bench and have a gradient of not more than 1 in 16.
- The bench height will be 5.0m.
- Width of working bench will be kept about 5.0 m for ease of operations and provide sufficient room for the movement of equipments.
- Protective equipment like dust masks, ear-plugs/ muffs and other equipments shall be provided for use by the work persons.
- Notices giving warning to prevent inadvertent entry of persons shall be displayed at all conspicuous places and in particular near mine entries.
- Danger signs shall be displayed near the excavations and proper signal by siren alarm will be given to the public before blasting to prevent accident.
- Security guards will be posted.
- In the event of temporary closer, approaches will be fenced off and notice displayed.
- Installation of CCTV cemaras in the quarry and entrance of the quarry.
- Monitoring of Quarrying operation by external agency as directed by authorities.

(ii) Disaster Management and Risk Assessment:

This should deal with action plan for high risk accidents like landslides, subsidence, flood, fire, seismic activities, tailing dam failures etc. and emergency plan proposed for quick evacuation, ameliorative measures to be taken etc. The capability of company to meet such eventualities and the assistance to be required from the local authorities should be described.

- The mechanized mining activities in the area may involve any high risk accident due to side falls/collapse, flying stones due to blasting etc.
- The complete mining operation will be carried out under the Management and control of experienced and qualified Mines Manager having Certificate of Competency to manage the mines granted by DGMS.
- All the provisions of Mines Act 1952, MMR 1961 and Mines Rules 1955, TNMMCR 1959 and other laws applicable to mine will be strictly complied with.
- During heavy rainfall the mining activities will be suspended.
- All persons in supervisory capacity will be provided with proper communication facilities.
- Competent persons will be provided FIRST AID kits which they will always carry.
- The Greenbelt Development will be formed in around the quarried out top benches and panchayat road of the lease applied area.

Environmental Monitoring Cell:

A dedicated team nominated by the mine manager or Agent will monitor and maintain the environmental compliances of the quarry as per the approved Environment Management Plan and report the Compliance to the Mine Manager half yearly.

Disaster Management Cell:

The Competent Qualified Statutory managers appointed by the applicant as per the Director of Mines Safety will be responsible for Disaster Management. It care any eventualities his mobile number will be displayed and he will take all the precautions and safety measures as per Mines and Minerals (Development and Regulations) Act, 1957.

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(iii) Disposal of mining machinery

All the Machineries will be purchased fresh; the same has been maintained in good condition during entire life of quarry. After completion of quarry operation all machineries will be utilized at another quarry area or sold out to the second hand. Hence, disposal or decommissioning of mining machinery does not arise.

(iv) Care and Maintenance during Temporary Discontinuance:

In case of any temporary discontinuance due to court order or due to statutory requirement or any other unforeseen circumstance following measures shall be taken for care, maintenance and monitoring of conditions.

- Notice of temporary discontinuance of work in mine shall be given to the DGMS as per the MMR 1961.
- All the mining machinery shall be shifted to a safe place.
- Entrance to the mine or part of the mine, to be discontinued shall be fenced off. Fencing shall be as per the circular 11/1959 from DGMS.
- Security Guards shall be posted for the safety and to prevent any unauthorized entry to the area.
- Carry out regular maintenance of the facilities/area detailed below in such a way as would have been done as if the mines were operation:

  Quarry roads and approach roads,

  Fencing on approach roads,

  Checking and maintenance of machines and equipment,

  Drinking water arrangements,

  Quarry office, first aid stations etc.
- Competent persons shall inspect the area regularly.
- Air, water and other environmental monitoring shall be carried out as per CPCB and IBM Guideline.
- Care and upkeep of plantation shall be carried out on regular basis.
- Status of the working and status monitoring for re-opening of the mines shall be discussed daily.

In case of discontinuance due to any natural calamities/abnormal conditions, mining operation will be restarted as early as possible after completing rescue work, restoring safety and security, repairs of roads etc.

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(v) Economic Repercussion of Closure of Quarry and manpower Retrenchments:

The quarry lease is granted for a period of ten years only. As per the production Programme envisaged, there will be no effect on the man power as the majority of persons belong to nearby villages and will have an option either to be available for employment for the next contract/ lease or do the agriculture in their fields.

(vi) Abandonment Cost:

As at present mining is not going to be closed so abandonment cost could not be assessed. However, based on the progressive quarry closure activities during the plan period, cost is assessed as given below at present scenario:

TABLE – 19

ACTIVITY		YEAR										RATE	COST (Rs.)
		I	II	III	IV	V	VI	VII	VIII	IX	X		
Plantation under safety zone	No. of sapling	100	100	100	100	100	80	80	80	80	80	Rs.200 Per sapling	1,80,000
	Cost	20000	20000	20000	20000	20000	16000	16000	16000	16000	16000		
Plantation in quarried out top benches and approach road		Approach Road		Quarried out top Benches									
	No. of sapling	250	250	50	50	50	50	50	50	50	50	Rs.200 Per sapling	1,80,000
	Cost	50000	50000	10000	10000	10000	10000	10000	10000	10000	10000		
Wire Fencing for 950 Mtrs length		285000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	2,85,000
Garland Drain with settling tanks for 900 Mtrs length		270000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	2,70,000
Total													**9,15,000**

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ASSISTANT DIRECTOR * GEOLOGY AND MINING *

13.0 ANY OTHER DETAILS INTEND TO FURNISH BY THE APPLICANT

This Mining plan for Rough stone (Charnockite) and Gravel is under Rules 41 & 42 as per the Amended under Tamil Nadu Minor Mineral Concession Rules, 1959. The provisions of the Mines Act, Rules and Regulations and orders made there under shall be complied within the quarrying operation, so that the safety of the mine, machinery and person will be well protected. Permission, relaxation or exemption wherever required for the safe and scientific quarrying of the deposit will be obtained from the Department of Mines Safety. Any violation pointed out by the inspecting authorities shall be rectified and modified after scrutiny comments as per the guidelines of the Concerned Department and Authorities.

This Mining Plan and mine design is prepared based on the requirement instructed by the applicant to me. If there is any change in the production schedule, change of technology, change in product mix during the course of operations, the applicant is advice to prepare a modified mining plan and get approval by the concerned authority for subsequent clearance and approval. The same will be monitored by the inspecting authority of Department of Geology and mining and other Concerned Departments under Rule 25 and sub rule (5)(d) in Rule 36 of Tamil Nadu Minor Mineral Concession Rules, 1959.

I hereby ensure that the information provided is correct to best of my knowledge and experience, some of the information contained in this report has been provided by external sources and by the applicant and is presented as the form as submitted by the applicant. The information is not intended to serve as legal advice related to the individual situation. I do not owe and specifically disclaim any liability resulting from the use during the course of quarrying operations after the grant of lease. The document may be scrutinized by the competent authority before approval.

Prepared by

B. Vengadagiri, M.Sc.,
Qualified Person

This Mining Plan is approved as per the Powers conferred under rule 41(2) of Tamil Nadu Minor Mineral Concession Rules, 1959

Place: Salem
Date: 29.07.2024

This Mining Plan is approved subject to the Conditions Indicated in the Mining Plan approved Letter No. 669/Mines/2023 Dated 29.07.2024.

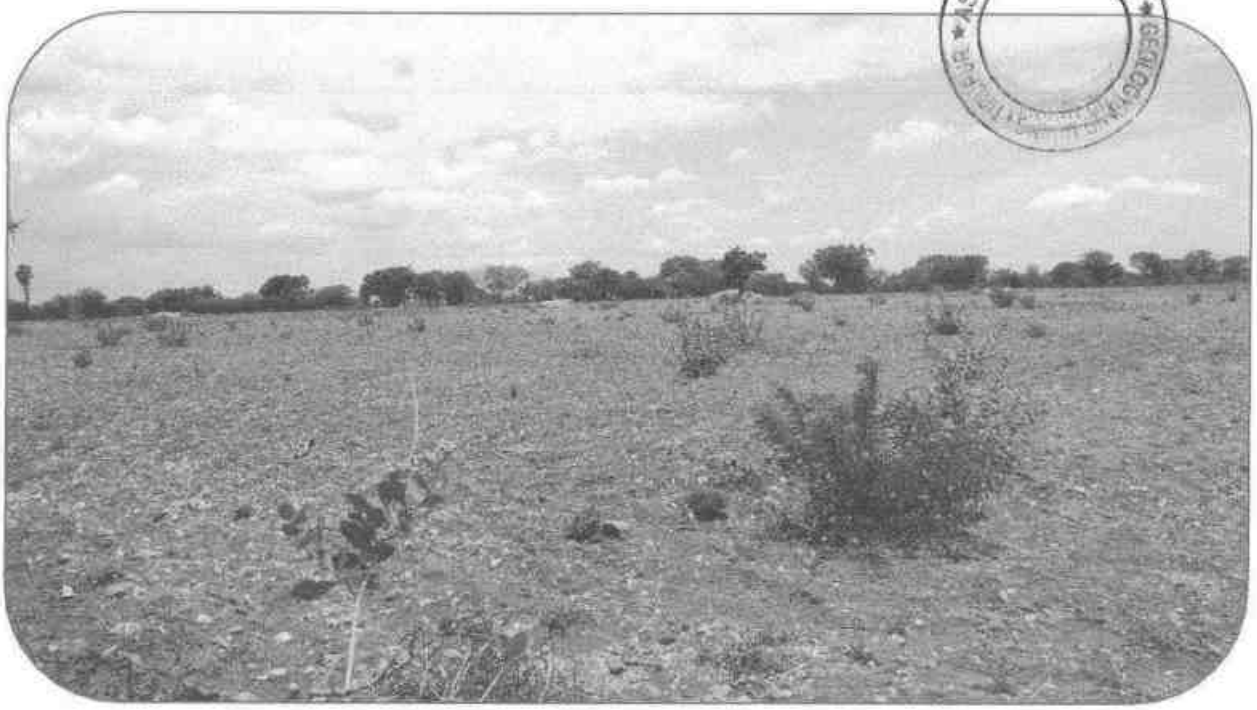
29/7/2024

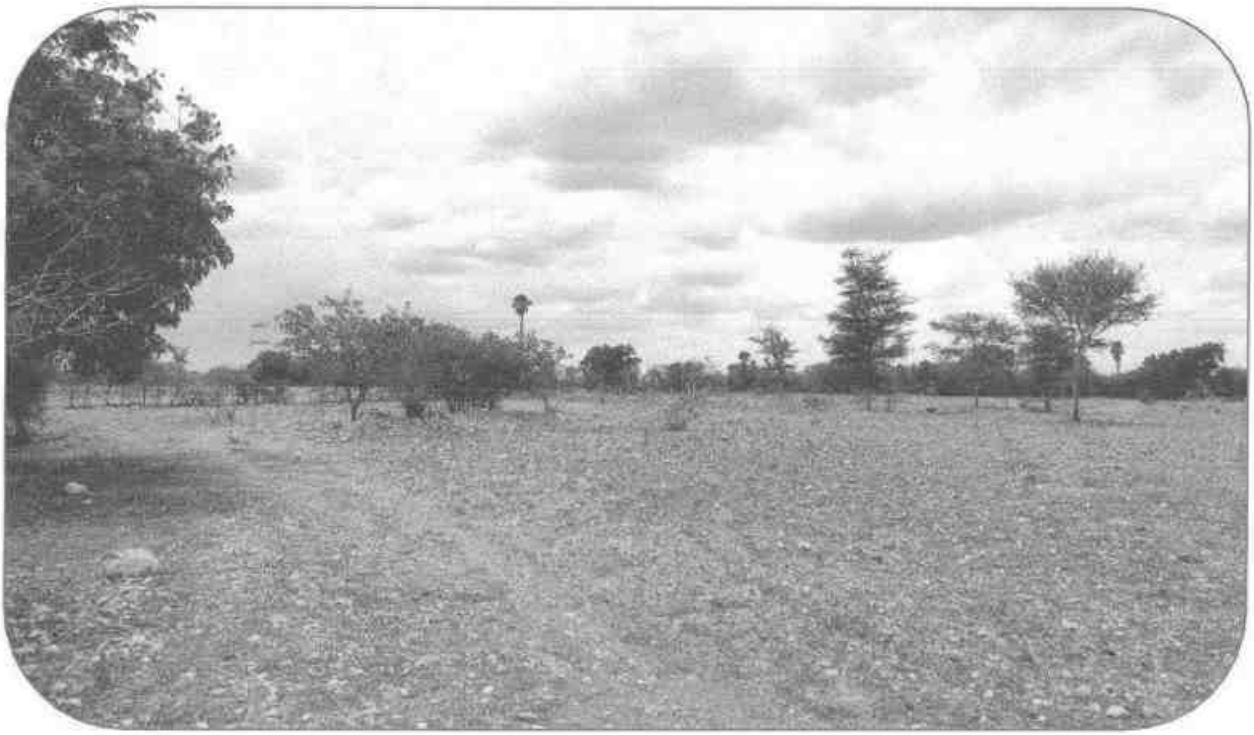
DEPUTY DIRECTOR i/c
Geology and Mining
Tiruppur

29/7/24

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TOPOGRAPHICAL VIEW OF PERUNTHOLAVU ROGH STONE AND GRAVEL QUARRY LEASE APPLIED AREA.





ANNEXURE 1

ASSISTANT DIRECTOR GEOLOGY AND MINING THIRUPPUR

ந.க.எண்.669/கனிமம்/ 2023

புவியியல் மற்றும் சுரங்கத்துறை
மாவட்ட ஆட்சியர் அலுவலகம்,
திருப்பூர்.

நாள்:.24.07.2024.

குறிப்பாணை

பொருள் : கனிமங்களும் சுரங்கங்களும் - சிறு கனிமம் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - பட்டா புல எண்கள். 538/2A(0.92.25), 538/2B(0.92.25)-ல், 539/2B(1.05.50) ஆகியவற்றில் மொத்தம் 2.90.0ஹெக்டர் பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி குத்தகை உரிமம் கோரி தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியா பிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) விண்ணப்பம் அளித்தது - புலத்தணிக்கை அறிக்கை சமர்பிக்கப்பட்டது - தகுதியான நிலப்பரப்பாக கருதி ஏற்பளிக்கப்பட்ட சுரங்க திட்டம் மற்றும் சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணைய இசைவிணை பெற்று சமர்பிக்கக் கோருதல் - தொடர்பாக.

பார்வை :

1. தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்), 11/32, வெட்டுக்காட்டு வலசு,ஈங்கூர், பெருந்துறை,ஈரோடு என்பவரின் மனு நாள்: 13.09.2023.
2. இவ்வலுவலக கடிதம் ந.க.எண். 668/கனிமம்/2023 நாள்:22.09.2023.
3. வட்டாட்சியர், திருப்பூர் தெற்கு கடிதம் ந.க. 3643/2024/அ1 நாள்: 15.02.2024.
4. சார் ஆட்சியர் (பொ), திருப்பூர் கடிதம் மூ.மு.எண்.5664/ 2023/அ3 நாள்.05.05.2024.
5. வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர் கடிதம் ந.க. 1200/2024/ஆ2. நாள்:23.05.2024.
6. உதவி புவியியலாளர் (கனிமம்), திருப்பூர் புலத்தணிக்கை அறிக்கை நாள்:11.06.2024.
7. மற்றும் உரிய ஆவணங்கள்

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள். 538/2A(0.92.25), 538/2B(0.92.25)-ல், 539/2B(1.05.50) ஆகியவற்றில் மொத்தம் 2.90.0 ஹெக்டர் பரப்புள்ள பட்டா பூமியிலிருந்து 10 வருடங்களுக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியா பிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்), 11/32, வெட்டுக்காட்டு வலசு,ஈங்கூர், பெருந்துறை,ஈரோடு என்ற நிறுவனத்தார்பார்வை 1-ல் கண்டுள்ளவாறு உரிய ஆவணங்களுடன் விண்ணப்பம் அளித்துள்ளனர்.

2. மேற்படி விண்ணப்பங்கள் தொடர்பாக, வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர், வட்டாட்சியர், திருப்பூர் தெற்கு, சார் ஆட்சியர்(பொ), திருப்பூர், மற்றும் உதவிப் புவியியலாளர் (கனிமம்), திருப்பூர் ஆகியோர் புலத்தணிக்கை மேற்கொண்டு திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள். 538/2A(0.92.25), 538/2B(0.92.25)-ல், 539/2B(1.05.50) ஆகியவற்றில் மொத்தம் 2.90.0 ஹெக்டர் பரப்பில் தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியா பிரைவேட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) என்ற நிறுவனத்திற்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி உரிமம் வழங்க கீழ்கண்ட நிபந்தனைகளுக்குட்பட்டு அனுமதி வழங்கலாம் என பரிந்துரை செய்துள்ளனர்.

நிபந்தனைகள்:

- 1959ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், அட்டவணை IIல் கண்டுள்ளபடி குவாரி செய்யப்படும் கனிமங்களுக்குரிய சீனியரேஜ் தொகை அவ்வப்போது செலுத்தி கனிமம் கொண்டு செல்லப்பட வேண்டும்.
- புலத்தை சுற்றி அமைந்துள்ள பட்டா நிலங்களுக்கு 7.5 மீட்டர் பாதுகாப்பு இடைவெளி விட்டு குவாரி பணிபுரிய வேண்டும்.
- பிரஸ்தாப புலமான 539/2B தெ. காலையின் மேற்கு எல்லையிலிருந்து சுமார் 135 மீட்டர் தூரத்தில் புல எண். 543/1 தெ. காலையில் செல்லும் உயர்மின்னழுத்த கோபுரம் செல்வதால் CEA Regulations, Sl.No.65 (2) ன்படி Electrical Inspector of Mines இடமிருந்து தடையின்மை சான்றிதழ் பெற்று சமர்ப்பித்த பின்னரே நடைசீட்டு வழங்கப்படும் என தெரிவிக்கப்படுகிறது. மேலும் கோபுரத்திற்கு எவ்வித பாதிப்பும் ஏற்படா வண்ணம் குவாரிப்பணி மேற்கொள்ள வேண்டும்.
- தகுதிவாய்ந்த பிளாஸ்டருடன் கூடிய லேசான வெடிபொருட்களைப் பயன்படுத்தி குவாரி நடவடிக்கை மேற்கொள்ளப்பட வேண்டும்.
- குத்தகை உரிமம் கோரும் புலத்திற்கு DGPS முறையில் அளவீடு செய்து அதற்கான சான்றினை சமர்ப்பிக்க வேண்டும்.
- அனுபவம் வாய்ந்த வெடிபொருள் பயன்படுத்துவோர் மூலம் குறைந்த அளவு சக்தி கொண்ட வெடிபொருட்களை பயன்படுத்தி அருகிலுள்ள பட்டாதாரர்களுக்கு எவ்வித இடையூறுமின்றி / அருகிலுள்ள பட்டா மற்றும் அரசு புலங்களில் எவ்வித ஆக்கிரமிப்பும் இன்றி குவாரிப்பணி மேற்கொள்ள வேண்டும்.
- விதிகளின் படி ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தினை உரிய காலத்திற்குள் சமர்பிக்க வேண்டும்.
- குவாரி உரிமம் வழங்க உள்ள பகுதிக்கு சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் முன் அனுமதி பெற்று சமர்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும்.

3. எனவே, வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர், வட்டாட்சியர், திருப்பூர் தெற்கு, சார் ஆட்சியர்(பொ), திருப்பூர், மற்றும் உதவிப் புவியியலாளர் (கனிமம்), ஆகியோரின் பரிந்துரை மற்றும் நிபந்தனைகளின் அடிப்படையில், திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள்.

538/2A(0.92.25), 538/2B(0.92.25)-ல்,. 539/2B(1.05.50) ஆகியவற்றில் மொத்தம் 2.90.0 ஹெக்டர் பரப்பில் மட்டும் 1959ம் வருட தமிழ்நாடு சிறுகனிம விதிகள், விதி எண்.19-ன் படி மேற்கண்ட நிபந்தனைகளுக்குட்பட்டு 10 (பத்து) வருட காலத்திற்கு தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியா பிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) நிறுவனத்தாருக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி உரிமம் வழங்குவதற்குரிய தகுதியான நிலப்பரப்பாக கருதப்படுகிறது.

4. மேலும், தமிழ்நாடு சிறு கனிம சலுகை விதிகள்-1959 விதி எண். 41-ன்படி குவாரிப்பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்க திட்டத்தினை 90 தினங்களுக்குள் சமர்ப்பிக்குமாறு மனுதாரரைக் கேட்டுக்கொள்ளப்படுகிறது. மேலும் ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தின் தொடர்ச்சியாக 1959ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.42-ன் படி சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும் என இதன் மூலம் தெரிவிக்கப்படுகிறது.

துணை இயக்குநர் (பொ),
புவியியல் மற்றும் சுரங்கத்துறை,
திருப்பூர்.

பெறுநர்:

தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட்
(இயக்குநர்: திரு.P.ஜெகதீசன்),
11/32, வெட்டுக்காட்டு வலசு,
ஈங்கூர், பெருந்துறை,
ஈரோடு மாவட்டம்.

ANNEXURE II

மாவட்டம். திருப்பூர்

வட்டம். திருப்பூர்

புல எண். 538

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

பக்கம் 3

→ புல எண்: 538/2A பாகம் 0.92.25 ஹெ
538/2B பாகம் 0.92.25 ஹெ சாதாரண
கற்கள் மற்றும் கிராவல் மண் வெட்ட
எங்க தேற்கை உரிமம் கோரும் புலம்.

534

A 101.2 1 80.0 B

(181.2)

49.0

113.0

2

1

44.0

(168.4)

3

537

160.2

231.8

73.4

86.6(86.4)

50.4

44.4

539

2A

2B

2

C

534

(179.8)

86.6

546

86.4

173.0

E

545

Name Subdivision 2A, 2B are
plotted as per TK 8A/T86/1A31.
dt. 24.10.21

			C (168.4)
			140.4
			90.2
			46.6
			B
			A
			(181.2)
D	2.50	C	80.0
			B

அளவு. மிகை : 2000மிமீ

LEASE APPLIED AREA

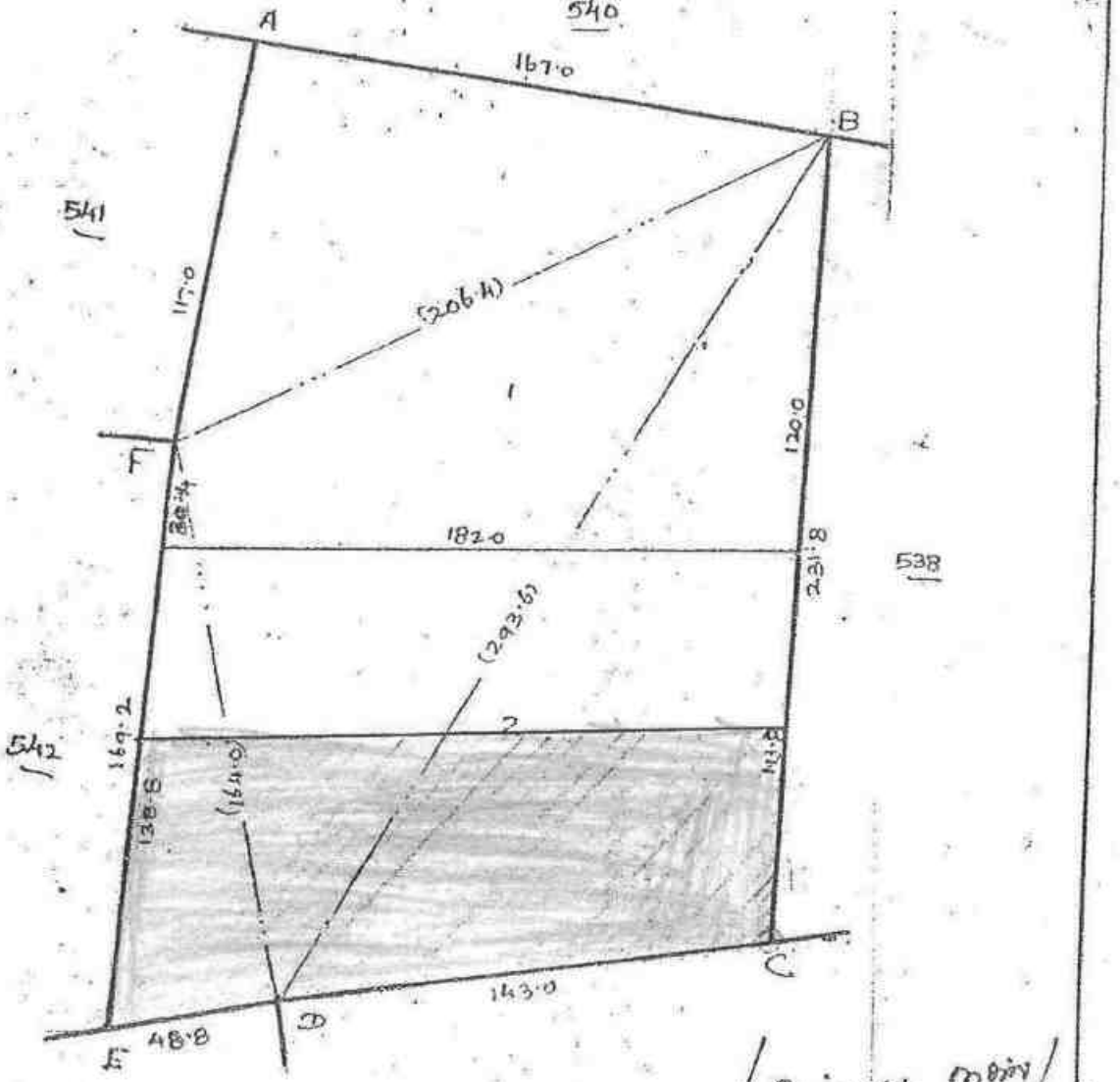
டம். திருப்பூர் XXXXXXXXXX

ட. விருப்பாட்சி

புல எண். 539

கிராமம் { எண். 22.
பெயர். [illegible]

பரப்பு: ஹெக்டேர் 4 ஏ. 65.5



/ உள்ளே நகல் /

6/11/2023

கிராம நிர்வாக அலுவலர்
பிறப்பு. இறப்பு பதிவாளர்

17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

E	48.2	1.2			
D					

- புல.எண்: 539/2 (P) பாகம் 1.05.50ஹெ சுதாதரண் கற்கள் மற்றும் கிராவல் மண் தோண்டி எடுக்க தற்காலிக அனுமதி கோரும் புலம்.

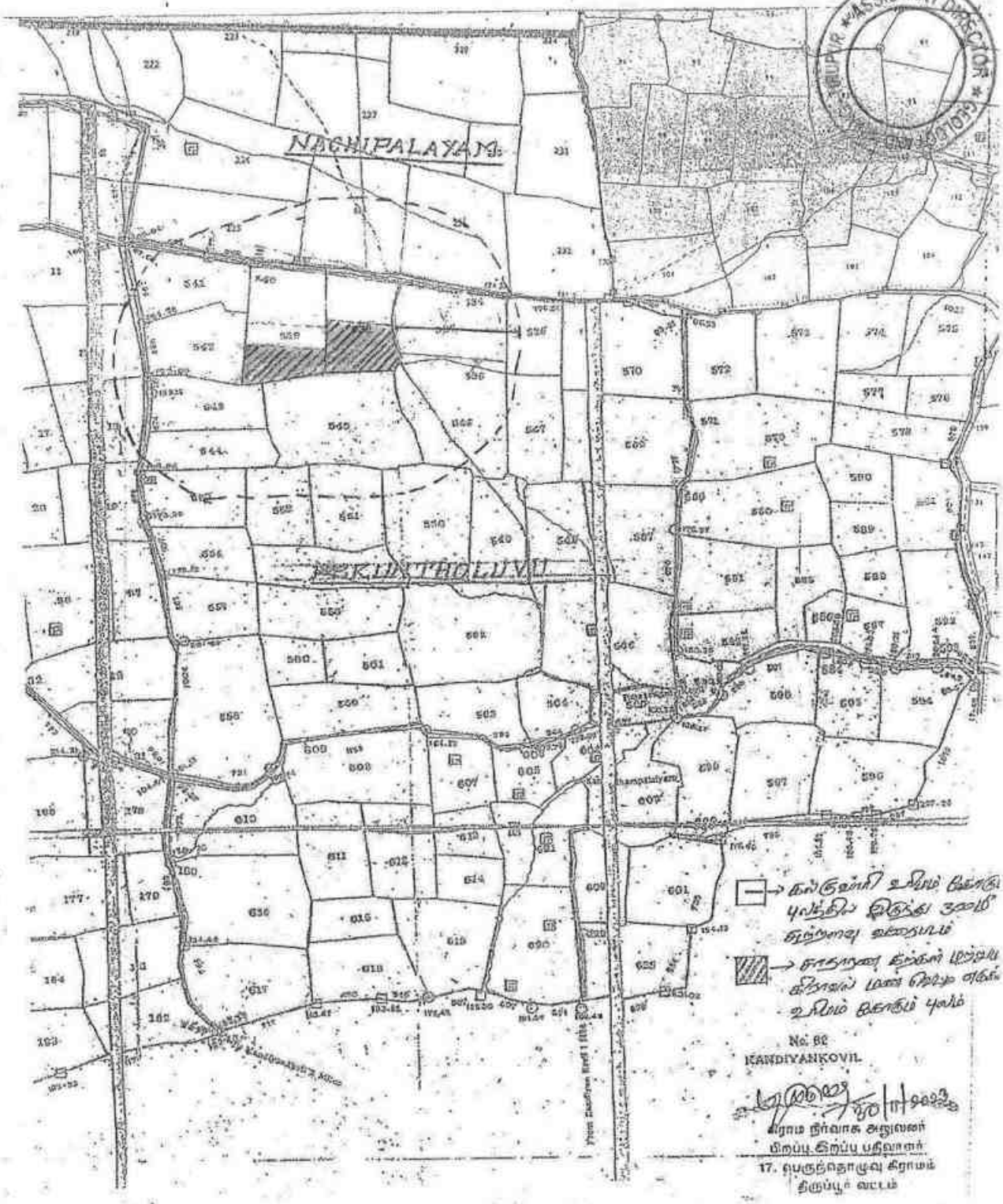
அளவு: மி.மீ: 2000 மிமீ

LEASE APPLIED AREA

244 A

ANNEXURE III

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு, காச்சிலையனூர் மற்றும் பாலர் கிராம கூட்டு மறைபடம்



ANNEXURE 17

வட்டாட்சியர் அலுவலக இணைய சேவை - நில உரிமை விபரங்கள்

தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPPUR

மாவட்டம் : திருப்பூர்

வட்டம் : திருப்பூர் தெற்கு

வருவாய் கிராமம் : பெருந்தொழுவு

பட்டா எண் : 2848

உரிமையாளர்கள் பெயர்

1. நஞ்சப்பன் மனைவி சரோஜினி

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	
538	2A	0 - 92.25	1.27	--	--	--	--	2021/0105/32/181037--2021/32/08/0002115D -- 21-12-2021
		0 - 92.25	1.27					

குறிப்பு2 :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **32/08/017/02848/20762** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 08-02-2024 அன்று 06:04:43 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய்த் துறை

ASSISTANT DIRECTOR * GEOLOGY AND MINING *

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : திருப்பூர் வட்டம் : திருப்பூர் தெற்கு

வருவாய் கிராமம் : பெருந்தொழுவு பட்டா எண் : 2849

உரிமையாளர்கள் பெயர்

1. பழனிச்சாமி மனைவி சிவகாமி

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	
538	2B	0 - 92.25	1.27	--	--	--	--	2021/0105/32/181037--2021/32/08/000211SD -- 21-12-2021
		0 - 92.25	1.27					

குறிப்பு2 :

1.	மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **32/08/017/02849/20773** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2.	இத் தகவல்கள் 08-02-2024 அன்று 06:06:33 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3.	கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : திருப்பூர் வட்டம் : திருப்பூர் தெற்கு

வருவாய் கிராமம் : பெருந்தொழுவு பட்டா எண் : 2136

உரிமையாளர்கள் பெயர்

1.	பழனிசாமி	மகன்	ஜெகதீசன்	
2.	பழனிசாமி	மகன்	மகேந்திரன்	
3.	மகேந்திரன்	மனைவி	புவனேஸ்வரி	
4.	ஜெகதீசன்	மனைவி	ஞானசுந்தரி	

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	
537	1	1 - 27.50	1.76	--	--	--	--	2018/0103/32/152669- -- -- 31-10-2018
537	3	1 - 37.00	1.89	--	--	--	--	2018/0103/32/152669- -- -- 31-10-2018
539	1	2 - 32.50	3.22	--	--	--	--	2018/0103/32/152669- -- -- 31-10-2018
539	2	2 - 33.00	3.22	--	--	--	--	2018/0103/32/152669- -- -- 31-10-2018
		7 - 30.00	10.09					

குறிப்பு2 :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **32/08/017/02136/20742** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 08-02-2024 அன்று 05:57:40 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

கிராமக் கணக்கு

1432 — ஆம் பசலியில் திருப்பூர் மாவட்டம் திருப்பூர் வட்டம் 10, பெருந்தொழு

நில வரித் திட்டத்திற்குப் புலங்களின் விபரம்						சரகடி மாளின் பெயர்.	முதல் போகம்.				
நில அளவை எண்.	உட்பிரிவு எண்.	ஏரல்	தீர்வை.	ஒரு போகம் அல்லது இரு போகம்.	வகைப்பாடு தாருடைய பெயரும் எண்ணும் அல்லது அநுபோக தாருடைய பெயர்.	நிலத்தின் வரித் தரம் மாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	வரித் தாருக்கு பயிர் செய்யப்பட்டது எந்த வகைப் பயிர் பயிரிடப்பட்டது.	பயிரின் பெயர்.	பயிரான / அறுவடை யான ரகம்.	உண்மையான பரப்பு ஆரம்.	விளைச்சல் அளவு விபரம்.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
538	2A	0.52	1.21	நஞ்சை	சிறாகினி						
538	2B	0.08	1.17	நஞ்சை	சிவதாரி						
539	2	2.04	32	48	செகதீசன்(ல)						

/உண்மைநகல்/

4/12/2023

கிராம நிர்வாக அலுவலர்
பிறப்பு,இறப்பு பதிவாளர்
17. பெருந்தொழு கிராமம்
திருப்பூர் வட்டம்

389/18-R.F.III-A10-5,00,000 Cps.-GEP.-Mdu-7-2021.

எண் 2

கிராமத்தில் வருடவாரி புலவாரி கைப்பற்று சாகுபடி அடங்கல் கணக்கு

இரண்டாம் போகம்.						கீழ்க்கண்டவைகளில் பயிரிடப்படாது உள்ள நிலத்தில் தன்மை மற்றும் பரப்பின் விவரங்கள் ஒவ்வொரு நில அளவை எண் அல்லது அகல பகுதியில்.	
வரித் தாருக்குப் பயிர் செய்யப்பட்டது எந்த வகைப் பயிர் பயிரிடப்பட்டது.	பயிரின் பெயர்.	பயிரான / அறுவடையான பரப்பு	உண்மையான பரப்பு ஆரம்.	விளைச்சல் அளவு விபரம்.	விரை அநுபவயின் குறிப்புரை :- (1) புலங்களில் பகுதிகளில் உட்பிரிவுகளில் பயிரிடப்பட்ட விவரங்கள் அளவில். (2) எவ்வாறான நிலம் பயிர் செய்ய ஏற்றது என்பதற்கான காரணங்களும் (3) பூர்வாதய வரித்தாருக்கு பயிர் செய்யப்பட்டது எந்த வகைப் பயிர் பயிரிடப்பட்டது என்பதற்கான காரணங்களும்.	(அ) வரப்பு, (ஆ) பயனற்ற பயிர் செய்ய இயலாத நிலம், (இ) விவசாயம் மற்றும் இதர காரியங்களுக்கு பயன் படுத்தப் படும் நிலம், (ஈ) பயிரிடத்தக்க தரிசு (உ) நிலையான புல் தரைகளும் மற்றும் இதர மேய்சல் நிலங்களும் (ஊ) விதைக்கப்பட்ட நிகர் பரப்பில் சேர்க்கப்படாத பழவகைப் பயிர்களும் தோப்புகளும், (எ) நடப்புத் தரிசுகள் (ஏ) இதர தரிசு நிலங்கள்.	பயிர் பார்வையிட்ட அலுவலர் குறிப்புரைகள்.
(13)	(14)	(15)	(16)	(17)	(18)	(18அ)	(19)

ASSISTANT DIRECTOR
GEOLOGY AND MINING

ANNEXURE

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ANNEXURE VI

1	2	3	4	5	6	7	8	9	10	11	12
							ரூ. பை.	ஹெ. ஏர்ஸ்	ரூ. பை.		
538	1	538-1	ஏ	பு	1	8-4	6	1 38	1 84 5	2 55	142 ரா. கொண்டாயம்மாள்
	2	-2	ஏ	பு	1	8-4	6	1 38	1 84.5	2 55	
									3 69.0	5 10	
539	1	539-1	ஏ	பு	1	8-4	6	1 38	2 32.5	3 22	623 ரா. முத்துசிவ சுப்பிரமணிய கவுண்டர்
	2	-2	ஏ	பு	1	8-4	6	1 38	2 33.0	3 22	623 ரா. முத்துசிவ சுப்பிரமணிய கவுண்டர்
									4 65.5	6 44	
540	...	540	அ	புற	...	...	...	...	0 59.0	...	...
541	...	541	ஏ	பு	1	8-4	6	1 38	3 60.0	5 12	1091 ராமசாமி கவுண்டர் (1), லிங்கே கவுண்டர் (2).
542	...	542	ஏ	பு	1	8-4	6	1 38	3 45.5	4 81	1092 முத்துசாமி கவுண்டர் (1), இளவர் முத்துசாமி கவுண்டர் (2), சுப்பராய கவுண்டர் (3).
543	...	541	ஏ	பு	1	8-4	6	1 38	3 30 5	4 58	1093 அ. வெங்கிட்டம்மாள் (1), சு. சாமாத்தாள் (2), மு. வள்ளியம்மாள் (3).
544	...	544	ஏ	பு				1 38	0 13 0	1 31	1093 வெங்கிட்டம்மாள் (1), சு. சாமாத்தாள் (2), மு. வள்ளியம்மாள் (3).

கிராம நிர்வாக அலுவலர்
பிறப்பு, இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

வண்டி பாதை

ASSISTANT DIRECTOR * GEO...

543/1	543பா	பு.4	1-8-4	6	1.38	1.65.12	2.27	112. ஆ. அந்தோந்தசாமி (D) மற்றும் (1) மனோன்.
543/2	543பா	பு.4	1-8-4	6	1.38	1.64.38	2.27	2644. பழனிசாமி மனைவி இன்பராஜ் (பிப்ப) ராஜேந்திரன் மனைவி சரோஜா மற்றும் -(2)
						3.30.50	4.54	

TK.GA/786/1431. நாள்: 24.12.2021ன் படி மாறுதல் செய்தளிக்கப்படுகிறது.

[signature]
[illegible]

538/2A	538	பு.4	1-8-4-6	1.38	0.92.25	1.27	2848. ராஜேந்திரன் மனைவி சரோஜினி.
538/2B	538	பு.4	1-8-4-6	1.38	0.92.25	1.27	2849. பழனிசாமி மனைவி இன்பராஜ்.
					1.84.50		

TK.GA/786/1431. நாள்: 24.12.2021ன் படி மாறுதல் செய்தளிக்கப்படுகிறது.

[signature]
[illegible]

உண்மை நகல்

[signature] 30/11/2023

கிராம நிர்வாக அலுவலர்
பிறப்பு. இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் மாவட்டம்

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ANNEXURE VII



தமிழ்நாடு तमिलनाडु TAMIL NADU 12.10.22.

VKP ENGINEERING IND PVT LTD

PERUNDURAI.

15AC 828312

எஸ். ஜெயிக்குமார் வேதலேல்
முத்திரைத்தாள் விற்பனையாளர்
உரிமை எண்: 3/1997
பெருந்துறை

சம்மதக் கடிதம்.

ஈரோடு மாவட்டம், பெருந்துறை வட்டம், ஈங்கூர் கிராமம், வெட்டுக்காட்டுவலசு, கதவு எண். 11/32 என்ற முகவரியில் வசிக்கும் திரு. V.K. பழனிச்சாமி மகன P. மகேந்திரன் (1), மகுமகள்கள் M. புவனேஸ்வரி (2), J. ஞானசுந்தரி (3) ஆகிய நாங்கள், ஈரோடு மாவட்டம், பெருந்துறை வட்டம், ஈங்கூர் கிராமம், வெட்டுக்காட்டுவலசு, கதவு எண். 11/32 என்ற முகவரியில் வசிக்கும் V.K. பழனிச்சாமி மகன் P. ஜெகதீசன் (4) ஆகிய உங்களுக்கு தெரிவித்துக் கொள்ளுகிறும் சம்மதக் கடிதம் என்னவென்றால்,

1. V.K.P.
2. M. Bhuvaneshwari
3. J. Gnanasundari
4. P. Jagadeesan

NOTARY
Name:
S. MANIAN M.A.,B.L.,
Area: Perundurai Tk
Regd. No.G.O.
Ms.No.341/16
INDIA
Pin: 638 052
GOVT. OF TAMIL NADU

J.M. 12.10.2022

Mobi 99655 41074 ☎ 228074
S. MANIAN, M.A.,B.L.,
Advocate & Notary Public
305, 306, Ram Nagar,
PERUNDURAI -638 052. Erode Dt.
Tamilnadu, India.
Book No. XXI Serial No. 3722

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திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண். 539/2-ல் 2.33.00 ஹெக்டர் பரப்பு பட்டா பூமி பட்டா எண். 2136-ன்படி நம்மில் (1),(2),(3) மற்றும் (4) இலக்கமிட்டவர்கள் பெயரிலும், கூட்டுப்பட்டாவாக தாக்கலாகியுள்ளது. மேற்படி புல எண். 539/2 -ல் 2.33.00 ஹெக்டர் பரப்பில் Tvl. V.K.P. Engineering IND Pvt. Ltd., என்ற பெயரில் சாதாரண கற்கள் / கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்கக் கோரி திருப்பூர் மாவட்ட ஆட்சியரிடம் மனு செய்துள்ளார். மேற்படி விண்ணப்பத்தின் பேரில் மாவட்ட ஆட்சியர் அனுமதி வழங்கும் நாளிலிருந்து பத்து ஆண்டுகளுக்கு குவாரி குத்தகை உரிமம் பெற்று சாதாரண கற்கள் / கிராவல் குவாரி நடத்த நம்மில் (1) முதல் (5) இலக்கமிட்டவர்களான எங்களுக்கு எவ்விதமான ஆட்சேபனையும் இல்லை. பின்னிட்டு எவ்வித பிரச்சனையும் செய்யமாட்டோம். முழுமனதுடன் சம்மதம் அளிக்கிறேன் என உறுதி கூறுகிறோம். மேலும், மேற்படி நிறுவனத்தின் நிர்வாகப் பங்குதாரர் என்ற முறையில் மேற்படி உரிமத்திற்காக அனைத்து ஆவணங்களிலும் கையொப்பமிடும் அதிகாரத்தினை நம்மில் (1) முதல் (3) இலக்கமிட்டவர்களான நாங்கள் நம்மில் (4) இலக்கமிட்ட திரு. P. ஜெகதீசன் என்பவருக்கு கூட்டுப்பட்டதாரர் என்ற முறையிலும், நிறுவனத்தின் நிர்வாக பங்குதாரர்கள், பங்குதாரர்கள் என்ற முறையிலும் சம்மதம் தெரிவிக்கிறோம்.

இப்படிக்கு,

1.
2. M. Bhanumathi
3. T. Chandrasekar
4. P.

Deponent/Executant

NOTARY
Name:
S. MANIAN, M.A., B.L.,
Perundurai Tk
NOTARIAL
NOTARIAL

SOLEMNLY AFFIRMED AND SIGNED
BEFORE ME AT PERUNDURAI, ERODE Dt.,
PIN : 638 052 ON 12.10.2022

12.10.2022

12.10.2022

12.10.2022

Mob: 99656 41074 ☎ 220074
S. MANIAN, M.A.,B.L.,
Advocate & Notary Public
305, 306, Ram Nagar,
PERUNDURAI -638 052. Erode Dt.
Regn. No. 237 / 3722

S. MANIAN M.A.,B.L.,
ADVOCATE & NOTARY PUBLIC
[illegible] Road, RAM NAGAR,
PERUNDURAI - 638 052.
ERODE DIST. TAMILNADU. INDIA.
APP/REN/ERD2204/00002

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ANNEXURE VIII



COMPANY LIMITED BY SHARES
(THE COMPANIES ACT, 2013)

MEMORANDUM OF ASSOCIATION OF
VKP ENGINEERING IND PRIVATE LIMITED

I The name of the company is VKP ENGINEERING IND PRIVATE LIMITED

II The registered office of the company will be situated in the State of Tamilnadu.

III The objects for which the company is established are:

(A) MAIN OBJECTS OF THE COMPANY TO BE PURSUED BY THE COMPANY ON IT'S INCORPORATION ARE:

1. To carry on the business to construct, alter, act as civil, architectural engineer, contractor for constructing, reconstructing, improving, commercial complexes, shops, offices, industrial estates, flats, houses, hotels, restaurants, bungalows and to manage construction and developmental work of roads, highways and bridges and to acquire license or lease mines for extracting blue metals, gravels, such other items and to trade or manufacture in construction materials in India or elsewhere.

[B] THE OBJECTS INCIDENTAL AND ANCILLARY TO THE ATTAINMENT OF THE MAIN OBJECTS ARE:

1. To enter into contracts, agreements and arrangements with any other company, firm or person in India or abroad on behalf of the company for the objects for which the company is formed.
2. To employ experts to investigate and examine into the conditions, prospects, value, character and circumstance of any business concerns or undertakings or of any assets, properties, and rights in connection with the business of the company.
3. To establish branches subsidiary companies or appoint agencies for or in connection with any of the objects of the company, and to enter into any arrangement with such subsidiary company for taking the profits to and bearing the losses of any business or branch so carried on or for financing any such subsidiary company or guaranteeing its liabilities, or to make any other arrangement which may seem desirable with reference to any business or branch so carried on including power at any time



either temporarily or permanently, to close any such branch or business.

4. To establish and maintain branch offices and local registers and to procure recognition of the company and to carry on business in any part of the world as are possessed by local companies or partnerships or as may be thought desirable.
5. Subject to the provisions of the Act to take part in the technical supervision and control of the business or operations of any company or undertaking having similar objects and to appoint and remunerate any directors, accountants or other experts or agents for such business operations.
6. To purchase, take on lease or in exchange, hire or otherwise acquire any immovable or movable property and any rights or privileges which the company may think necessary or convenient for the purpose of its business, and in particular any land, buildings, machinery, plant and either to retain any property so acquired for the purposes of the Company's business or to turn the same to account as may seem expedient.
7. To construct, improve, maintain, develop, work, manage, carry out or control any buildings, offices, roadways, branches, or siding, bridges, wells, reservoirs, watercourses, wharves, warehouses, electric works, shops, stores chawls and other buildings for housing employees, workers and others, other works and conveniences which may seem calculated directly or indirectly to advance the Company's interests, and contribute to, subsidise or otherwise assist or take part in the construction, improvement, maintenance, development working, management, carrying out or control thereof.
8. To sell, lease, mortgage, grant licenses, easements and other rights over and in any other manner deal with or dispose of the undertaking, property, assets, rights and effects of the Company or any part thereof, for such consideration as the Company may think fit, and in particular for shares, debentures or securities of any other company having objects altogether or in part similar to those of this company.



9. To acquire and undertake whole or any part of the business, property and liabilities of any person, firm or company carrying on or proposing to carry on any business which the company is authorised to carryon or possessed of property suitable for the purposes of this Company.
10. To amalgamate, enter into any partnership or partially amalgamate with or acquire interest in the business of any other company, person or firm carrying on or engaged in, or about to carry on or engage in any business or transaction included in the objects of the Company, or enter into arrangement of sharing profits or for co-operation or for mutual assistance with any such person, firm or company, to acquire the business of the Company or connected therewith any of the Company's property and to give or accept by way of consideration for any of the acts or things aforesaid or property acquired, any shares, debentures, debenture-stock or securities that may be agreed upon and to hold and retain, or sell, mortgage and deal with any shares, debentures, debenture-stock or securities so received.
11. Subject to Section 391 to 394 of the Act to amalgamate with any other company whose objects are, or include objects similar to those of this Company whether by sale or purchase of fully or partly paid up shares or otherwise of the undertaking subject to the liabilities of this or any such company as aforesaid, with or without winding up or by sale or purchase of fully or partly paid-up shares or otherwise of all or a controlling interest in the shares or stock of this or any other company as aforesaid or in any other manner.
12. To enter into arrangement with any government or authorities, supreme, municipal, local or otherwise, or any other person or company that may seem conducive to Company's objects, or any of them, and obtain from any such government, authority, person or company any rights, privileges, charters, contracts, licenses and concessions which the company may think fit, desirable to obtain and to carry out, exercise and comply therewith.

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13. To apply for, promote, and obtain any Act, charter, order, regulation, privilege, concession, license or authorization of any Government, municipality or any authority or any corporation or any public body which may be empowered to grant for enabling the Company to carry any of its objects into effect or for extending any of the powers of the Company or for any other purpose which may seem expedient and to oppose any bills, proceedings or applications which may be seen calculated to prejudice the Company's interests, and to appropriate any of the Company's shares, debentures or other securities and assets to defray to necessary cost, charges and expenses thereof.
14. To apply for, purchase, or otherwise, acquire, and protect and renew in any part of the world and patents, patent rights, brevets, invention, trade-marks, designs, formulae, copyrights, licenses, concessions and the like, conferring any exclusive or non-exclusive or limited rights to their use, or any secret or other information as to any invention which may seem capable of being used for any of the purpose of the company and to use exercise, develop, or grant licenses in respect of or otherwise turn to account the proprietary rights, or information so acquired and to expend money in experimenting upon, testing or improving any such patents, inventions or rights.
15. To sell any patent rights or privileges belonging to the Company or which may be acquired by it or any interest in the same, and to grant licenses for the use and practice of the same or any inventions, patents or privileges in which the Company may be interested, and to do all such acts and things as may be deemed expedient for turning to account any inventions, patents, and privileges in which Company may be interested.
16. To sell or sublet any concession or licenses obtained or contracts entered into and generally to sell the whole or part of the property and business of the Company for cash of for the shares or obligations of any person or persons.

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17. To improve, manage, cultivate, develop, exchange, refine, repair, alter, let on account, grant rights and privileges in respect of or otherwise deal with all or part of the properties and rights of the Company.
18. To adopt such means of making known the business of the company as may seem expedient, and in particular by advertising in the press, circulars, by purchase and exhibition of works of art or interest, by publication of books and periodicals and by granting prizes, rewards and donations.
19. Subject to provisions of the Act to make donations to such persons or institutions and in such cases and either by cash or any other assets as may be thought directly or indirectly conducive to any of the Company's objects or otherwise expedient and in particular to remunerate any person or corporations introducing business to this Company and also to subscribe, contribute or otherwise assist or guarantee money for charitable scientific, religious or benevolent, national, public, cultural, educational or other institutions or objects or for any exhibition or for any public, general or other objects.
20. To establish and maintain or procure the establishment and maintenance of any contributory or non-contributory pension or superannuation funds for the benefit of and give or procure the giving of donations, gratuities, pensions, allowances or emoluments to any persons who are or were at any time in the employment or service of the Company or of any company which is subsidiary of the company, or who are or were at any time Directors or officers of the Company or of any such other company, as aforesaid and the wives, widows, families, dependents and connections of any such persons, and to also establish and subsidise and subscribe to any institutions, associations, clubs or funds calculated to be for the benefits of or for advancing the interests and wellbeing of the Company as aforesaid, and make payments, to or towards the insurance of any such person aforesaid and to do any of the matters aforesaid either alone or in conjunction with any such other company as aforesaid.



21. To refer or agree to refer any claim, demand, dispute or any other question, by or against the Company, or in which the Company is interested or concerned, and whether between the company and the member or members of his or his or their representatives, or between the Company and third parties, to arbitration in India or at any place outside India, and to observe and perform awards made thereon, and to do all acts, deeds, matters and things necessary or expedient to carryout or enforce the awards.
22. To pay out of the funds of the Company all expenses which the company may lawfully pay with respect to the promotion, formation and registration of the Company.
23. To pay all preliminary expenses of any company promoted by the Company or any company in which the Company is or may contemplate being interested, including in such preliminary expenses all or any part of the costs and expenses of owner of any business property acquired by any such company.
24. To pay for any rights or property acquired by the Company and to remunerate any person or Company for services rendered or to be rendered in placing of or assisting to place or guaranteeing the placing of shares in the company's capital or any debentures, debenture stock, or other securities of the company or in or about the formation or promotion of the company, or the acquisition of property by the company or the conduct of its business or otherwise for any of the purpose of the company, whether by cash payment or by the allotment of shares, debentures, or other securities of the company, credited as paid up in full or in part or otherwise.
25. To open any kind of account in any Bank, and to make, draw, accept, endorse, discount, execute and issue bills of exchange, promissory notes, bills of lading, warrants, debentures and other negotiable or transferable instruments or securities.

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26. To vest any movable or immovable property, rights or interest acquired by or belonging to the Company in any person or company on behalf of or for the benefit of the company, and with or without any declared trust in favour of the Company.
27. Subject to the provisions of the Companies Act 1956, to distribute among the members in specie or in kind any property of the Company or any proceeds of sale or disposal of any property of the company in the event of winding up of the Company.
28. To insure the whole or any part of the property and assets of the company either fully or partially to protect and indemnify the Company from liability or loss in any respect either fully or partially, and to also ensure, and to protect and indemnify any part or portion thereof either in mutual principle or otherwise.
29. To carry out in any part of the world all or any of the company's objects as principal, agent, contractor, or otherwise, and by or through agents or otherwise, and either alone or in conjunction with any person, firm, association, corporate body, municipality, province, state, body politic or government or colony or dependency thereof.
30. To subscribe, acquire, take up, and hold shares, stocks, debentures, debenture stock, bonds, obligations, and other securities issued or guaranteed by any company and to invest in debentures, debenture stock, bonds, obligations, and other securities issued or guaranteed by any Government Sovereign Ruler, Commissioner, public body or authority supreme, municipal, local or otherwise, whether in India or in any foreign country.
31. To issue and deposit any securities which the Company has power to issue by way of mortgage to secure any sum less than the nominal amount of such securities and also by way of securities for the performance of any contracts or obligations of the company or of its customers or other persons or corporations having dealings with the Company, or in whose business or undertakings the Company is interested, whether directly or indirectly.



32. To lend and advance money or property with or without security or to give credit to such persons or companies and upon such terms as may seem expedient and in particular to customers and persons having dealings with the Company and to guarantee the performances of any contract or obligation and the payment of money of or by any such persons or companies, generally to provide guarantees and give indemnities and generally to provide credit facilities to customers and others provided that the Company shall not carry only the business of banking as defined by the Banking Regulation Act 1949.
33. To place, to reserve, or to distribute as bonus shares among the members or otherwise to apply as the Company if permitted by law and may deem fit including other money received by way of premium on shares or debentures or debentures issued at a premium by the Company and any money received in respect of dividends accrued on forfeited shares.
34. To undertake and execute any trusts, the undertakings of which may seem to the Company desirable and either gratuitous or otherwise
35. To render or assist in rendering of technical services to any person, firm, company and undertaking in connection with the business of the Company.
36. To exercise all or any of its corporate powers, rights and privileges and to conduct its business in all or any of its branches in the Union of India, and in any or all states, territories, possessions, colonies and dependencies thereof and in any or all foreign countries, and for this purpose to have and maintain and to discontinue, such number of offices and agencies therein as may be convenient.

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[C] OTHER OBJECTS: (NOT INCLUDED IN CLAUSES (A) & (B) ABOVE)

1 To carry on the business of assembling, participating in, establishing, erecting, building, planning, commissioning all types of engineering, mechanical, construction and industrial plants and projects including turnkey projects in India and any other country in the world.

2 To carry on the business of manufacturers, installers, maintainers, repairers of and dealers in electrical and electronic appliances and apparatus of every description, including ratio, magnetic tapes, tape recorders, television and telecommunication requisites, supplies, equipments and stores.

3 To manufacture, make, assemble, build, construct, mould, erect, fabricate, fund and participate in industrial, mechanical, construction and office plants, equipments, machinery, vehicles, buildings and real estate required for manufacturing, processing, transportation and other commercial, manufacturing, trading and service business.

4 To plan, manufacture, design, import, export, purchase, sell, construct, repair install and otherwise deal in or with apparatus, appliances, instruments, machinery, fixtures, devices and contrivances of every kind more particularly those used in the regulation or control of temperature, heat, ventilation, compression, moisture and other conditions of air, steam, electricity, gas, water, oil and in the drying and moistening of materials and in the regulation or control of the said or allied instruments and systems, pertaining in any manner to the act, art, science and/or business of heating, humidification, dehumidification, absorption, purification, and handling of air or other gases.

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5 To carry on the trade or business of manufacturers of and dealers, in calculators and tabulators of every kind, description and activation, accounting, book-keeping, calculating, accounting, reckoning, registering, recording, perforating, tabulating, sorting, adding, subtracting, dividing, multiplying, printing, typewriting, copying, reproducing and distributing machinery systems, apparatus appliance and devices of all kinds, and for all purposes and any products and components thereof or materials or articles used in connection therewith, and any and all other machines. Machinery, appliances, apparatus, devices, materials, substances, articles or things of a character similar or analogous to the foregoing or any of them or connected therewith.

6 To provide and undertake consultancy services in the fields of management, finance, administration, personnel including selection and recruitment, marketing, accountancy, business planning, diversification, new products, technology, engineering, contracting, erection, supervision, commissioning, guidance and other works, services and activities including the marking estimates, preparing evaluations and economic studies and furnishing all other works, services and securities required to enable clients to consider the feasibility and execution of all types of works relating to or connected therewith.

7 To undertake, carry out, promote and sponsor rural development including any program for promoting the social and economic welfare of or the uplift of the public in any rural area and to incur any expenditure on any program of rural development and to assist execution and promotion thereof either directly or through an independent agency or in any other manner.



8 To undertake, carry out, promote sponsor or assist any activity for the promotion and growth of national economy and also any activity likely to promote national welfare or social, economic or moral uplift of the public or any section of the public and in such manner and by such means and without prejudice to the generality of the foregoing, undertake, carry out, promote and sponsor any activity for publication of any books, literature, newspapers or for organizing lectures or seminars likely to advance these objects or for giving merit awards for giving scholarships, loans or any other assistance to deserving students or other scholars or persons to enable them to prosecute their studies or academic pursuits or researches.

IV. The liability of the member(s) is limited and this liability is limited to the amount unpaid, if any, on the shares held by them.

V. The Authorised Share Capital of the Company is Rs. 10,00,000/- (Rupees Ten Lakhs) divided into 100,000/- (One lakh) Equity shares of Rs. 10/- (Rupees Ten) each. The Company has the power, from time to time, to increase or reduce its capital not below the minimum paid-up capital as aforesaid, and to vary, modify or abrogate any such rights, privileges or conditions or restrictions in such manner as may, for the time being be permitted by the Articles of Association of the Company or the legislative provisions for the time being in force that behalf.

We, the several persons, whose names, addresses, descriptions and occupations are hereunder subscribed below, are desirous of being formed into a company in pursuance of this Memorandum of Association and

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We respectively agree to take the number of shares in the capital of the Company set opposite to out respective names: -

Sl. No.	Name, address, description and occupation of each subscriber	No. of Equity Shares taken by each subscriber	Signature
1	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPA GOUNDER S/O KOLANDAVELAPPA GOUNDER VELICHANAN KADU V.K VALASU, INGUR PO PERUNDURAI TK 638058 Age: 56 OCCUPATION: BUSINESS	10,000 TEN THOUSAND ONLY	V K Palanisamy
2	PALANISAMY JAGADEESAN S/O PALANISAMY 32 VETTUKATTU VALASU INGUR, ENGUR ERODE - 638058, AGE: 34 OCCUPATION: BUSINESS	10,000 TEN THOUSAND ONLY	P. Jagadeesan
3	GNANA SUNDARI D/O PALANISAMY 11-32 VETKATTUVALASU ENGUR (P) PERUNDURAI ERODE (D) 638058 Age: 31 Occupation: Business	10,000 TEN THOUSAND ONLY	J. GnanaSundari
4	NANJAPPAN BHUVANESWARI D/O NANJAPPAN 230A MURUNGATHOZUVU MURUNGATHOZUVU (P) WARD-1 ERODE 638051 Age: 30 Occupation: BUSINESS	10,000 TEN THOUSAND ONLY	N. Bhuvaneswari
	TOTAL	40,000 FORTY THOUSAND	

All have signed before me at Erode

Date: 09.10.2013
Place: Erode
Witness to above signatures:

S. Parthasarathy
S. PARTHASARATHY B.Com FCA
Chartered Accountant
M.No. 21061
S/o V. Shanmugam
L375/54 First Floor
Periyar Nagar Surampatti
Erode - 638009



View Signatory Details

Company / LLP Name : VKP ENGINEERING IND PRIVATE LIMITED
CIN/LLPIN : U45400TZ2013PTC019956

List of Signatories

DIN/DPIN/PAN	Full Name	Present residential address	Designation	Date of Appointment	Whether DSC Registered	Expiry Date of DSC
06692274	JAGADEESAN PALNISAMY	32 VETTUKATTU VALASU, INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	25/10/2013	NO	-
06692275	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER	VELICHANAN KADU, V.K.VALASU, INGUR PO, PERUNDURAI TK, 638058, Tamil Nadu, INDIA	Director	25/10/2013	YES	16/09/2016
06781531	MAHENDRAN	32 VETTUKATTUVALASU INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	15/01/2014	NO	-



COMPANY LIMITED BY SHARES

(THE COMPANIES ACT, 2013)

ARTICLES OF ASSOCIATION OF
VKP ENGINEERING IND PRIVATE LIMITED

TABLE F SHALL APPLY

1. All the regulations of Table 'F' in Schedule I of the Companies Act, 2013 shall be deemed to be incorporated with these Articles and to apply to the Company in so far as they are not inconsistent with provisions of the following Articles.

CONSTITUTION

2. The Company is a Private Company within the meaning of Section 2 (68) of the Act, having a minimum paid-up capital of one lakh rupees or such higher paid-up capital as may be prescribed and which by its articles

(i) restricts the right to transfer its shares;

(ii) limits the number of its members to two hundred:

Provided that where two or more persons hold one or more shares in a company jointly, they shall, for the purposes of this clause, be treated as a single member:

Provided further that—

(A) persons who are in the employment of the company; and

(B) persons who, having been formerly in the employment of the company, were members of the company while in that employment and have continued to be members after the employment ceased,

shall not be included in the number of members; and

(iii) prohibits any invitation to the public to subscribe for any securities of the company;



BUSINESS

3. The Business of the company may comprise of all or any part of the business and objects mentioned or included in the Memorandum of Association.

SHARE CAPITAL

4. The Authorised Share Capital of the Company is Rs. 10,00,000/- (Rupees Ten Lakhs only) divided in to 100,000 (ONE LAKH) Equity Shares of Rs. 10/- (Rupees Ten) each. The Company shall have the power to increase or reduce the capital for the time being of the Company and to divide the shares in the capital into several classes with rights, privileges or conditions as may be determined.
5. The Company may issue preference shares which shall, or at the option of the Company, be liable to be redeemed, subject to the provisions of the Companies Act
6. Subject to the provisions of the Companies Act the shares shall be under the control of the Directors, who may allot or dispose of them on such terms and conditions and at such time as the Directors may think fit.
7. The Board may allot fully paid-up shares to minors represented by their guardians.

CALLS ON SHARES

8. In clause 13 of the Table 'F' the words "provided that no call shall exceed one fourth of the nominal value of the shares or be payable at less than one month from the date for the payment of the last proceeding call" shall be omitted.
9. If any Member fails to pay any call due from him on the day appointed for payment thereof, or any such extensions thereof as aforesaid, he shall be liable to pay interest on the same from the day appointed for the payment thereof to the time of actual payment at such rate as shall from time to time be fixed by the Board not exceeding 12 per cent per annum but nothing in this Articles shall render it obligatory for the Board to demand or recover any interest from any such Member.



SHARE CERTIFICATE

10. Every persons whose name is entered as a member in the register of members shall be entitled to receive within two months after incorporation, in case of subscribers to the memorandum or after allotment or within one month after the application for the registration of transfer or transmission or within such other period as the conditions of issue shall be provided,—
    (a) One certificate for all his shares without payment of any charges; or
    (b) Several certificates, each for one or more of his shares, upon payment of Twenty rupees for each certificate after the first.
11. Every certificate shall be under the seal and shall specify the shares to which it relates and the amount paid-up thereon.
12. In respect of any share or shares held jointly by several persons, the company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all such holders

TRANSFER OF SHARES

13. No share shall be transferred to any other person so long as any member is willing or if no member is willing any other person selected by the Directors as one whom it is desirable in the interest of the Company to admit to membership is willing to purchase the same at the fair value.
14. Except where the transfer is made pursuant to Article 19, thereof, the person proposing to transfer any shares shall give notice in writing to the Company that he desires to transfer the same. Such notice shall constitute the Directors as agents of the transferor for the sale of the shares to any member or to any person selected as aforesaid at the fair value to be agreed upon between the transferor and the purchaser and in default of such agreement at a value to be fixed by the Auditors of the Company. The notice may include several shares and in such case it shall operate as if it were a separate notice in respect of each share. The notice shall not be revocable except with the sanction of the Directors.

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15. Every share specified in the notice given pursuant to the preceding Article hereof shall be offered to the members in proportion to the shares of the same class in the capital of the Company held by them, or if there are no other holders of shares of the same class then to the members generally in the proportion to the shares of the Company then held by them. If no member is ready and willing to take such shares the same may be offered to any person selected by the Directors as one whom it is desirable in the interest of the Company of admit to membership.
16. If the Directors shall within the period of 28 days after being served such notice, finds a member or person selected as aforesaid, willing to purchase the shares and gives notice thereof the transferor shall be bound upon payment of the fair value fixed as aforesaid to transfer the share to the purchaser.
17. In case any difference arises between the transferor and the Purchaser as to the fair value of a share the Auditors of the Company shall certify the fair value and the same shall be binding on the transferor and the Purchaser.
18. In any case the transferor after having become bound as aforesaid makes default in transferring the share, the Directors may receive the purchase money and shall thereupon cause the name of the purchaser to be entered in the register as the holder of the share and shall hold the purchase money in trust for the transferor. The receipt of the Directors for the purchase money shall be a good discharge to the purchaser and after his name has been entered in the register in purported exercise of the aforesaid power the validity of the transfer shall not be questioned by any person.
19. If the Directors shall not, within the time prescribed as aforesaid after being served with notice, find a member or person selected as aforesaid willing to purchase the shares or any of them and give notice in the aforesaid manner, the transferor shall at any time within thirty days thereafter be at liberty, subject to Articles herein to sell and transfer the shares to any person at any price.



20. The instrument of transfer of any share shall be in writing in the form prescribed if any, by law or otherwise and shall be duly stamped and executed by or on behalf of the transferor and the transferee and shall specify the full name, address and occupation, if any, of transferee. Every instrument of transfer shall be attested. The transferor shall be deemed to remain the holder of the share until the name of the transferee is entered in the register of members in respect thereof.
21. Restrictions as to transfer shall not apply to transfer of shares by a member to any major child, son-in-law, father, mother, brother, sister, wife or husband of such members, and any share of a deceased member to whom such deceased member may have specifically bequeathed the same the shares standing in the name of such deceased member or his executors or administrators may be transferred to the trustee of his will and shares standing in the name of the trustee of the will of any deceased member may be transferred upon any change of trustee to the trustees for the time being of such will. A member may by way of gift or otherwise, transfer any shares to any child, father, brother, sister, husband and wife of such members.
22. No transfer shall be made to an insolvent or person of unsound mind.
23. A fee not exceeding Rs. 2/- may be charged for the registration thereof.
24. The executor or administrator of a deceased member (not being one of several joint-holders) shall be the only person recognised by the company as having any title to the share registered in the name of such member and, in case of the death of any one or more of the joint holders of any registered share, the survivor shall be the only person recognised by the Company as having any title to or interest in such share, but nothing herein contained shall be taken to release the estate of a deceased joint-holder from any liability on the share held by him jointly with any other person. Before recognizing any executor or administrator the Board may require him to obtain a Grant of Probate or Letter of Administration or other legal representation, as the case may be; from a competent Court in India, provided nevertheless that in any case where the Board in its absolute discretion thinks fit it shall be lawful for the Board to dispense with the production of Probate or Letters of Administration or such other legal representation upon such terms as to indemnity or otherwise at the Board, in its absolute discretion may consider.

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25. Any Committee or guardian of a lunatic member of any person becoming entitled to or to transfer a share in consequence of the death or bankruptcy or insolvency of any Member upon producing such evidence that he sustains the character in respect of which he proposes to act under this Article or of his title as the Board thinks sufficient, may, with the consent of the Board (which the Board shall not be bound to give), be registered as a member in respect of such share, or may subject to the regulations as to transfer herein contained transfer such share. This article is hereinafter referred to us the "Transmission Article".

    (a) the person so becoming entitled under the Transmission Article shall elect be to registered as holder of the share himself, he shall deliver or send to the Company a notice in writing signed by him stating that he so elect.

    (b) If the person aforesaid shall elect to transfer the share, he shall testify his election by executing an instrument of transfer of the share.

    (c) All the limitations, restrictions and provisions of these Articles relating to the right to transfer and registration of instruments of transfer of a share shall be applicable to any such notice or transfer as aforesaid as if the death, lunacy, bankruptcy or insolvency of the Member had not occurred and the notice of transfer were a transfer signed by that Member.

BUY BACK OF SHARES

26. Subject to and in full compliance of the requirements of Sections 68, 69 and 70 of the Companies Act, 2013 or corresponding provisions of any re-enactment thereof and any Rules and Regulations as may be prescribed by the Central Government, or any other appropriate authority in this regard, either the Company in a General Meeting may, at any time and from time to time, by a Special resolution authorise or the Board of Directors may itself approve and authorise buy-back of any part of the share capital of the company fully paid up on that date.

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GENERAL MEETINGS

27. All general meetings other than annual general meeting shall be called extraordinary general meeting.

28. (i) The Board may, whenever it thinks fit, call an extraordinary general meeting.

(ii) If at any time directors capable of acting who are sufficient in number to form a quorum are not within India, any director or any two members of the company may call an extraordinary general meeting in the same manner, as nearly as possible, as that in which such a meeting may be called by the Board.

PROCEEDINGS AT GENERAL MEETINGS

29. (i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.

(iii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in section 103.

30. The chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.

31. If there is no such Chairperson, or if he is not present within fifteen minutes after the time appointed for holding the meeting, or is unwilling to act as chairperson of the meeting, the directors present shall elect one of their members to be Chairperson of the meeting.

32. If at any meeting no director is willing to act as Chairperson or if no director is present within fifteen minutes after the time appointed for holding the meeting, the members present shall choose one of their members to be Chairperson of the meeting.

33. In case of a One Person Company–

(iv) the resolution required to be passed at the general meetings of the company shall be deemed to have been passed if the resolution is agreed upon by the sole member and communicated to the company and entered in the minutes book maintained under section 118;

(v) such minutes book shall be signed and dated by the member;

(vi) the resolution shall become effective from the date of signing such minutes by the sole member.



ADJOURNMENT OF MEETING

34. (i) The Chairperson may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place.

(ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.

(i) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting.

(ii) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

VOTING RIGHTS

35. Subject to any rights or restrictions for the time being attached to any class or classes of shares,—

(a) on a show of hands, every member present in person shall have one vote;and

(b) on a poll, the voting rights of members shall be in proportion to his share in the paid-up equity share capital of the company.

36. A member may exercise his vote at a meeting by electronic means in

37. Accordance with section 108 and shall vote only once.

38. (i) In the case of joint holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders.

(iii) For this purpose, seniority shall be determined by the order in which the names stand in the register of members.

39. A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy, may vote, whether on a show of hands or on a poll, by his committee or other legal guardian, and any such committee or guardian may, on a poll, vote by proxy.

40. Any business other than that upon which a poll has been demanded may be preceded with, pending the taking of the poll.

41. No member shall be entitled to vote at any general meeting unless all calls or other sums presently payable by him in respect of shares in the company have been paid.



42. (i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes.

(ii) Any such objection made in due time shall be referred to the Chairperson of the meeting, whose decision shall be final and conclusive.

PROXY

43. The instrument appointing a proxy and the power-of-attorney or other authority, if any, under which it is signed or a notarized copy of that power or authority, shall be deposited at the registered office of the company not less than 48 hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, or, in the case of a poll, not less than 24 hours before the time appointed forthe taking of the poll; and in default the instrument of proxy shall not be treated as valid.

44. An instrument appointing a proxy shall be in the form as prescribed in the rules made under section 105.

45. A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given:

Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.

DIRECTORS

46. Subject to the provisions of the Companies Act, 2013, the number of Directors of the Company shall not be less than two, and not more than twelve.

47. The first directors of the Company are:

1) VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER
2) PALNISAMY JAGADEESAN

The two Directors mentioned hereinabove in Article 47 shall be permanent Directors and shall remain as Directors for life or until they voluntarily resign their office.

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48. The Board shall have power at any time from time to time to appoint Additional Directors other than a person who fails to get appointed as a director in a general meeting, as an additional director, subject to the maximum mentioned above, who shall hold office until the next annual general Meeting, but however such Additional Directors shall be eligible for re-appointment by the Company as a Director at that Meeting.
49. The Board may appoint as Alternate Director recommended for such appointment by the Director (hereinafter called the 'Original Director') to act for him during his absence for a period of not less than three months from the State in which the Meetings of the Board are ordinarily held. An Alternate Director appointed under this Article shall not hold office as such, for a longer period than that permissible to the Original Director in whose place he has been appointed and shall vacate office if and when the Original Director returns to the said State. If the term of office of the Original Director is determined before he so returns to the said State any provisions in the Act or in these Articles for the automatic reappointment or retiring Director in default of another appointment shall apply to the Original Director and not to the Alternative Director.
50. A Director shall not be required to hold any qualification shares and shall not be liable to retire by rotation.
51. Unless otherwise determined by the Company in General Meeting, each Director shall be entitled to receive out of funds of the Company for his services in attending Meeting of the Board or a committee of the Board of Directors of the Company may from time to time determine not exceeding, however, a sum of Rs. 2,000/- for each such Meeting attended. The Directors shall be entitled to be paid reasonable traveling, hotel and other expenses incurred in connection with attendance at Board and committee Meetings and otherwise in connection with the business of the Company for execution of their duties as Directors of the Company.
52. The remuneration of the Directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day to day.
53. Subject to the provisions of the Act, a Director, who is neither in the whole time employment nor a Managing Director may be paid remuneration by way of commission if the Company so resolves.
54. Subject to Section 174 of the Act, the quorum for a Meeting of the Board shall be one-third of its total strength (excluding Director, if any whose

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place may be vacant at the time and any fraction contained in that one third being rounded off as one), or two Directors, which ever is higher.

55. A resolution in writing signed by all the Directors shall be as effective as a resolution passed at a Meeting of the Directors duly convened and held and may consist of several documents in the like from each duly signed by one or more of the Directors.

56. The Directors may, from time to time, at their discretion raise or borrow for the purpose of the Company's business such sums of money as they think fit. The Directors may secure the repayment of or raise any such sum or sums as aforesaid by mortgage or charge upon the whole or any part of the property and assets of the Company, present and future including the uncalled capital or by the issue, at such price as they may think fit, of bonds or debentures or debenture stock, either charged upon the whole or any part of the property and assets of the Company or not so charged or in such other way as the Directors may think expedient.

57. The Board may exercise, all such powers of the Company and do such acts and things as are not by the Act, or any other Act or by the Memorandum or by the Articles of the Company, required to be exercised by the Company in General Meeting, subject nevertheless to these Articles, the provisions of the Act, or any other Act and to such regulations being not inconsistent with the aforesaid regulations or provisions as may be prescribed by the Company in General Meeting, but no regulation made by the Company in the General Meeting, shall invalidate any prior act of the Board which would have been valid if that regulation had not been made.

58. The Directors may, from time to time, accept deposits from members (either in advance of calls or otherwise), directors and from their relatives and generally raise or borrow any sums of money for the purpose of the Company from the Members or other persons, or the Director may themselves advance money to the company on such interest as may be approved by the Board of Directors.

59. The Directors, may, from time to time, secure the payment of such moneys in such manner and upon such terms and conditions in all respects they deem fit and in particular by the issue of debentures, or bonds of Company or any mortgage, charge hypothecation, pledge, lien or other security of all or any part of portion of the property of the Company and the uncalled capital for the time being.

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60. The Director may grant retiring pensions or annuities or other allowance, including allowances on death to any person or to the widow or dependents of any person in respect of services rendered by him to the Company as Managing Director, Manager, or as an Officer or employee of the Company or of any subsidiary Company or if its Holding Company (if any) notwithstanding that he may have been a Director of the Company and may make payments towards insurance or trusts for such purposes in respect of such person and may include rights in respect of such pensions, annuities and allowances in terms of engagement of any such person.

61. (a) Subject to the provisions of the Companies Act, 2013, and notwithstanding anything to the contrary contained in these Articles, so long as any moneys remain owing by the Company to any Financing Company or Body or Financial Corporation or Credit Corporation or Bank or any Insurance Corporation (each such Financing Company or Body or Financial Corporation, Credit Corporation or Bank or any Insurance Corporation is hereinafter referred to as "Financial Institution") out of any loans granted by the Financial Institution to the Company or so long as the Financial Institution continues to hold debentures in the Company by direct subscription or private placement, or so long as the Financial Institution hold shares in the Company as a result of underwriting or direct subscription or so long as any liability of the Company arising out of any guarantee furnished by the Financial Institution on behalf of the Company remains outstanding the Financial Institution shall have a right to appoint from time to time, its nominee/s as a Director or Directors (which Director or Directors is/are hereinafter referred to as Nominee Director/s) on the Board of the Company and to remove from such office the Nominee Director/s so appointed, and at the time of such removal and also in the case of death or resignation of the Nominee Director/s so appointed at any time appoint any other person/persons in his/their place/s and also fill any vacancy which may occur as a result of such director/s ceasing to hold office for any reasons whatsoever; such appointment or removal shall be made in writing on behalf of the Financial Institution appointing such Nominee Director/s and shall be delivered to the Company at its registered office.



(b) The Nominee Director/s shall not be required to hold any qualification shares in the Company to qualify him/them for the office of a Director/s nor shall he/they be liable to retirement by rotation. The Board of Directors of the Company shall have no power to remove from office the Nominee Director/s shall be entitled to the same rights and privileges and be subject to the same obligations as any other Director of the Company.

(c) The Nominee Director/s so appointed shall hold the office only so long as any moneys remain owing by the Company to the Financial Institution or so long as the financial Institution holds Debentures in the Company as result of direct subscriptions or private placement or so long as the Financial Institution holds shares in the Company as a result of underwriting or direct subscription or the liability of the Company arising out of any guarantee, is outstanding and the Nominee Director/s so appointed in exercise of the said power shall ipso facto vacate such office, immediately the moneys owing by the Company to the Financial Institution is paid off or on the Financial Institution ceasing to hold debentures/shares in the Company or on the satisfaction of the liability of the Company arising out of any Guarantee furnished by the Financial Institution.

(d) The nominee Director/s appointed under this Article shall be entitled to receive all notices of and attend al General Meetings, Board Meetings and the Meeting of the Committee of which the Nominee Director/s is/are member/s as also the minutes of such meeting. The Financial Institution shall also be entitled to receive all such notices and minutes.

(e) The Company shall pay to the Nominee Director/s sitting fees and expenses to which the other Directors of the Company are entitled. PROVIDED that if the Nominee Director is an officer of the Industrial Development Bank of India (IDBI) the sitting fees in relation to such Nominee Director shall accrue to IDBI and the same shall accordingly be paid by the Company directly to the IDBI. Any expenses that may be incurred by the Financial or such Nominee Director/s in connection with his/their appointment of Directorship shall be paid by the Company. The IDBI or the Financial Institution shall be entitled to depute observer to attend the meetings of the Board or any other Committee constituted by the Board.

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(f) The nominee Director/s shall notwithstanding anything to the contrary contained in these Articles, be at liberty to disclose any information obtained by him/them to the Financial Institution appointing him/them as such Director/s.

MANAGING DIRECTORS – DEPUTY MANAGING DIRECTOR

62. Subject to the provisions of the Act and of these Articles, the Board shall have power to appoint from time to time any one or more of its Directors as Managing Director or Managing Directors of the company and any other of its Directors as the Deputy managing Director or Deputy Managing Directors of the Company for a fixed term not exceeding five years at a time and upon such terms and conditions as the Board thinks fit, and subject to the provisions of Articles 56, the Board may by resolution vest in such Managing Director/s or Deputy managing Director/s such of the powers hereby vested in the Board generally as it thinks fit, as such powers may be made exercisable for such conditions and subject to such restrictions as it may determine. The remuneration of the Managing Director/s and the Deputy Managing Director/s may be by way of monthly payment, fee for each meeting or participating in profits, or by all or any of these modes or any other mode not expressly prohibited by the Act.

63. The Managing Director or the Deputy Director shall not exercise the powers to:

(a) make calls on shareholders in respect of money unpaid on their share in the Company.

(aa) the power to authorize the buyback referred to in the first proviso to clause (b) of sub sec (2) of section 77A,

(b) Issue debentures;

And except to the extent mentioned in the resolution passed at the Board meeting under Section 292 of the Act, the Managing Director/s or the Deputy Managing Director/s shall also not exercise the powers to: -

(c) borrow moneys, otherwise than on debenture;

(d) invest the funds of the Company; and

(e) make loan.

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64. The company shall not appoint or employ, or continue the appointment or employment of a person as its Managing, Deputy Managing or whole time Director who: -

(a) is an undischarged insolvent, or has at any time been adjusted as insolvent;

(b) suspends, or has at any time suspended, payment to his creditors, or members, or has at any time made, a composition with them; or

(c) is or has at any time been convicted by a Court of an offense involving moral turpitude.

65. The Managing Director and the Deputy Managing Director shall not while he continues to hold that office be subject to retirement by rotation and if he ceases to hold the office of Director he shall ipso facto and immediately cease to be the Managing director or the Deputy Managing Director, as the case may be.

66. Subject to the provisions of the Act and of these Articles, the Board may from time to time appoint any of its members, as Executive Director or Directors of the Company for a fixed term not exceeding five years at a time and upon such terms and conditions as the Board thinks fit, an Executive director shall not be required to hold any qualification shares, and subject to provisions of Companies Act, the Board may from time to time determine that one or more of such Executive Director or Directors appointed or proposed to be appointed by the Board shall not be liable to retire by rotation so long as he continues to hold that office.

MANAGER OR SECRETARY

67. Subject to the provisions of the Act –

(1) A manager or secretary may be appointed by the Board for such term, at such remuneration and upon such conditions as it may think fit, and any manager or secretary so appointed may be removed by the Board.

(2) A director may be appointed a manager or secretary.

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68. A provision of the Act, or these regulations requiring or authorizing a thing to be done by or to a director and the manager or secretary, shall not be satisfied by its being done by or to the same person acting both as director and as, or in place of the manager or secretary.

ACCOUNTS

69. The Company shall comply with the provisions of the Companies Act, 2013 regarding maintenance of books of accounts and other statutory records.

AUDIT

70. Subject to the provisions of Section 139 of the Act –

(i) The Company shall at each Annual General Meeting appoint an Auditor or Auditors to hold office from the conclusion of the meeting until the conclusion of the next Annual General Meeting.

(ii) Rights and Duties of the Auditors shall be regulated in accordance with Sections 139 to 147 of the Act.

(iii) Once at least in every year accounts of the Company shall be audited and correctness of the Final Accounts be ascertained by one or more Auditor or Auditors.

(iv) Every Account of the Company when audited and approved by General Meeting shall be conclusive.

THE SEAL

71. The Company shall have a common seal and the Directors shall provide for the safe custody thereof. The Seal shall not be affixed to any instrument except by the authority of a resolution of the Board of Director or a Committee of the Board except in the presence of at least two Directors or of one Director and the Secretary and such Directors or Secretary shall sign each instrument to which the Seal be affixed in his presence. Such signatures shall be conclusive evidence of the fact that the Seal has been properly affixed.

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INDEMNITY

72. Every officer of the company shall be indemnified out of the assets of the company against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favour or in which he is acquitted or in which relief is granted to him by the court or the Tribunal.

SECRECY

73. Except to the extent allowed by the Companies Act, no member shall be entitled to visit or inspect any works of the company without the permission of the directors or to require discovery of or any information respecting any detail of the Company's trading or any matter which is or may be in the nature of a trade secret, mystery or trade, secret process or any other matter which may relate to the conduct of the business of the Company and which in the opinion of the directors, it would be inexpedient in the interest of the Company to disclose.

ALTERATION IN ARTICLES OF ASSOCIATION

74. The Company may from time to time alter, add to amend or delete any of the existing clauses of the Articles of Association of the Company or may add a new clause thereto or adopt a new set of articles in accordance with the provision of the Companies Act, 2013.

Sl. No.	Name, address, description and occupation of each subscriber	Signature
1	VETTUKATTUVALASU PALANISAMY KULANJAVELAPPA GOUNDER S/O KOLANJAVELAPPA GOUNDER VELICHANAN KADU V.K. VALASU, INGUR PO PERUNDURAI TK 638055 Age: 56 OCCUPATION: BUSINESS	V.K. Palanisamy
2	PALANISAMY JAGADEESAN S/O PALANISAMY 32 VETTUKATTU VALASU INGUR INGUR ERODE: 638058 - AGE: 24 OCCUPATION: BUSINESS	P. Jagadeesan
3	GNANA SUNDARI. D/O PALANISAMY 11-32 VETKATTUVALASU ENGUR (P) PERUNDURAI ERODE [D] 638058 AGE: 31 OCCUPATION: BUSINESS	J. GnanaSundari
4	NANJAPPAN BHUVANESWARI D/O NANJAPPAN 230A MURUNGATHOZUVU MURUNGATHOZUVU (P) WARD-1 ERODE 638051 AGE: 30 Occupation: Business	N. Bhuvaneswari

All have signed before me at Erode

Date: Erode
Place: 09.10.2013
Witness to above signatures:

S. Saravanan
S. SARAVANAN B.Com FCA
Chartered Accountant
M.No 210614
S/o V. Shanmugam
L 375/54 First Floor
Periyar Nagar, Surampatti
Erode - 638009



View Signatory Details

Company / LLP Name : VKP ENGINEERING IND PRIVATE LIMITED
CIN/LLPIN : U45400TZ2013PTC019956

List of Signatories

DIN/DPIN/PAN	Full Name	Present residential address	Designation	Date of Appointment	Whether DSC Registered	Expiry Date of DSC
06692274	JAGADEESAN PALNISAMY	32 VETTUKATTU VALASU, INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	25/10/2013	NO	-
06692275	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER	VELICHANAN KADU, V.K.VALASU, INGUR PO, PERUNDURAI TK, 638058, Tamil Nadu, INDIA	Director	25/10/2013	YES	16/09/2016
06781531	MAHENDRAN	32 VETTUKATTUVALASU INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	15/01/2014	NO	-

ANNEXURE

VKP ENGINEERING IND PRIVATE LIMITED
CIN U45400TZ2013PTC019956
Registered Office: 151/260B, BHAVANI ROAD SOUTH SIDE, PERUNDURAI - 638052

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED IN THE MEETING OF BOARD OF DIRECTORS OF THE COMPANY HELD ON 08th JANUARY 2024 AT 10.00 AM AT THE REGISTERED OFFICE OF THE COMPANY AT 151/260B, BHAVANI ROAD SOUTH SIDE, PERUNDURAI – 638052.

Sub: To authorize **Mr.P.JAGADEESAN, Director** to sign, execute and complete the formalities pertaining to execute the Quarry Lease for rough stone.

RESOLVED THAT Mr.P.JAGADEESAN, Director of the Company who is residing at Door No.11/32, Vettukattuvalasu, Ingur (P.o), Perundurai, Erode – 638 052 (Aadhar No 7091 1371 8745) be and is hereby authorized to sign the mining plan and relevant documents and to submit the same to the DD (Mines), other Govt. Correspondences Tirupur on behalf of the Company for getting approval"

"RESOLVED FURTHER THAT Mr.P.JAGADEESAN, Director of the Company is hereby authorized to sign the application of Environment Clearance and consent of the Tamil Nadu Pollution Control Board, attend the meeting and sign the relevant on behalf of the Company for obtaining the consent of the Tamil Nadu Pollution Control Board"

Place: Perundurai
Date: 08.01.2024

By Order of the Board

On behalf of the Board

V.K.PALANISAMY,
Director

P.JAGADEESAN,
Director

P.MAHENDRAN,
Director

J.GNANASUNDARI,
Director

M.BHUVANESWARI,
Director

Scanned with CamScanner

ANNEXURE X

आधार

இந்திய அரசாங்கம்
Unique Identification Authority of India
Government of India

பதிவேட்டு எண்/ Enrolment No.: 1111/71211/53228

To
ஜெகதீசன் பழனிச்சாமி
Jagadeesan Palanisamy
S/O: Palanisamy
11/32
VETTUKATTUVALASU
Ingur
Ingur
Erode Tamil Nadu - 638052
9842730265

Download Date: 31/07/2018

Generation Date: 02/10/2013

Signature valid

QR Code with Photograph

உங்கள் ஆதார் எண் / Your Aadhaar No. :

7091 1371 8745

VID : 9173 6631 7105 6045

எனது ஆதார், எனது அடையாளம்

இந்திய அரசாங்கம்
Government of India



ஜெகதீசன் பழனிச்சாமி
Jagadeesan Palanisamy
பிறந்த நாள்/DOB: 26/04/1979
ஆண்/ MALE

7091 1371 8745

VID : 9173 6631 7105 6045

எனது ஆதார், எனது அடையாளம்

Government of India

AADHAAR

தகவல்

- ஆதார் அடையாளத்திற்கான சான்று, குடியுரிமைக்கு அல்ல.
- அடையாள சான்றை ஆன்லைன் ஆதாரம் கேட்டுப் பெறவும்.
- இது எலக்ட்ரானிக் செயல்முறை மூலம் தயாரிக்கப்பட்ட கடிதமாகும்.

INFORMATION

- Aadhaar is a proof of identity, not of citizenship.
- To establish identity, authenticate online.
- This is electronically generated letter.

- ஆதார் நாடு முழுவதிலும் செல்லுபடியாகும்.
- வருங்காலத்தில் அரசு மற்றும் அரசு சாரா சேவைகளை பயன்படுத்திக் கொள்ள ஆதார் உதவிகரமாக இருக்கும்.
- Aadhaar is valid throughout the country.
- Aadhaar will be helpful in availing Government and Non-Government services in future.

ASSISTANT DIRECTOR

Unique Identification Authority of India

முகவரி:
S/O: பழனிச்சாமி, 11/32, வெட்டுகாட்டுவலசு, ஈங்கூர், ஈரோடு, தமிழ் நாடு - 638052

Address:
S/O: Palanisamy, 11/32, VETTUKATTUVALASU, Ingur, Erode, Tamil Nadu - 638052

QR Code with Photograph

7091 1371 8745

VID : 9173 6631 7105 6045

आयकर विभाग
INCOME TAX DEPARTMENT

भारत सरकार
GOVT. OF INDIA

VKP ENGINEERING IND PRIVATE LIMITED

5/18/2019

Permanent Account Number

AAECV6374R

Signature

In case this card is lost / found, kindly inform / return to :
Income Tax PAN Services Unit, UTIITSL
Plot No. 3, Sector 11, CBD Belapur,
Navi Mumbai - 400 614.

इस कार्ड के खोने/पाने पर कृपया सूचित करें/लौटाएं :
आयकर पैन सेवा यूनिट, UTIITSL
प्लाट नं. 3, सेक्टर 11, सीबीडी बेलापुर,
नवी मुंबई-400 614.

ASSISTANT DIRECTOR * TIRUPUR *

ANNEXURE XI

அண்ணாமலைப் பல்கலைக்கழகம்
ANNAMALAI UNIVERSITY



அறிவியற்புலம்
FACULTY OF SCIENCE

No. : 090895

மே, 2011 இல் பயன்பாட்டு நிலத்தியல் பிரிவில் நடத்திய தேர்வுகளில் வெங்கடகிரி பா கூடுதல் மதிப்புப்புள்ளிகள் 10.00 க்கு சராசரியாக 6.03 பெற்று இரண்டாம் வகுப்பில் தேர்ச்சியடைந்து முறையாக அமைக்கப்பெற்ற தேர்வுக்குழுவினர் சான்றளித்தபடி, அறிவியல் நிறைஞர் பட்டம் பெறுவதற்கு உரியவர் ஆகின்றார் என அண்ணாமலைப் பல்கலைக்கழக ஆளவை இதன்வழி அறிவிக்கின்றது.

The Senate of the ANNAMALAI UNIVERSITY hereby makes known that VENGATAGIRI B has been admitted to the Degree of MASTER OF SCIENCE in APPLIED GEOLOGY, he/she having secured OGPA of 6.03 out of 10.00 been certified by duly appointed Examiners at the Examination held in MAY,2011 to be qualified to receive the same, and that he/she was placed in SECOND CLASS.

பல்கலைக்கழக முத்திரை பெறுகின்றது
Given under the seal of the University

அண்ணாமலைநகர்
Annamalainagar

நாள்:
Dated: 09/11/2011

துணை தேர்வாணையர் (கல்விசார்ந்த)
Dy. Controller of Examinations (Academic)

Dr.M.Rathinasabapathi
பதிவாளர்
Registrar

Dr.M.Ramanathan
துணை வேந்தர்
Vice-Chancellor

ANNEXURE XI-A

GEOLOGY AND MINING * TIRUPUR * ASSISTANT DIRECTOR * GEOLOGY AND MINING

GOVERNMENT OF INDIA
MINISTRY OF LABOUR AND EMPLOYMENT
DIRECTORATE GENERAL OF MINES SAFETY

Certificate of Practical Experience granted by the Manager to a Candidate for a Manager's/ Surveyor's/ Mining foreman/ Mining Mate/ Blasters certificate of competency examination under Metalliferous Mines Regulation, 1961.

I, M.S.Pavel being the Manager of K.Pitchampatti Multicolour Granite Mine belong to M/s. Anupkumar Lohia do hereby certify that **Thiru. B.Vengadagiri** son of **Thiu. Balasubramanian** (whose signature is appended) worked in the above mine from 10.07.2012 to 15.08.2018 and is still working. During his term of work aforesaid, he has obtained practical experience as detailed overleaf. The duties connected with his work have involved continuous attendance at the mine and have been efficiently performed by him.

I believe him to be of good character and a fit and proper candidate to be examined for certificate of competency.

M.S. 16.8.18

(Signature with date and official seal)

(Mines Manager's class)

MANAGER (MINES)
MULTICOLOUR GRANITE MINE
K. PITCHAMPATTI,
KARUR - TALUK & DIST.

(Signature of Candidate)

State the name of the mineral works: Multi Colour Granite



S. No.	Particulars of Practical experience (a)	Place of Experience (b) Opencast	Period of Practical experience (c)		Total Experience (e)		
			From	To	Yrs.	Months	Days
1.	As a trainee in drilling operation	Open cast	10.07.2012	24.10.2013	01	03	16
2.	As a trainee in deep hole blasting operation	Open cast	25.10.2013	31.12.2014	01	02	07
3	Production incharge quality control and Supervisor of Earth moving Mining Machinery	Open cast	01.01.2015	15.08.2018	3	7	14
GRAND TOTAL					**06**	**1**	**5**
In words : Six years one month ten days					**Six**	**One**	**five**

In below ground working	In open cast working	In all
Nil	Average monthly output 250m^3	250m^3
Nil	Average daily employment 25Nos	25Nos

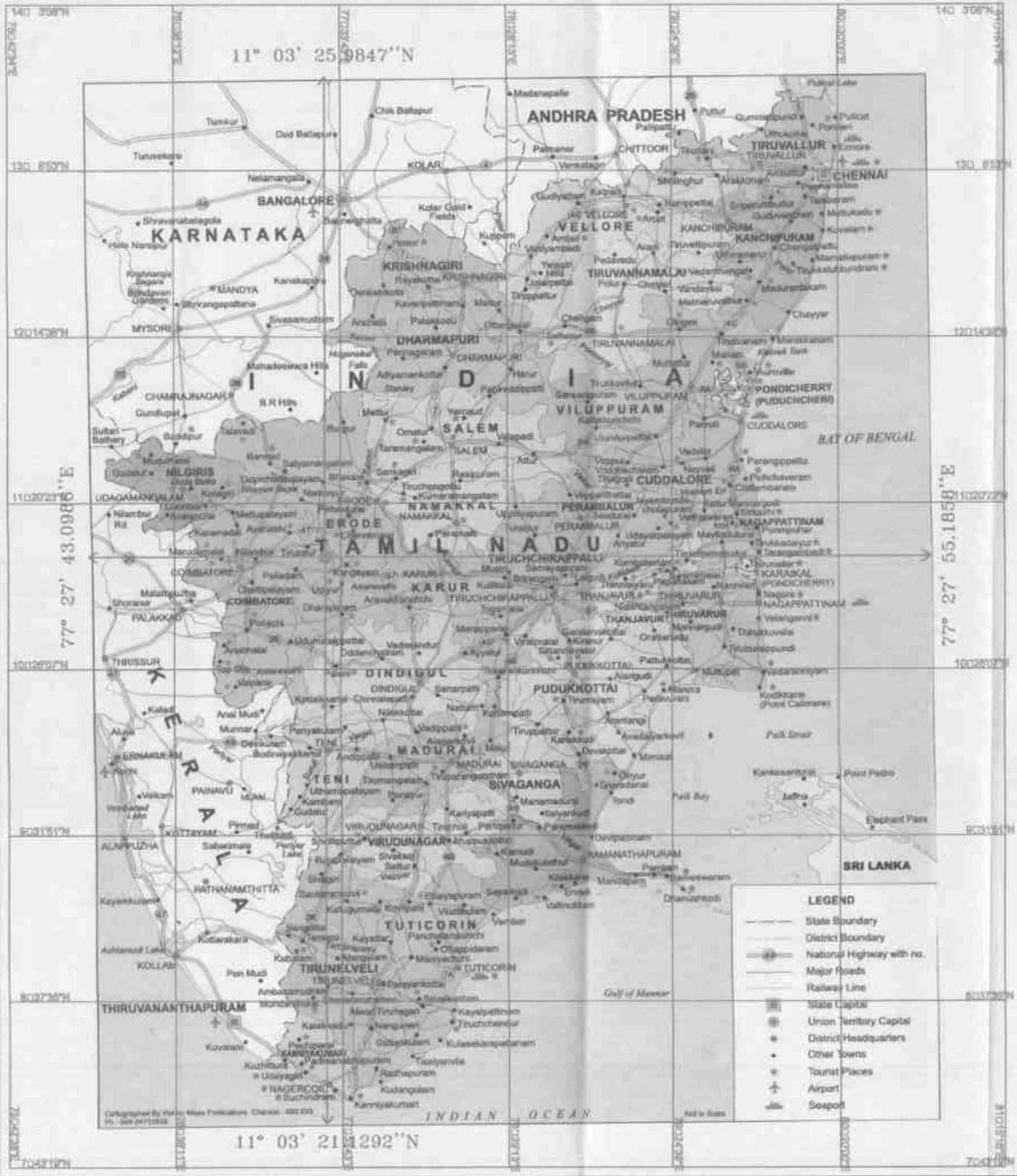
Note: The average employment is less because this is mechanized mines having deep hole drilling, blasting and Heavy Earth Moving Machineries operation.

(Signature of Candidate)

(Signature with date and official seal)

(Mines Manager 1st class)

MANAGER (MINES)
MULTICOLOUR GRANITE MINE
K. PITCHAMPATTI,
KARUR - TALUK & DIST.



N

GEOLOGY AND MINING • TIRUPUR • ASSISTANT DIRECTOR

PLATE NO:I

DATE OF SURVEY : 27.07.2024

APPLICANT :

TM.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR. THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,
TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 538/2A.2B.539/2(P).
EXTENT : 2.90.00 Hq.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

INDEX

Q. L.A. AREA :

TOPO SHEET NO. : 58 E/08

LATITUDE : 11° 03' 21.1292"N to 11° 03' 25.9847"N

LONGITUDE : 77° 27' 43.0986"E to 77° 27' 55.1858"E

LOCATION PLAN

SCALE 1:24,00,000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASEMAP AUTHENTICATED BY STATE GOVERNMENT

B.VENKATACHALAM M.Sc.,
QUALIFIED PERSON
Under Rule 19(1)(a) of MCR,2016

293 A

PLATE NO:1-A

DATE OF SURVEY : 27.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,
TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

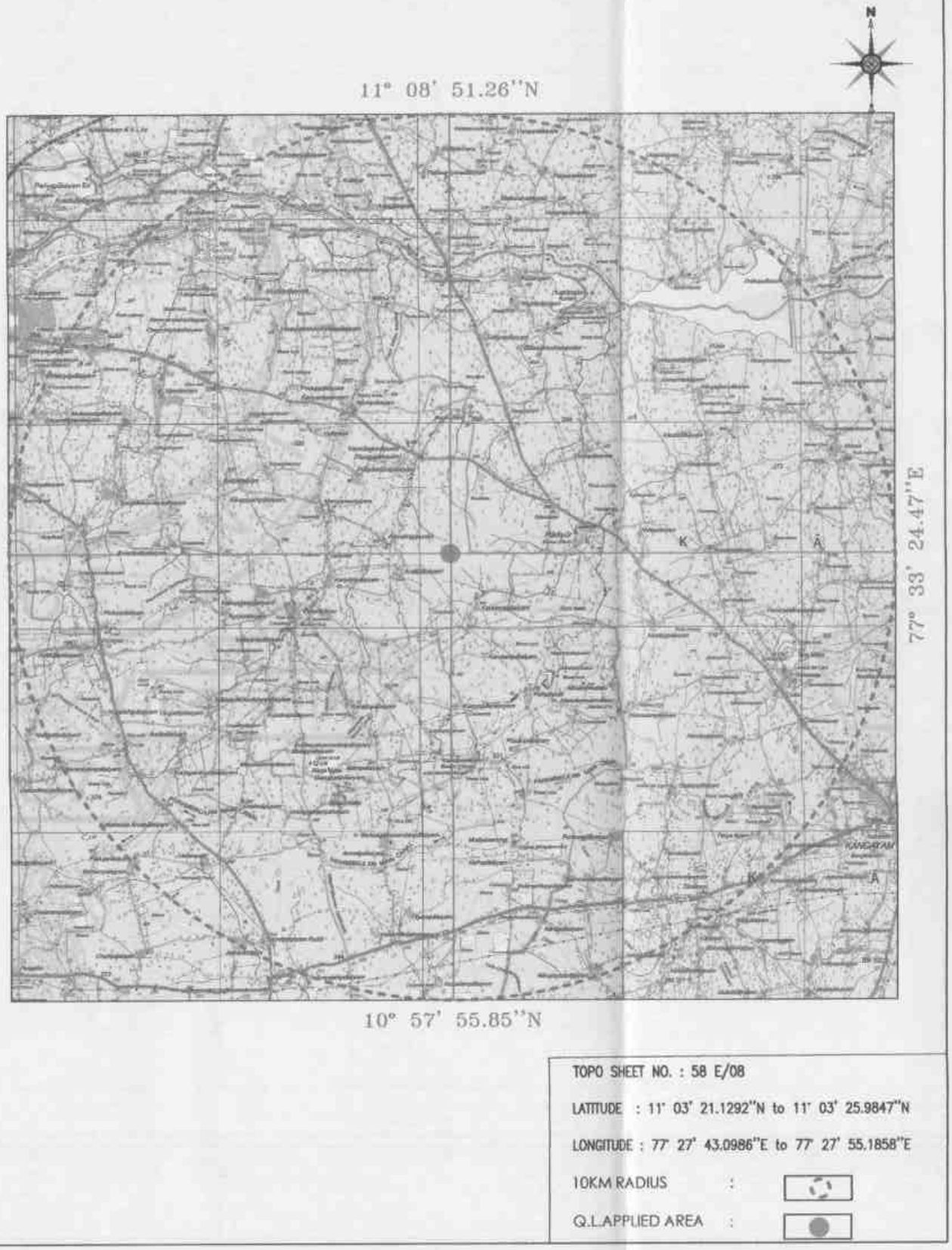
S.F.No : 538/2A,2B,539/2(P),
EXTENT : 2.90.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR *

INDEX

CONVENTIONAL SYMBOLS





TOPO SKETCH OF QUARRY LEASE APPLIED AREA FOR 10Km RADIUS

SCALE– 1:100000

TOPO SHEET NO. : 58 E/08

LATITUDE : 11° 03' 21.1292"N to 11° 03' 25.9847"N

LONGITUDE : 77° 27' 43.0986"E to 77° 27' 55.1858"E

10KM RADIUS :

Q.L.APPLIED AREA :

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASEMAP AUTHENTICATED BY STATE GOVERNMENT

B.VENGADAGIRI,M.Sc.,
QUALIFIED PERSON
Under Rule 15(1)(a)and(b) of MCR 2016

LANDUSE PATTERN

DESCRIPTION	PERCENTAGE
ROADS\CRUSHER	(15%)
HABITATION	(10%)
TREES\INFRASTRUCTURE	(15%)
AGRICULTURAL LAND	(50%)
QUARRY PIT/SHED	(10%)

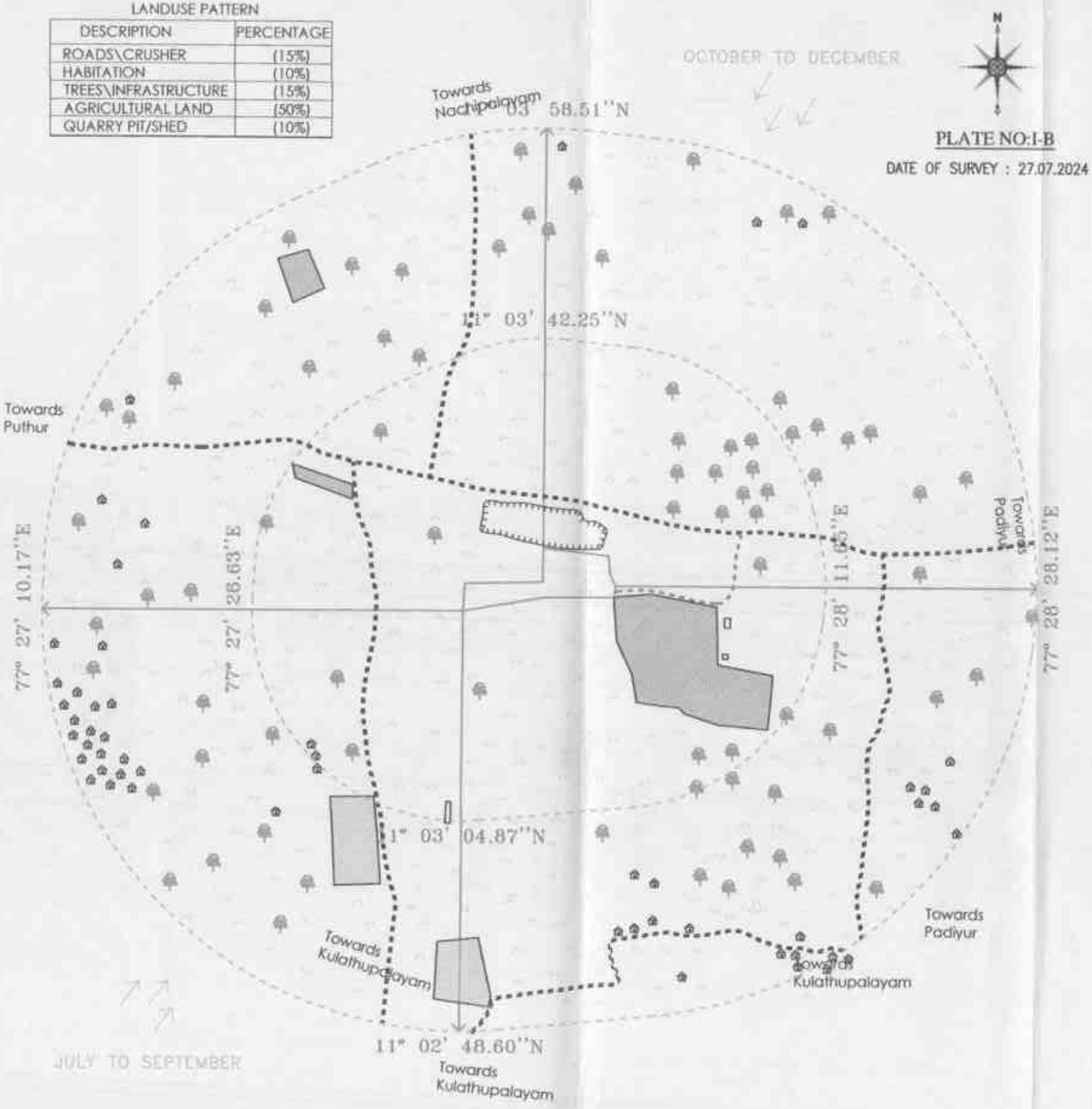


PLATE NO:I-B

DATE OF SURVEY : 27.07.2024

1Km Radius :

500m Radius :

Q.L.Applied Area :

TOPO SHEET NO. : 58 I/08

LATITUDE : 11° 03' 21.1292"N to 11° 03' 25.9847"N

LONGITUDE : 77° 27' 43.0986"E to 77° 27' 55.1858"E

APPLICANT :

Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU
INGUR,PERUNDURAI,
ERODE,
TAMILNADU - 638 052.

GEOLOGY AND MINING • TIRUPUR • ASSISTANT

LOCATION OF Q.L.APPLIED AREA

S.F.No : 538/2A,2B,539/2(P),
EXTENT : 2.90.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- APPROACH ROAD
- CART TRACK
- HABITATION
- TREES
- AGRICULTURAL LAND
- QUARRY PIT/SHED
- WIND DIRECTION
- CRUSHER PLANT
- VILLAGE ROAD
- INFRASTRUCTURE

ENVIRONMENTAL AND LANDUSE PLAN FOR 1Km RADIUS

SCALE:- 1:10,000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASEMAP AUTHENTICATED BY STATE GOVERNMENT

B.VENKATAGIRI, M.Sc.,
QUALIFIED PERSON
Under Rule 15(1)(a)and(b)of MCR,2016

2005 A

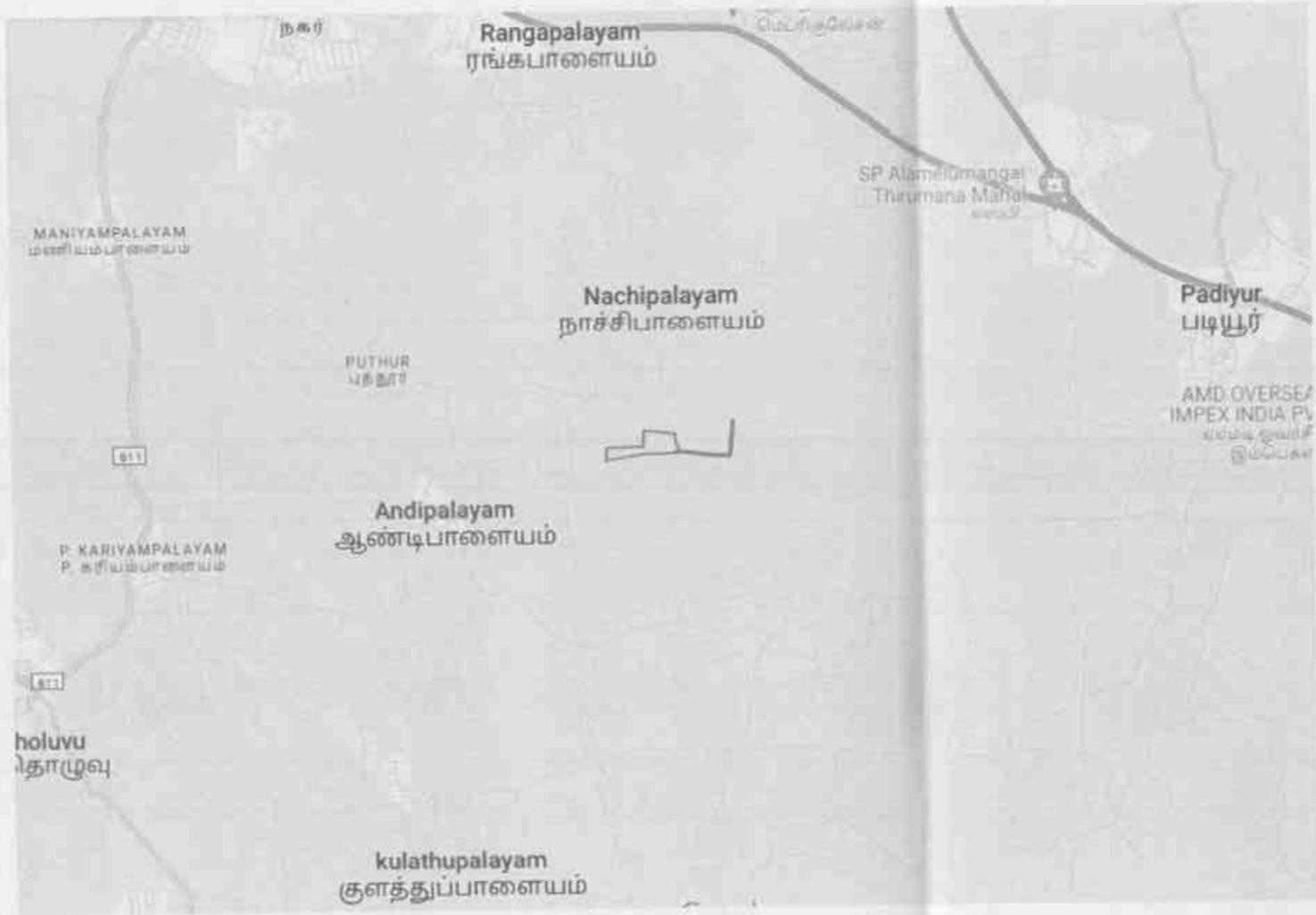


PLATE NO:I-C

DATE OF SURVEY : 27.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED.
DIRECTOR. THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,
TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 538/2A,2B,539/2(P).
EXTENT : 2.90.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

Q.L.APPLIED AREA
VILLAGE ROAD
MAJOR DISTRICT ROAD
SH ROAD
APPROACH ROAD

ROUTE MAP

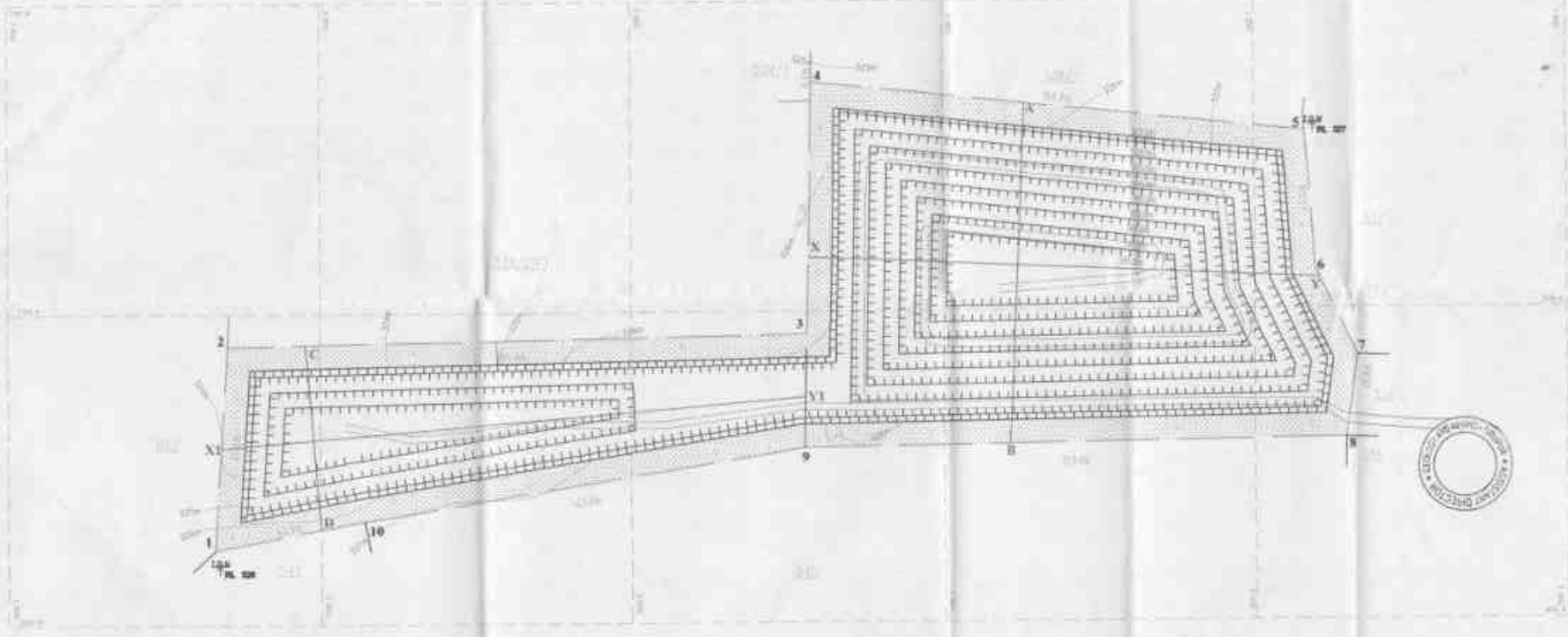
Not To Scale

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASEMAP AUTHENTICATED BY STATE GOVERNMENT

B.VENKATAGIRI,M.Sc.,
QUALIFIED PERSON
Under Rule 15(1)(a)and(b)of MCR,2016

296 A



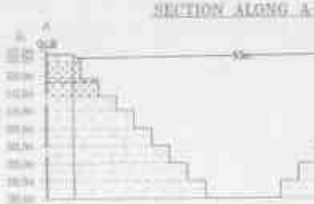
SECTION ALONG X-Y



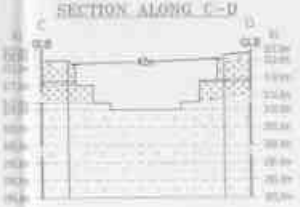
SECTION ALONG X1-Y1



SECTION ALONG A-B



SECTION ALONG C-D



Ground Surface Level R.L 316m

Ultimate Pit Dimension
XY-AB 146m(L)X93m(W)X42m(d)
X1Y1-CD 179m(L)X423m(W)X17m(d)
Above Ground Level 9m
Below Ground Level 33m

(- - X YEAR PLANTATION)

PLATE NO-VI-A
DATE OF SURVEY : 27.07.2024

APPLICANT :

M/s.V.K.P.ENGINEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INOOR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 538/2A, 2B, 539/2(P),
EXTENT : 2.90.00 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m SAFETY DISTANCE
- TEMPORARY BENCH MARK (TBM)
- APPROACH ROAD
- GRAVEL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR
- QUARRY PIT
- QUARRY ROAD

CONCEPTUAL
PLAN AND SECTION
SCALE 1 : 1000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LICENSED AUTHORITY

297 A

BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 21.1292"N	77° 27' 43.0886"E
2	11° 03' 23.2583"N	77° 27' 43.3536"E
3	11° 03' 23.3120"N	77° 27' 49.3692"E
4	11° 03' 25.0887"N	77° 27' 49.4485"E
5	11° 03' 25.3703"N	77° 27' 54.8563"E
6	11° 03' 23.9289"N	77° 27' 54.7474"E
7	11° 03' 23.0110"N	77° 27' 55.1858"E
8	11° 03' 22.1486"N	77° 27' 55.0559"E
9	11° 03' 22.1219"N	77° 27' 48.3337"E
10	11° 03' 21.4135"N	77° 27' 47.6786"E

DATUM : UTM - WGS84, ZONE 43N

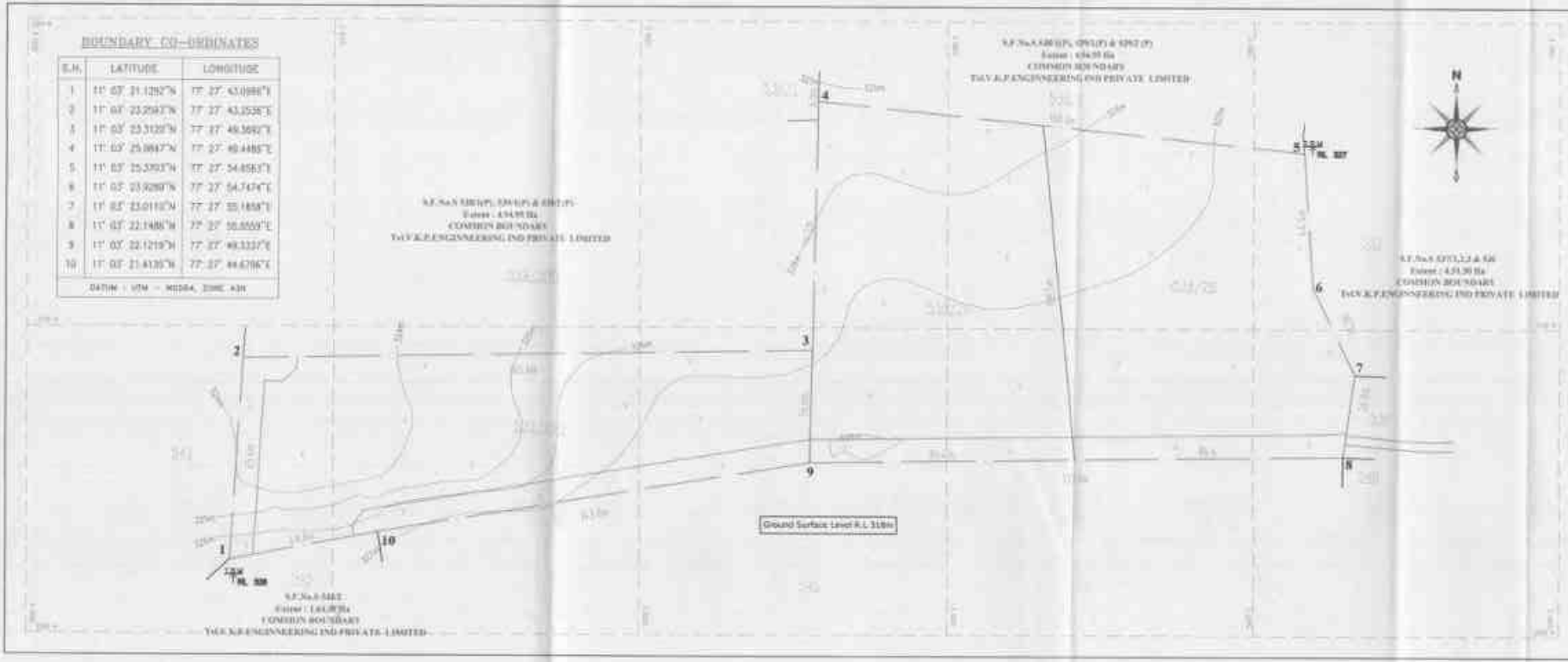


PLATE NO-II

DATE OF SURVEY : 27.07.2024

APPLICANT :

Tnl.V.K.P.ENGINNEERING IND PRIVATE LIMITED.
DIRECTOR, THIRU.P.JEGATHEESAN,
11/132,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA :

S.F.No. : 538/2A,2B,539/2(P),
EXTENT : 2.90.00 Hrs.
VILLAGE : PERUNTHOZUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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Q.L.APPLIED AREA BOUNDARY	
7.5m - SAFETY DISTANCE	
TEMPORARY BENCH MARK	T.B.M
APPROACH RAOD	
GRAVEL	
CONTOUR	

QUARRY LEASE AND SURFACE PLAN

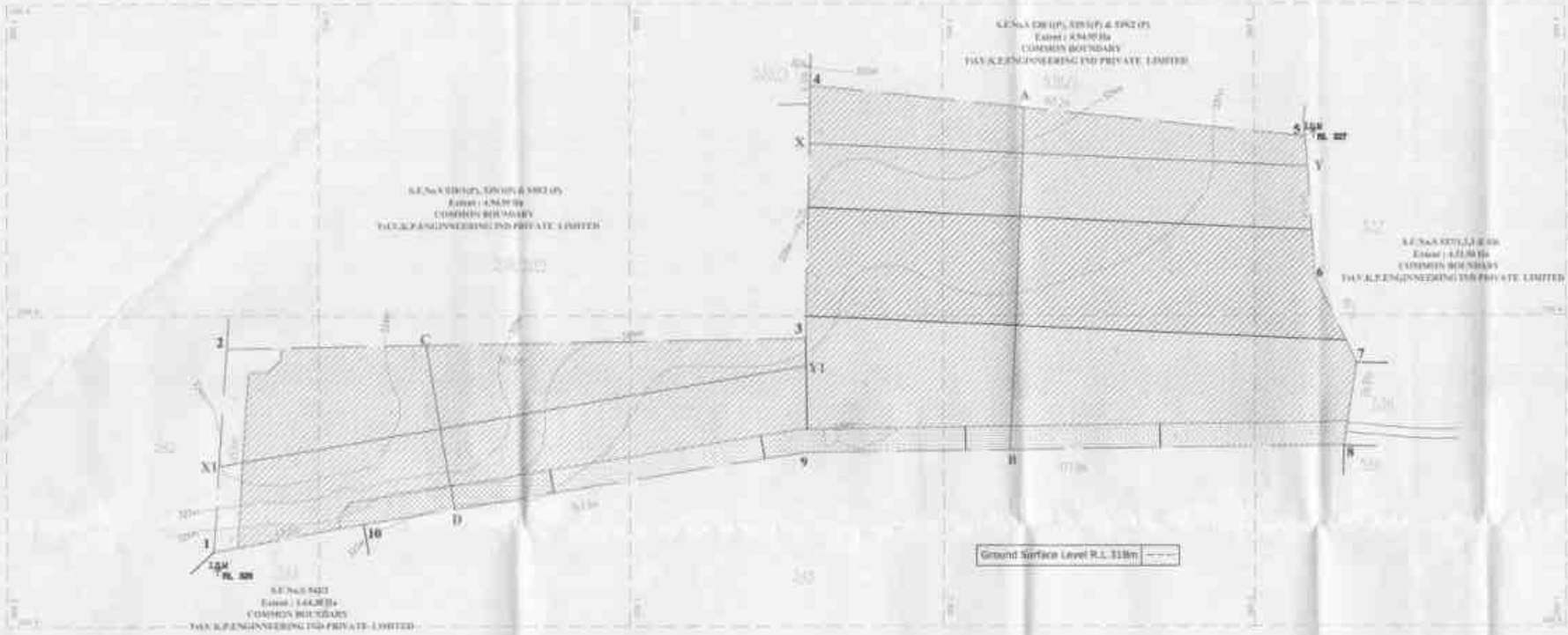
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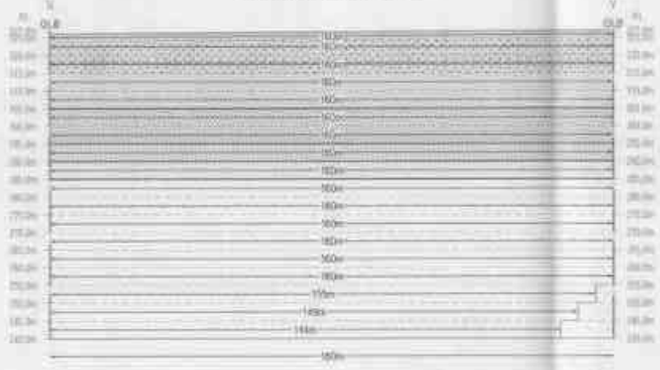
THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE MADE FROM THE LEASEHOLD AUTHENTICATED BY STATE DEPARTMENT.

Name : R.THANGAVELU, M.Sc.,
QUALIFIED PERSON
Email ID : thangavelu.rs@gmail.com, M.R.No.1519

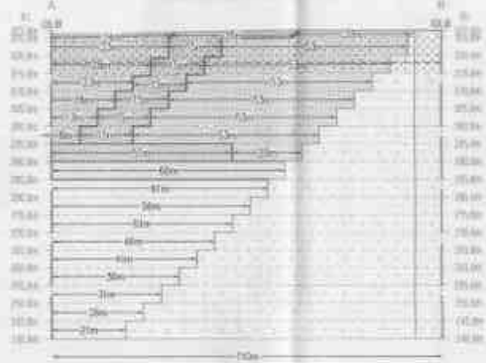
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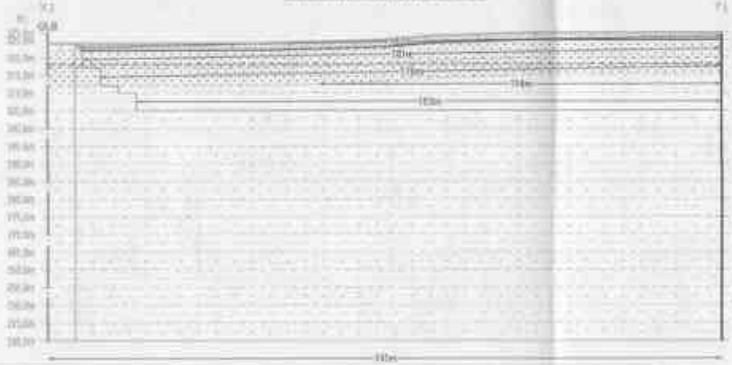
SECTION ALONG X-Y



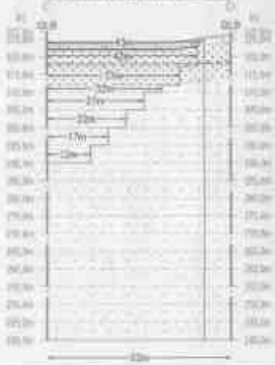
SECTION ALONG A-B



SECTION ALONG X1-Y1



SECTION ALONG C-D



I Yr PROPOSED EXCAVATION
II Yr PROPOSED EXCAVATION
III Yr PROPOSED EXCAVATION
IV Yr PROPOSED EXCAVATION
V Yr PROPOSED EXCAVATION

I Yr PROPOSED PLANTATION
II Yr PROPOSED PLANTATION
III Yr PROPOSED PLANTATION
IV Yr PROPOSED PLANTATION
V Yr PROPOSED PLANTATION

PLATE NO-III
DATE OF SURVEY : 27.07.2024

APPLICANT :

TWV.K.P.ENGINNEERING IND PRIVATE LIMITED.
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 338/2A,2B,339/2(P),
EXTENT : 2.90.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

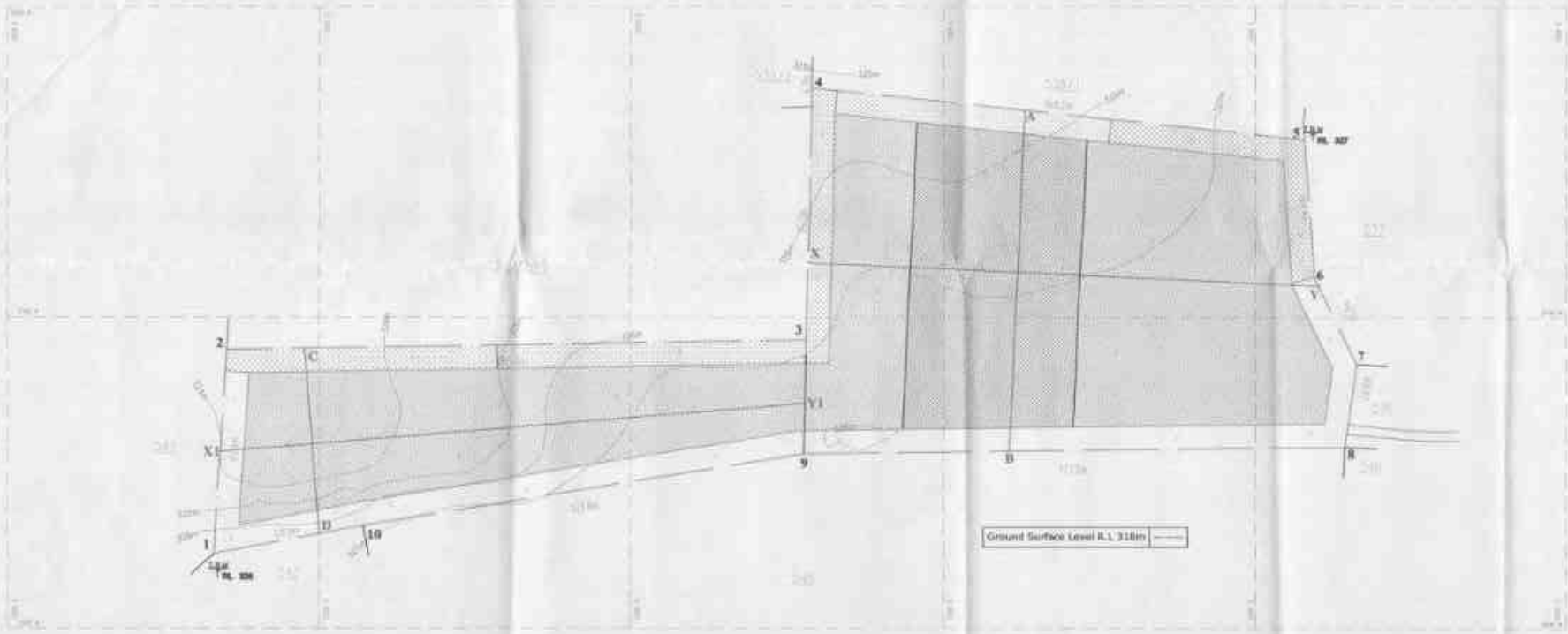
INDEX

Q.L.APPLIED AREA BOUNDARY
7.5m SAFETY DISTANCE
TEMPORARY BENCH MARK
APPROACH ROAD
GRAVEL
WEATHERED ROCK
ROUGH STONE
CONTOUR

TOPOGRAPHY,GEOLOGICAL , YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS FIRST FIVE YEAR
SCALE 1 : 1000

PREPARED BY :

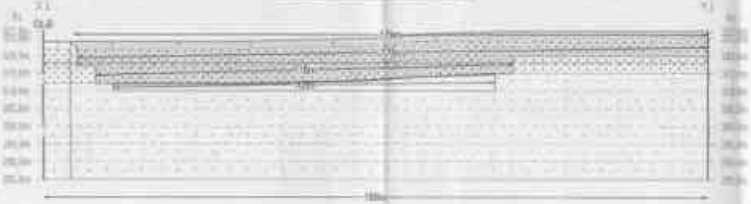
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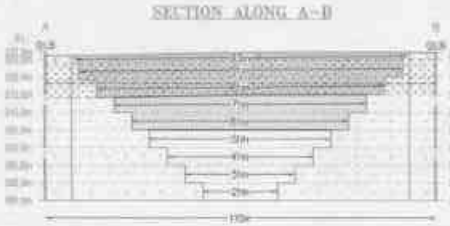
SECTION ALONG X-Y



SECTION ALONG X1-Y1



SECTION ALONG A-B



SECTION ALONG C-D



I Yr PROPOSED EXCAVATION	
II Yr PROPOSED EXCAVATION	
III Yr PROPOSED EXCAVATION	
IV Yr PROPOSED EXCAVATION	
V Yr PROPOSED EXCAVATION	

I Yr PROPOSED PLANTATION	
II Yr PROPOSED PLANTATION	
III Yr PROPOSED PLANTATION	
IV Yr PROPOSED PLANTATION	
V Yr PROPOSED PLANTATION	

N

PLATE NO-III-A

DATE OF SURVEY : 27.07.2024

APPLICANT :

M/S.V.K.P.ENGINEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
1/132,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 538/2A,2B,539/2(P),
EXTENT : 2.70.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMILNADU.

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Q.L APPLIED AREA BOUNDARY	
7.5m SAFETY DISTANCE	
TEMPORARY BENCH MARK	TBM
APPROACH ROAD	
GRAVEL	
WEATHERED ROCK	
ROUGH STONE	
CONTOUR	

TOPOGRAPHY, YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS FIRST FIVE YEAR
SCALE 1 : 1000

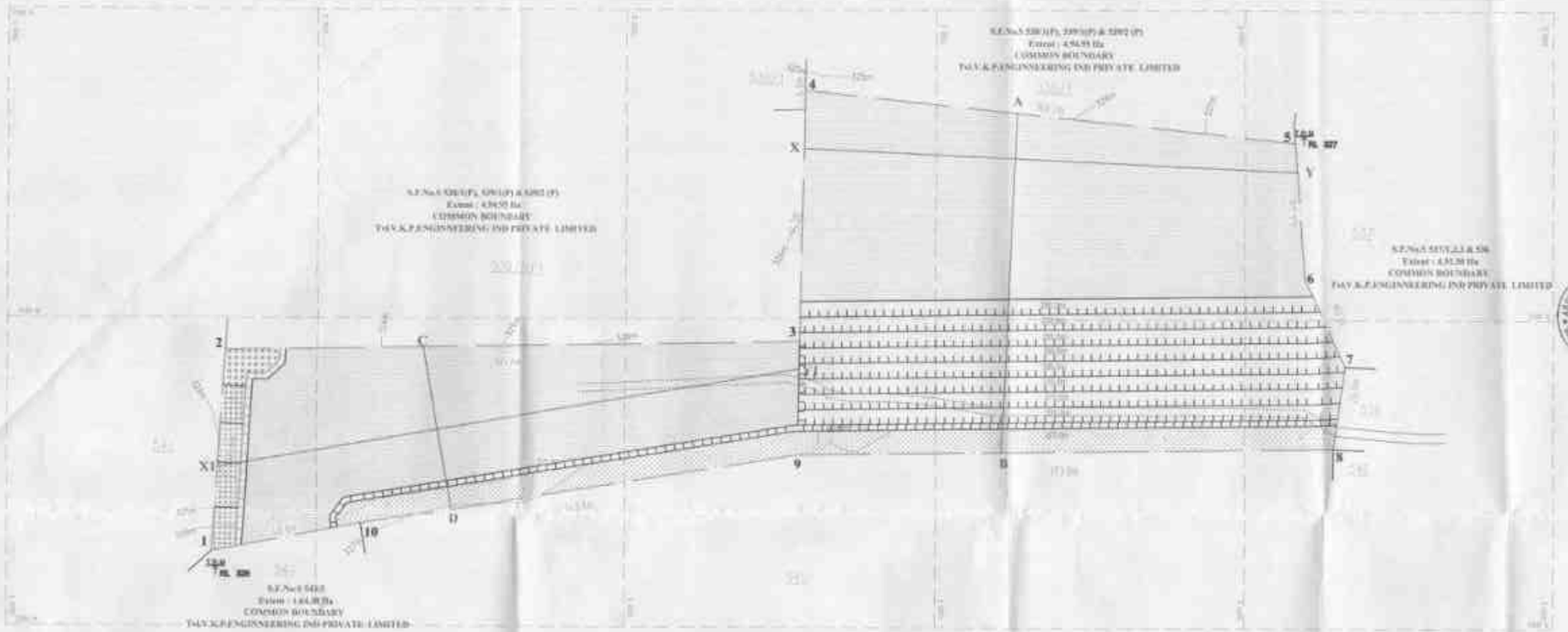
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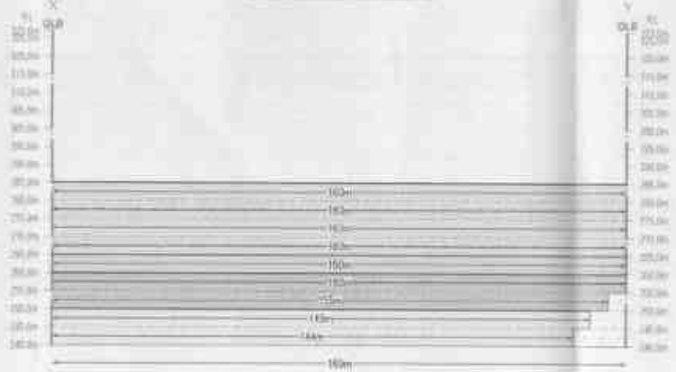
ASSISTANT DIRECTOR (MINES) ERODE

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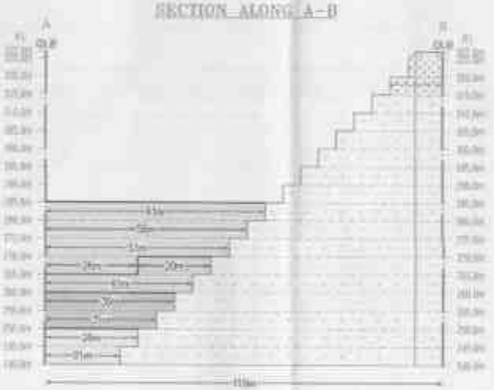
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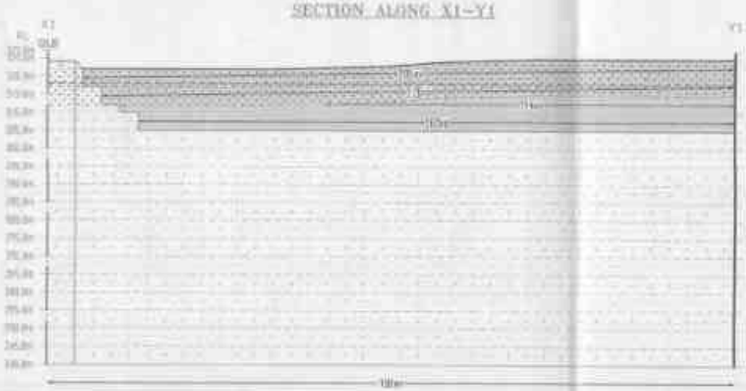
SECTION ALONG X-Y



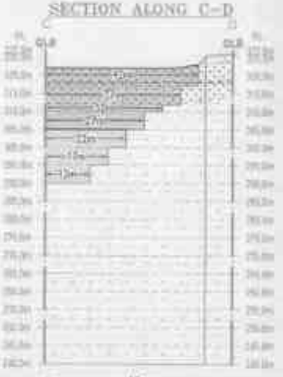
SECTION ALONG A-B



SECTION ALONG X1-Y1



SECTION ALONG C-D



Ground Surface Level R.L 318m

VI Yr PROPOSED PLANTATION
VII Yr PROPOSED PLANTATION
VIII Yr PROPOSED PLANTATION
IX Yr PROPOSED PLANTATION
X Yr PROPOSED PLANTATION

VI Yr PROPOSED EXCAVATION
VII Yr PROPOSED EXCAVATION
VIII Yr PROPOSED EXCAVATION
IX Yr PROPOSED EXCAVATION
X Yr PROPOSED EXCAVATION

1st V Year Proposed Pit Dimension
XY-AB 160m(L)X102m(W)X42m(d)
X1Y1-CD 182m(L)X43m(W)X2m(d)
Above Ground Level 9m
Below Ground Level 33m

I – V YEAR PLANTATION

PLATE NO-IV
DATE OF SURVEY : 27.07.2024

APPLICANT :

T+LV.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VEETUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 538/2A,2B,539/2(P),
EXTENT : 2.90.00 Hq.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

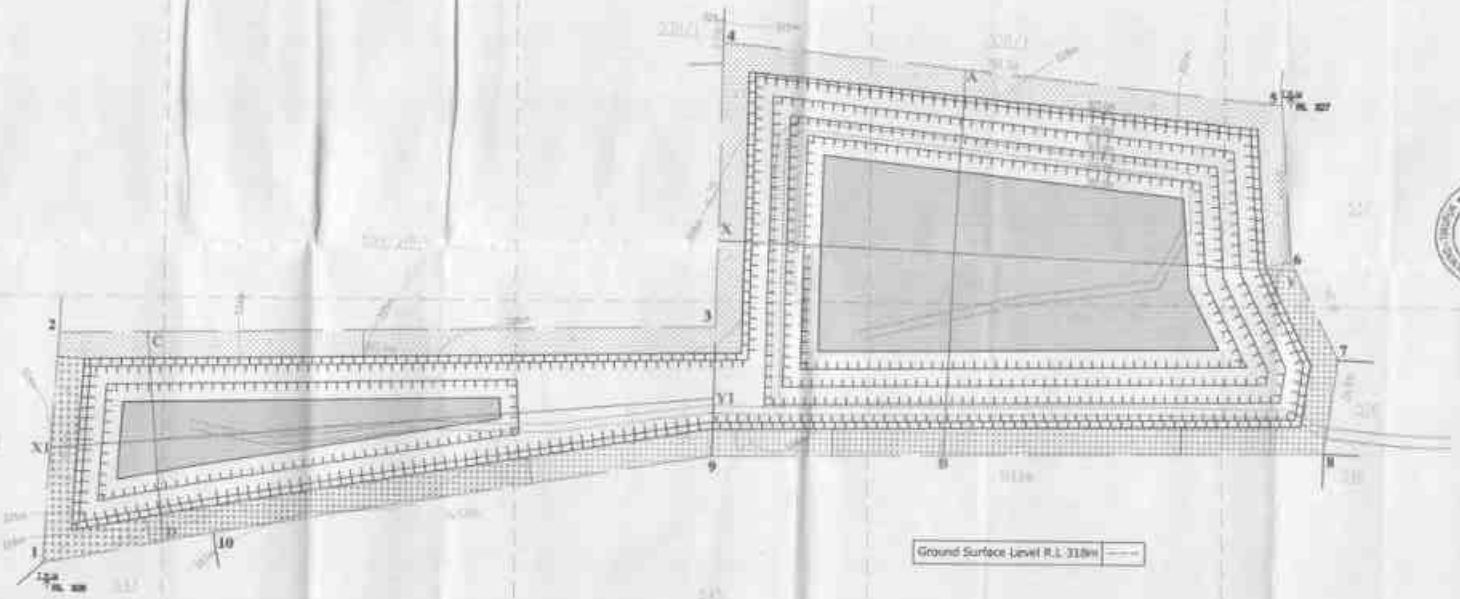
Q.L.APPLIED AREA BOUNDARY
7.5m SAFETY DISTANCE
TEMPORARY BENCH MARK
APPROACH ROAD
GRAVEL
WEATHERED ROCK
ROUGH STONE
CONTOUR
QUARRY PIT
QUARRY ROAD

TOPOGRAPHY,YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS SECOND FIVE YEAR
SCALE 1 : 1000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASEHOLD AUTHORISATION BY STATE GOVERNMENT.

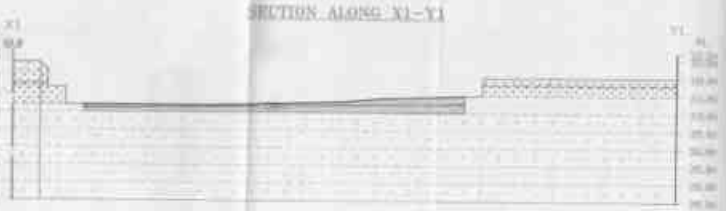
301 A



SECTION ALONG X-Y



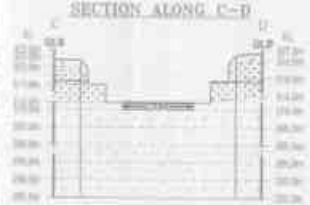
SECTION ALONG X1-Y1



SECTION ALONG A-B



SECTION ALONG C-D



VI Yr PROPOSED PLANTATION
VII Yr PROPOSED PLANTATION
VIII Yr PROPOSED PLANTATION
IX Yr PROPOSED PLANTATION
X Yr PROPOSED PLANTATION

VI Yr PROPOSED EXCAVATION
VII Yr PROPOSED EXCAVATION
VIII Yr PROPOSED EXCAVATION
IX Yr PROPOSED EXCAVATION
X Yr PROPOSED EXCAVATION

1st V Year Proposed Pit Dimension
XY-AB 146m(L)X93m(W)X22m(d)
X1Y1-CD 179m(L)X42m(W)12m(d)
Above Ground Level 9m
Below Ground Level 13m

I – V YEAR PLANTATION

N

PLATE NO-IV-A
DATE OF SURVEY : 27.07.2024

APPLICANT :

M.V.K.F.ENGINEERING IND PRIVATE LIMITED,
DIRECTOR THIRU.P.JEGATHEESAN,
11/2Z,VETTUKATTUVALASU
PAGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 538/2A,3B-539/2(P),
EXTENT : 2.90.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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Q.L.APPLIED AREA BOUNDARY
7.5m SAFETY DISTANCE
TEMPORARY BENCH MARK
APPROACH RAOD
GRAVEL
WEATHERED ROCK
ROUGH STONE
CONTOUR
QUARRY PIT
QUARRY ROAD

TOPOGRAPHY, YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS SECOND FIVE YEAR
SCALE 1 : 1000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THE CONTENT AUTHORISED BY STATE GOVT.

302 A

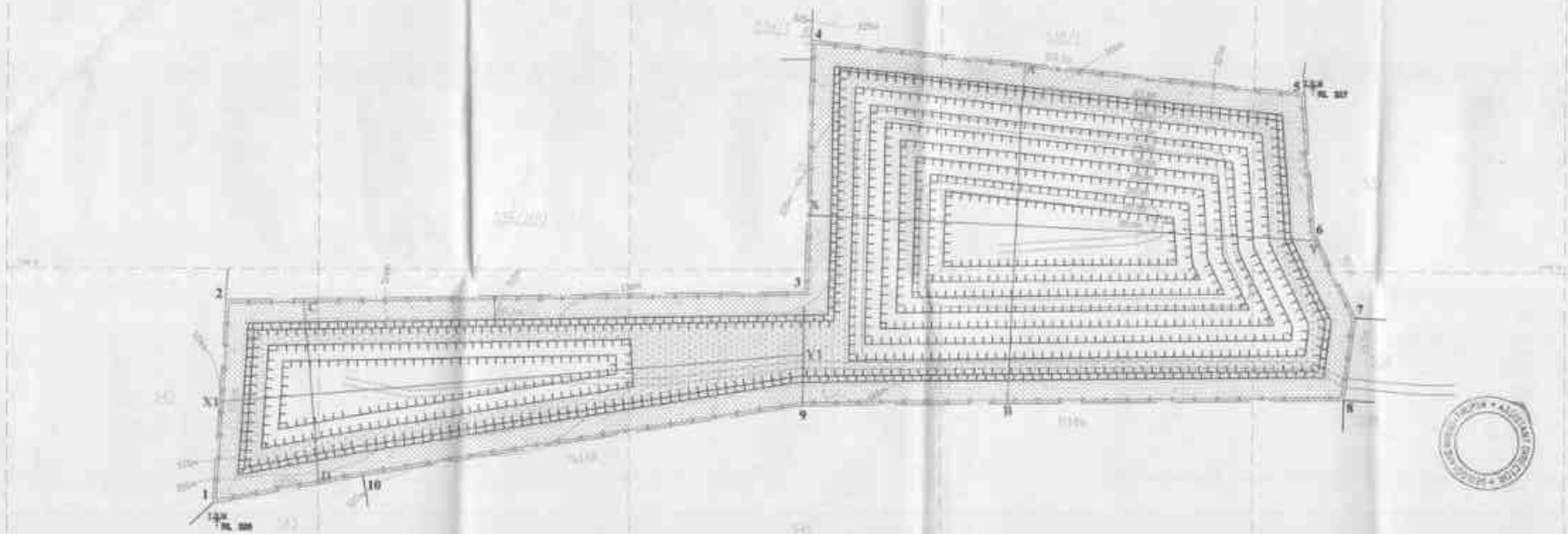


PLATE NO-V-A

DATE OF SURVEY : 27.07.2024

APPLICANT :

M/s.V.K.P. ENGINEERING AND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A. AREA:

S.F.No. : 538/2A,2B,539/2(P),
EXTENT : 2.90.00 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH ROAD
- CONTOUR
- QUARRY PIT
- QUARRY ROAD
- TREES
- EXISTING LANDFORM
- OLD SURFACE LEVEL
- FINISHED SURFACE LEVEL
- FENCING
- PROPOSED GARLAND DRAIN
- REHABILITATED LANDFORM

PROGRESSIVE QUARRY CLOSURE PLAN AND SECTION

SCALE 1 : 1000

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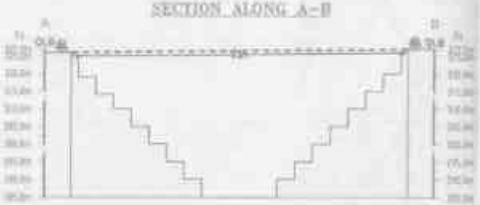
SECTION ALONG X-Y



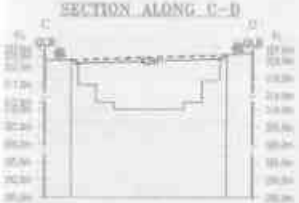
SECTION ALONG X1-Y1



SECTION ALONG A-B



SECTION ALONG C-D



PRESENT & POST LAND USE PATTERN

DESCRIPTION	AREA TO BE REQUIRED AT THE PRESENT MINING PLAN PERIOD(Ha)	AREA AT THE END OF THIS QUARRYING PERIOD (Ha)
AREA UNDER QUARRYING	2.05.10	2.05.10
INFRASTRUCTURE	Nil	Nil
ROADS	0.01.00	0.01.00
GREEN BELT	0.34.80	0.83.80
UN-UTILIZED AREA	0.49.10	Nil
GRAND TOTAL	2.90.00	2.90.00

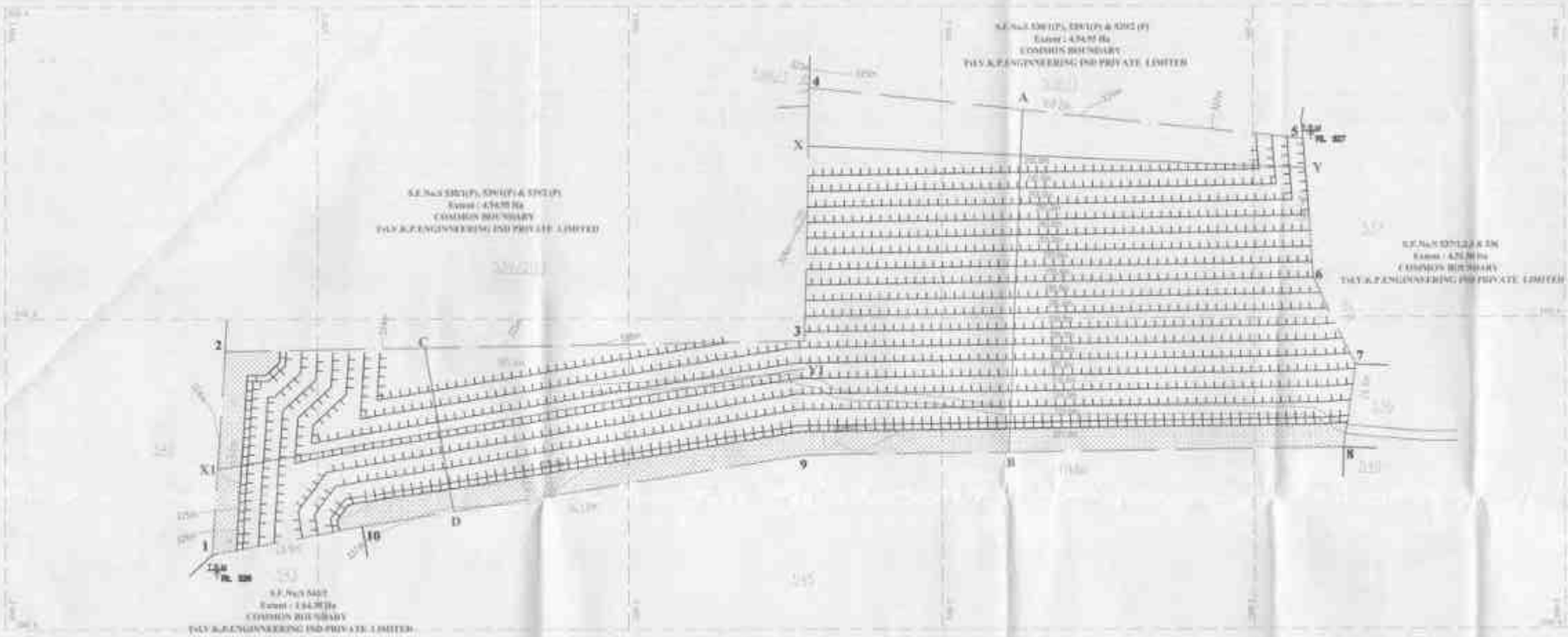
Notes: Present Area Virgin

Ground Surface Level R.L 318m

Proposed Pit Dimension
XY-AB 146m(L)X93m(W)X42m(d)
X1Y1-CD 179m(L)X423m(W)X17m(d)
Above Ground Level 9m
Below Ground Level 33m

1 - X YEAR PLANTATION

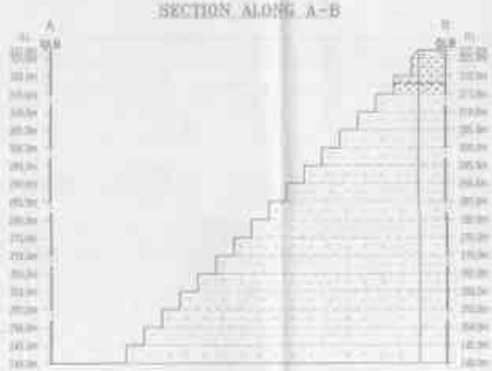
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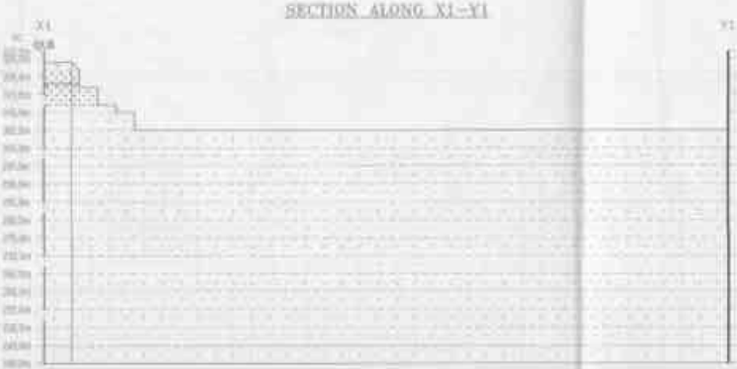
SECTION ALONG X–Y



SECTION ALONG A–B



SECTION ALONG X1–Y1



SECTION ALONG C–D



Ground Surface Level R.L 318m

Ultimate Pit Dimension
XY-AB 160m(L)X102m(W)X87m(d)
X1Y1-CD 182m(L)X43m(W)X37m(d)
Above Ground Level 9m
Below Ground Level 78m

1 – 3 YEAR PLANTATION

PLATE NO-VI
DATE OF SURVEY : 27.07.2024

APPLICANT :

TnLV.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
ANGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 538/2A,2B,539/2(P).
EXTENT : 2.90.00 Ha.
VILLAGE : PERUNTHOLUVU.
TALUK : TIRUPPUR SOUTH.
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH ROAD
- GRAVEL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR
- QUARRY PIT
- QUARRY ROAD

CONCEPTUAL
PLAN & SECTIONS
SCALE 1 : 1000

PREPARED BY :

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BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 21.1292"N	77° 27' 43.0866"E
2	11° 03' 33.2943"N	77° 27' 43.2536"E
3	11° 03' 33.5120"N	77° 27' 49.2852"E
4	11° 03' 25.9647"N	77° 27' 49.4485"E
5	11° 03' 25.3703"N	77° 27' 54.9363"E
6	11° 03' 23.9286"N	77° 27' 54.7474"E
7	11° 03' 23.0710"N	77° 27' 55.1858"E
8	11° 03' 22.1486"N	77° 27' 55.0358"E
9	11° 03' 22.1016"N	77° 27' 49.3337"E
10	11° 03' 21.4135"N	77° 27' 44.6798"E

DATUM : WGS84, ZONE 43N

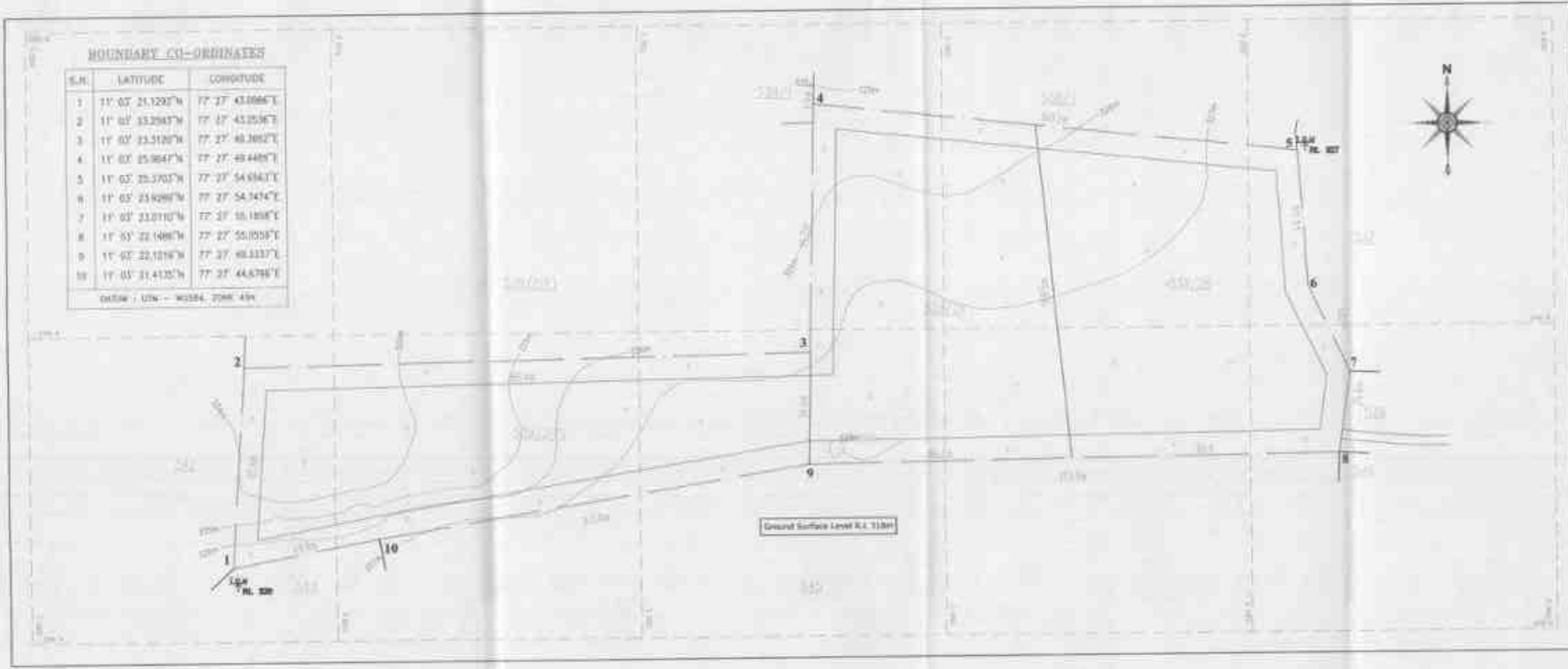


PLATE NO-II-A

DATE OF SURVEY - 27.07.2024

APPLICANT :

M.V.K.P. ENGINEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JEGATHEESAN,
11/22,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 536/2A,2B,539/2(P).
EXTENT : 2.90.00 Ha.
VILLAGE : PERUNTHOLUVU.
TALUK : TIRUPPUR SOUTH.
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH ROAD
- GRAVEL
- CONTOUR

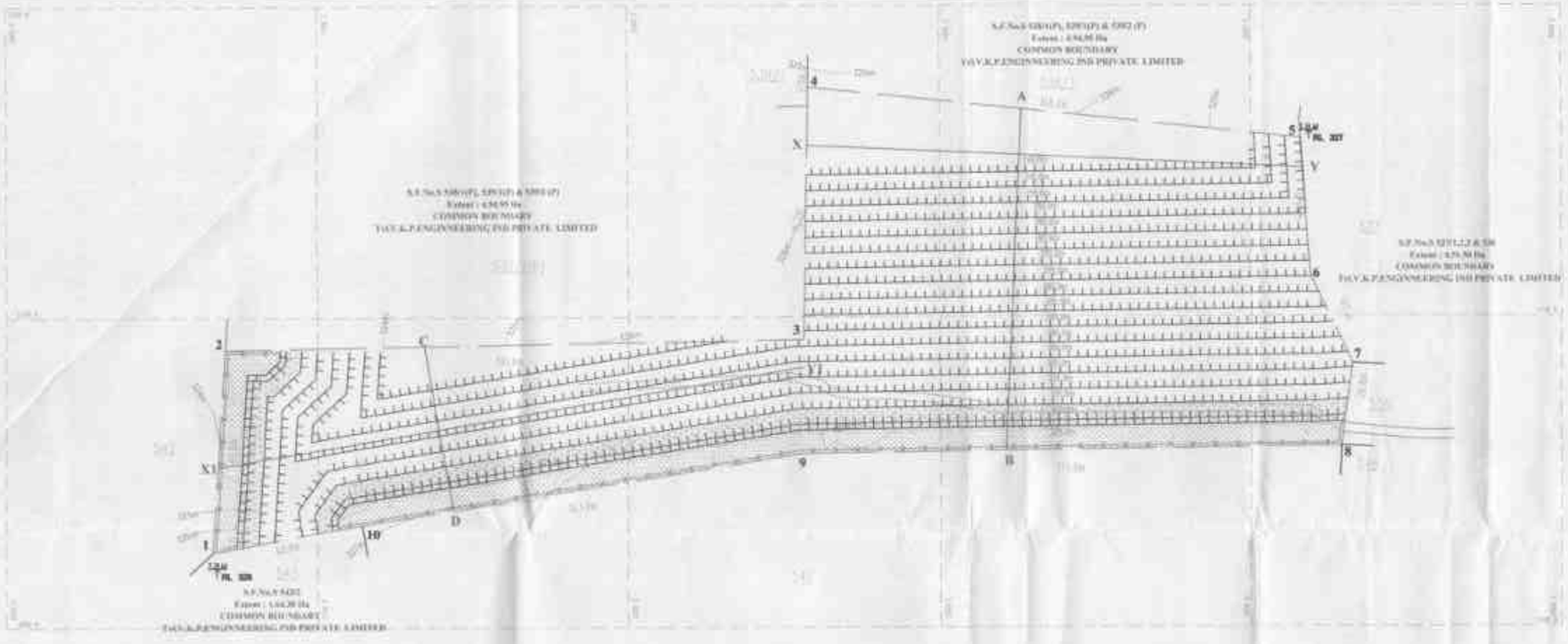
QUARRY LEASE AND SURFACE PLAN

SCALE 1 : 1000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLAN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASEHOLD AUTHENTICATED BY STATE GOVERNMENT

R.VENKATESWARLU
SURVEYOR-II
Under Rule 19(1)(a) of TNMCC Rules, 2019



N

PLATE NO-IV
DATE OF SURVEY : 27.07.2024

APPLICANT :

TwV.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

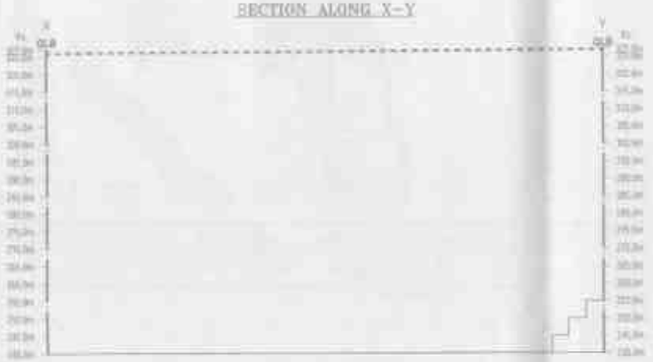
LOCATION OF Q.L.A. AREA:

S.F.No : 538/2A,2B,539/2(P).
EXTENT : 2.90.00 Hrs.
VILLAGE : PERUNTHOLUVU.
TALUK : TIRUPPUR SOUTH.
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

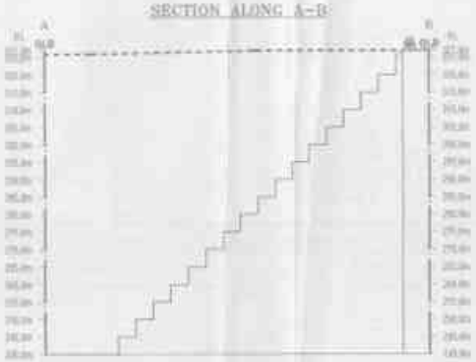
INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH ROAD
- CONTOUR
- QUARRY PIT
- QUARRY ROAD
- TREES
- EXISTING LANDFORM
- OLD SURFACE LEVEL
- FINISHED SURFACE LEVEL
- FENCING
- PROPOSED GARLAND DRAIN
- REHABILITATED LANDFORM

SECTION ALONG X-Y



SECTION ALONG A-B

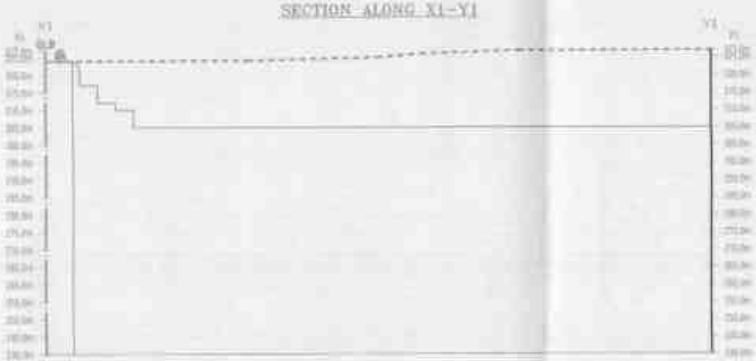


Ground Surface Level R.L 318m

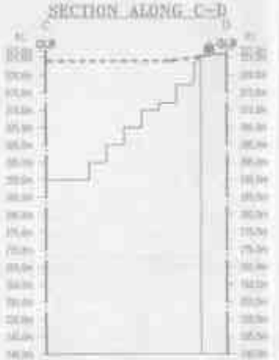
Proposed Pit Dimension
XY-AB 160m(L)X102m(W)X87m(d)
X1Y1-CD 182m(L)X43m(W)X37m(d)
Above Ground Level 9m
Below Ground Level 78m

I – X YEAR PLANTATION

SECTION ALONG X1-Y1



SECTION ALONG C-D



PRESENT & POST LAND USE PATTERN

DESCRIPTION	AREA TO BE REQUIRED AT THE PRESENT MINING PLAN PERIOD(Ha)	AREA AT THE END OF THIS QUARRYING PERIOD (Ha)
AREA UNDER QUARRYING	2.44.20	2.44.20
INFRASTRUCTURE	Nil	Nil
ROADS	0.01.00	0.01.00
GREEN BELT	0.24.53	0.44.10
UN-UTILIZED AREA	0.19.77	Nil
GRAND TOTAL	2.90.00	2.90.00

Notes: Present Area Virgin

PROGRESSIVE QUARRY CLOSURE
PLAN & SECTIONS
SCALE 1 : 1000

PREPARED BY :

I HEREBY CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASEHOLD INFORMATION GIVEN BY THE COMPANY.

S.VEERAMANIKANDAN
QUALIFIED PERSON

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HYDRO - GEOLOGICAL STUDIES AT TVL. VKP ENGINEERING IND PRIVATE LIMITED ROUGH STONE AND GRAVEL QUARRY PERUNTHOLUVU VILLAGE, TIRUPPUR SOUTH TALUK, TIRUPPUR DISTRICT, TAMILNADU.

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7. CONCLUSION 85

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HYDRO - GEOLOGICAL STUDIES AT TVL. VKP ENGINEERING IND PRIVATE LIMITED ROUGH STONE AND GRAVEL QUARRY PERUNTHOLUVU VILLAGE, TIRUPPUR SOUTH TALUK, TIRUPPUR DISTRICT, TAMILNADU.

1. INTRODUCTION

Proprietor of **Tvl. VKP Engineering Ind Private Limited** in Rough Stone and Gravel Quarry Over an extent of 2.90.0 hectares of patta land in S.F. No's. 538/2A, 538/2B and 539/2(P) of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State on the hydrological regime of thearea, the above area has been studied & investigated for finding out Ground water level and aquifer thickness and water quality in and around mine lease area. The electrical resistivity method, TEM study in rough stone and gravel quarry and genesis rock with determine the shallow and deeper freshwater aquifer in the proposed mining area in Tvl. VKP Engineering Ind Private Limited, Peruntholuvu Village.

1.1. Scope of Study

In the present study, the main aim of the shallow and deeper aquifer investigation through electrical resistivity VES, Method is used to measure the apparent resistivity of the Study area. The present study is estimating the ground water level in Peruntholuvu village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu village proposed leasehold area and their surrounding area. The study area is mostly covered by Water level, type of sand, type of rock and their basement rock characters. The main aim of the study is to determine the water table and flow movement of this Lease and surrounding area **(Fig.1).**

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1.2. Profiles in the Study Area.

Name of the Lessee	**:** Tvl. VKP Engineering Ind Private Limited
Survey No	: 538/2A, 538/2B and 539/2(P)
Extent	: 2.90.0 hectares
Village	: Peruntholuvu
Taluk	: Tiruppur South
District	: Tiruppur
State	: Tamil Nadu

2. STUDY AREA DESCRIPTION



Figure.1. Shows proposed mine lease area

The lease applied area is located about 13.2km Southeastern side of Tiruppur, 3.3km Northeastern side of Peruntholuvu village. The lease applied area falls in the Toposheet No: **58 E/08** Latitude between: **11°03'21.1292"N** to **11°03'25.9847"N** and Longitude between: **77°27'43.0986"E** to **77°27'55.1858"E** on WGS datum – 1984.

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	11km		3.3km	
Tiruppur	⟶	Peruntholuvu	⟶	Lease applied area
	Southeast		Northeast	

2.1 Topography of the Lease Area and Its Surrounding Environments:

The lease applied area is exhibits undulated topography. The area has gentle sloping towards Northwestern side and altitude of the area is 327m to 324m above from Mean Sea Level. The area is covered by 2m thickness of Gravel, 10m thickness of Weathered Rock and followed by Massive Charnockite which is clearly inferred from the nearby existing quarry pit. **(Fig.2).**

The Water level in the surrounding area is 93m - 96m below from general ground profile which is observed from the nearby bore wells. The Normal rainfall is about 619mm.



Figure 2. Topography in the lease area

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3. REGIONAL GEOLOGY OF TIRUPPUR DISTRICT.

The oldest lithology found in the district are amphibolite of Satyamangalam Group and meta-ultramafite of Sargur Group which is Archaean in age. The lithologies of Sittampundi-Mettupalaiyam Complex like pyroxenite, Gabbro, Anorthisitic gabbro which are from Archean in age are found at NE of Tiruppur, west of Padiyar and at south of Perumanalhin. The Archaean granite gneiss are present in and around Sevur, Kunnattur and at the north of Tiruppur which is the part of Peninsular Gneissic complex I Group. Hornblende biotite gneiss is the major lithology occurs in the district, which is of Migmatite Group and covers most part of the district except northern part. The Charnockite Group contains charnockite, pyroxene granulite, amphibolite and banded magnetite quartzite. The charnockite are occurs as throughout the district areas in the form of patches while pyroxene granulite occurs at east of Tayampalaiyam.

The banded magnetite quartzite is occurring in a patches at north of Avanashipalyaiyam. The Migmatite Group contains hornblende biotite gneiss, pink migmatite and pink granite gneiss. The pink migmatite occurs at south of Perumanalhin and in and around Karattohivu in the form of patches, while pink granite gneiss is occurs as patches at north of Perumanalhin, south of Manupparm and Kolinjivadi. The Neoproterozoic, Chalk Hill Formation contains pyroxenite which is famous for magnesite deposit occurs in the district at east of Tayampalaiyam. The Neoproterozoic, Alkali Complex Group contain Sivamalai Syenite which contains different types of syenites bodies occurs at south of Padiyur.

The Neoproterozoic Acid intrusives contains major lithologies like quartz veins & reefs, pegmatites and granite, which forms at the end phase of magmatism. The large granitic bodies are intruded into granite gneiss of PGC-I at north of Sevur, west of Tiruppur and in the hornblende-biotite gneiss of Charnockite Group at south of Padiyur, east of Avanshipalaiyam, and at north of Kolinjivadi. The Cenozoic calcrete occurs as small patches in Gudimangalam to Kolinjivadi sector. The gypseous clay of Coimbatore - Palladam Formation of Late Holocene in age are occurs at west and south of Gudimangalem north of Karattohivu and west of Tayampalaiyam and contains gypsum deposits.

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3.1 Geology of the Lease Area

Peninsular gneiss forms the oldest rock formation, in which the massive formation of Charnockite lies over with accumulation of recent quaternary formation. On regional scale of the Charnockite body is N40º E – S40º W with dipping towards SE60º.

The general geology sequence of the rocks in this area are given below:

AGE		FORMATION
Recent	-	Quaternary Formation (Gravel)
----------Unconformity----------		
Archaean	-	Charnockite
		Peninsular Gneissic Complex

4. HYDROGEOLOGY

Geohydrologically major rock type covered large part of the district are migmatitic gneiss along with charnockite and fluvial alluvium are present as patches with it. The shallow water table viz., 0-2 m. bgl (below ground level) is occurred in the northern and at southern parts of the district and it occurs in the patches. The medium water table 2-5 m. BGL is occurs at central and northern part of the district. The deep water table 5 m to 20 m. BGL are occurs in the large part of the district area particularly near the Tiruppur town. The depth to water table is upto 5 m is occurs due to the fluvial alluvium present in the southern part of the district. The fluoride and uranium concentration are occurring >1.5 and 40 (mg/l) respectively in the central part of the district.

5. METHODOLOGY OF STUDY

1. Open well and bore well water level measurement, depth of water level diameter of open well, agriculture land survey.
2. Geophysical survey for deep aquifer in nearby site Rock and soil geology also collected for the aquifer characteristic study.
3. Aquifer thickness and quality measurement study in nearby proposed mine site areas of the study area.

6.1 Geophysical Investigation

6.1.1 Vertical Electrical resistivity sounding for aquifer study.

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The electrical resistivity study is used to determine aquifer and occurred rock in the proposed site. The DDR 3 equipment was used for data collection **(Fig.3)**

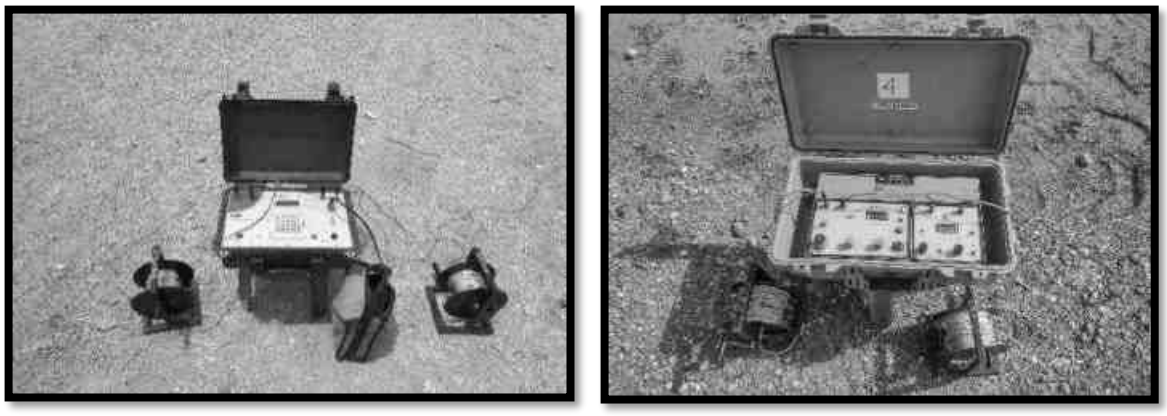


Figure 3. Electrical resistivity survey in the mine lease area.

6.1.2 Basic Principles

The electrical properties of rocks in the upper part of the earth's crust are dependent upon the lithology, porosity, and the degree of pore space saturation and the salinity of the pore water. Saturated rocks have lower resistivity than unsaturated and dry rocks. The higher the porosity of the saturated rock, or the higher the salinity of the saturating fluids, the lower is the resistivity. The presence of clays and conductive minerals also reduces the resistivity of the rock.

The resistivity of earth materials can be studied by measuring the electrical potential distribution produced at the earth's surface by an electric current that is passed through the earth. Current is moved through the subsurface from one current electrode to the other and the potential difference is recorded as the current passes. From this information, resistivity values of various layers are acquired and layer thickness can be identified.

The apparent resistivity values determined are plotted as a log function versus the log of the spacing between the electrodes. These plotted curves identify thickness of layers. If there are multiple layers (more than 2), the acquired data is compared to a master curve to determine layer thickness.

This method is least influenced by lateral in-homogeneities and capable of providing higher depth of investigation.

The resistance R of a certain material is directly proportional to its length L and cross-sectional area A, expressed as:

$$R = Rs * L/A \text{ (in Ohm)}$$

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Where Rs is known as the specific resistivity (characteristic of the material and independent of its shape or size)
With Ohm's Law,

$$R = dV/I \text{ (Ohm)}$$

Where dV is the potential difference across the resistor and I is the electric current through the resistor. The specific resistivity may be determined by:

$$Rs = (A/L) * (dV/I) \text{ (in Ohm m)}$$

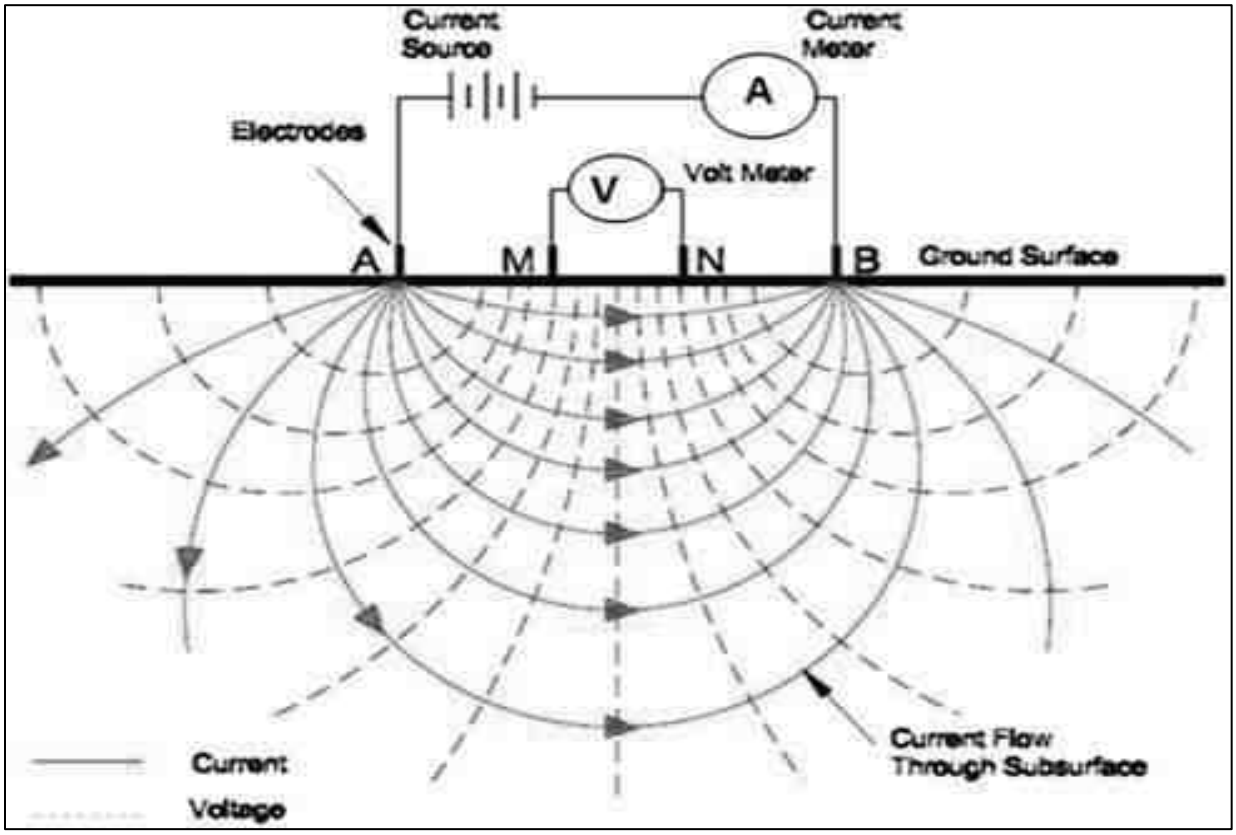


Figure 4. Schematic Diagram of Electrical resistivity principle

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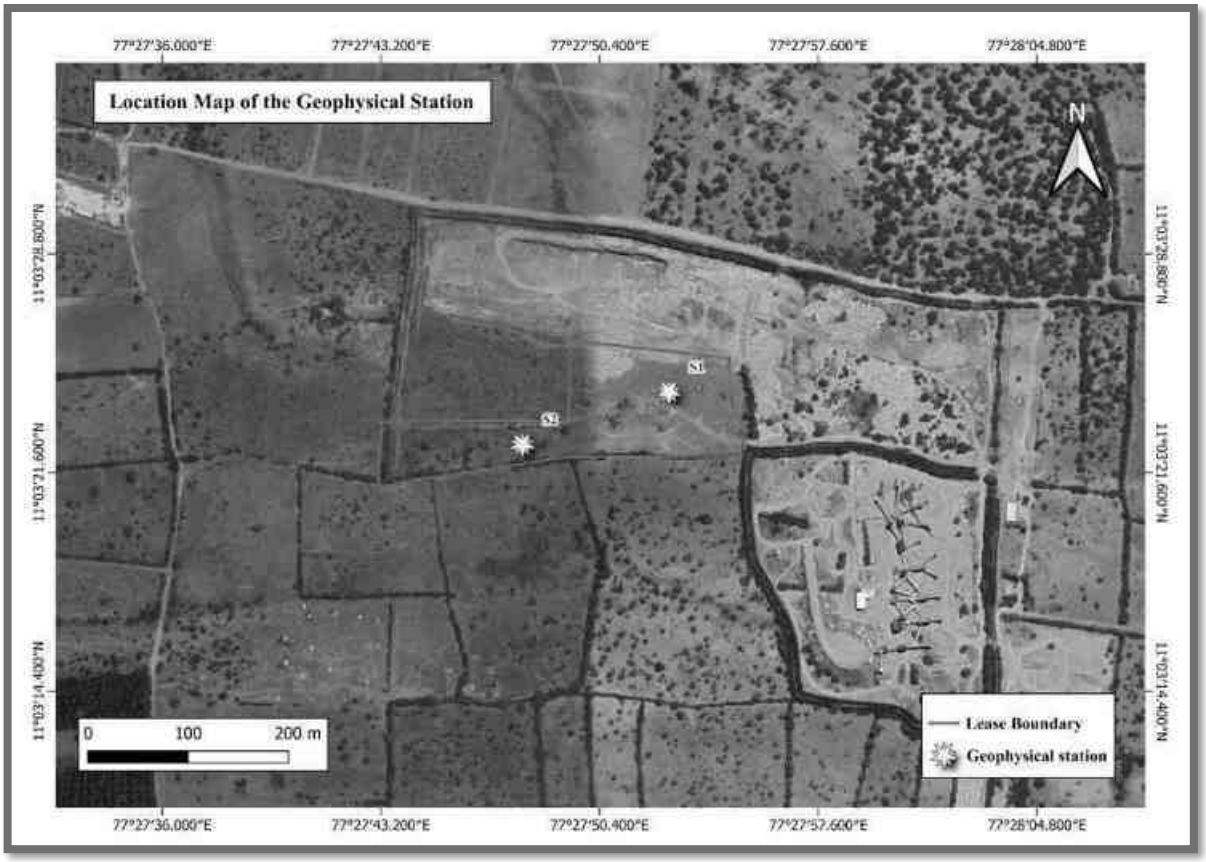


Figure 5. Geophysical survey location in the lease area

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6. GEOPHYSICAL DATA INTERPRETATION & GRAPH

Table 1 Geophysical data of Station 1

STATION-1				
AB/2 (m)	MN/2 (m)	Geometric Factor (K)	Resistance (R) Ohm	Apparent Resistivity Rho Ohm-meter
2	1	4.7	8.31	39.16
5	1	37.7	2.1	79.17
10	1	155.5	0.774	120.36
10	5	23.6	3.87	91.18
15	5	62.8	2.56	160.85
20	5	117.8	2.07	243.87
30	5	274.9	1.69	464.56
40	5	494.8	1.35	667.98
50	5	777.5	1.12	870.85
60	5	1123.1	0.95	1066.97
70	5	1531.5	0.68	1041.44
80	5	2002.8	0.61	1221.69
90	5	2536.8	0.58	1471.37
100	5	3133.7	0.5	1566.87

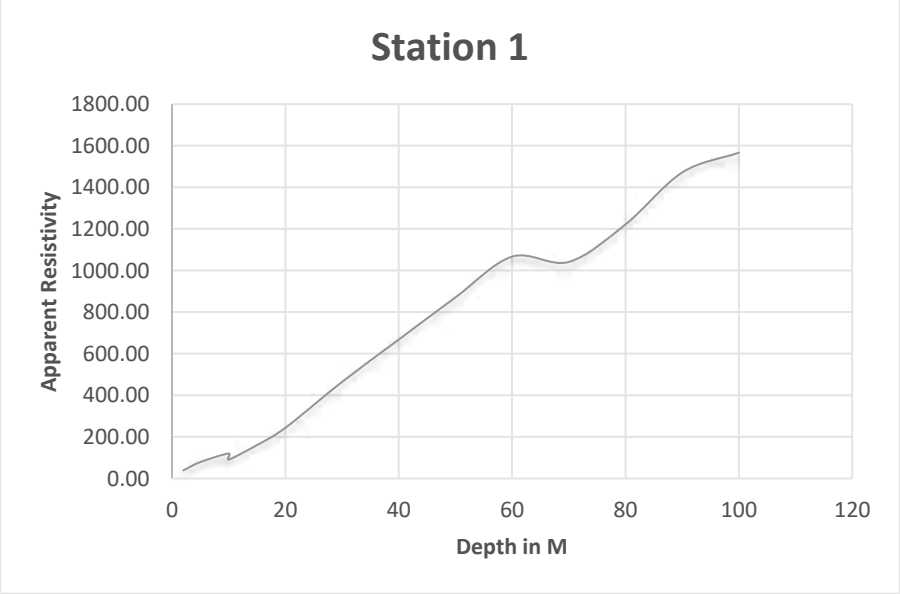


Figure 6 Graphical Representation of Geophysical data Station 1

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Table 2 Geophysical data of Station 2

STATION-2				
AB/2 (m)	MN/2 (m)	Geometric Factor (K)	Resistance (R) Ohm	Apparent Resistivity Rho Ohm-meter
2	1	4.7	4.38	20.64
5	1	37.7	2.88	108.57
10	1	155.5	1.45	225.49
10	5	23.6	6.24	147.03
15	5	62.8	3.79	238.13
20	5	117.8	2.54	299.24
30	5	274.9	2.18	599.26
40	5	494.8	1.86	920.33
50	5	777.5	1.4	1088.56
60	5	1123.1	1.09	1224.20
70	5	1531.5	0.95	1454.95
80	5	2002.8	0.81	1622.24
90	5	2536.8	0.74	1877.26
100	5	3133.7	0.7	2193.62

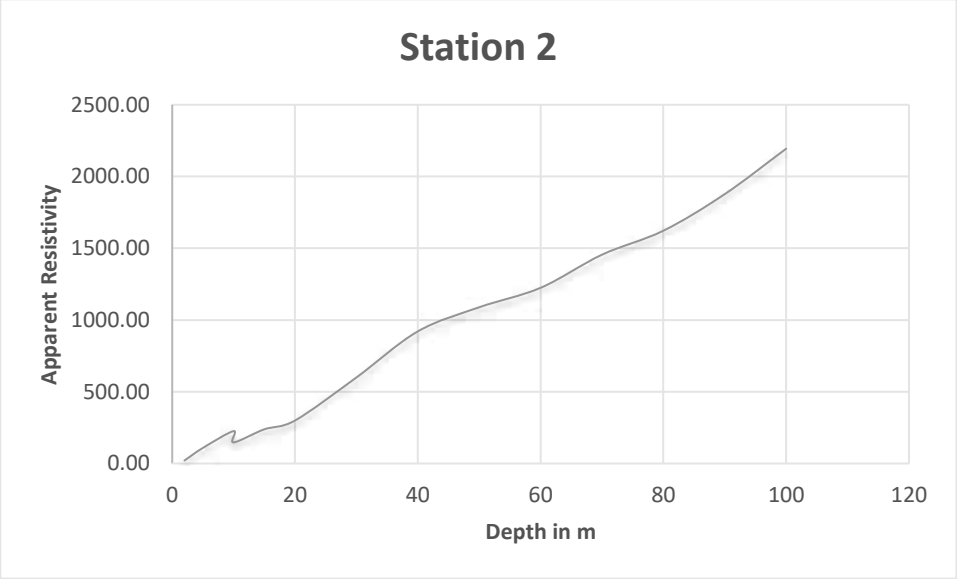


Figure 7 Graphical Representation of Geophysical data Station 2

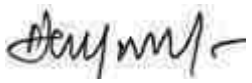
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7. CONCLUSION

- The lease applied area is exhibits undulated topography. The area has gentle sloping towards Northwestern side and altitude of the area is 327m to 324m above from Mean Sea Level.
- The geological study of the given area covered by gravel and rough stone in the area. The discharge of the groundwater controlled by the massive charnockite rock
- The study area exhibit 60°SE dipping and massive charnockite formation. So, it acts as a barrier and restrict the groundwater flow movement.
- Based on the geophysical investigation, Vertical Electrical Sounding (VES) were conducted to determine the subsurface water table and rock types up to depth of 100m.
- The subsurface formation up to this depth can be categorized as follows,
    - **0m to 2m (Average) – Gravel.**
    - **2m to 10m (Average) – Weathered Rock.**
    - **10m to 87m (Average) – Hardrock Formation.**
- Water level from open and bore in nearby proposed site –open well having recharge water in the Shallow perched aquifer well built by the rainwater.
- In this mine lease area, groundwater occurs at deeper depths, depending on the intensity of weathering and its development is much less compared to gneissic formation. The mine area such no major intersections of water table are expected up to 50m.
- The aquifer is found within the weathered / fractured metamorphic terrain. Currently the aquifers are located at **93 to 96** meters below ground level (BGL). However, considering the approved mining plan ultimate depth, which is **87 meters [9m AGL and 78m BGL]**. It will not impact the groundwater table.

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- To obviate the impact due to catchment of rainwater as surface runoff management, effective measures like construction of peripheral garland drain, settling pond and ensuring water flow to the nearby downstream users are devised and will be implemented during the course of mining.
- From the above study it can be concluded there will be no adverse effect on the hydrological regime, water drainage, environment, and livelihood. Agricultural activity in the region.



Dr. P. Thangaraju, M.Sc., Ph.D.,

Govt. Approved Hydro Geologist

M/s. Geo Exploration and Mining Solutions,

Regd. Office: No. 17, Advaitha Ashram Road,

Alagapuram, Salem – 636 004, Tamil Nadu

320 A

Ph: 04294 - 251991
Cell : 99425 54963

SRI SELVANAYAGI EXPLOSIVES

Ad. Office :
4/152, Pudupalayam East,
Karaikuthukadu,
Murungatholuvu (Post),
CHENNIMALAI - 638 051.

Magazine :
No.422/B1, Keeranur Village,
Keeranur.

Form - 22 EX.L.No.E/SC/TN/22/432(E-23992)

To

Date :.....

VKP Engineering Ind (P) Ltd.,
No.151/260, Bhavani Road,
Perundurai Taluk,
Erode District,
Tamil Nadu-638052.

Ref: Your Letter dated

Sub: Regarding blasting work using explosives in your proposed quarry.

Sir,

We are having explosives licence in Form 22 holding No:E/SC/TN/22/432 (E 23992) situated in Survey No.422/B1, Keeranur Village, Keeranur, Tirupur District. Our office functions at Address - M/S. Sri Selvanayagi Explosives, 4/152, Pudhupalayam East, Karaikuthukadu, Murungatholuvu-Post, Chennimalai, Erode District, Pin Code-638051.

We are enacting 2 explosives vans for transporting detonators and class 2 separately for our Magazine to our work site and well experienced and licenced blasters and shot firer for safe Blasting work since 15 years without untoward incident.

We are willing to undertake work on contract basis at your SF.No.538/2A, 538/2B, 539/2 part in Peruntholuvu Village, Tirupur South Taluk, Tirupur District.

Thanking You,

For Sri Selvanayagi Explosives

(Proprietor)

Enclosure:- 1. Licence Copy

2. Short Firer Licence Copy

अनुज्ञप्ति प्ररुप एल. ई.-3 | LICENCE FORM LE-3

(विस्फोटक नियम, 2008 की अनुसूची 4 के भाग 1 के अनुच्छेद 3(क) से (घ) देखिए।)

(See article 3(a) to (d) of Part 1 of Schedule IV of Explosives Rules, 2008)

(ग) उपयोग के लिए एक समय पर वर्ग 1,2,3,4,5 या वर्ग 7 के विस्फोटक या किसी मैगज़ीन में वर्ग 6 के विस्फोटक रखने के लिए अनुज्ञप्ति

Licence to possess : (c) for use,explosives of class 1, 2,3,4,5,6 or 7 in a magazine

अनुज्ञप्ति सं. (Licence No.) : E/SC/TN/22/432(E23992)

वार्षिक फीस रुपए (Annual Fee Rs): 3600/-

1. Licence is hereby granted to

Sri Selvanayagi Explosives (अधिभोगी / Occupier : Sri D.selvaraju.), 4/152 Pudupalayam East, Karaikuthukadu, Murungatholuvu Post,Chennimalai, Town/Village - Keeranur (Post), District-ERODE, State-Tamil Nadu, Pincode - 638051



को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : Individual

3. अनुज्ञप्ति निम्नलिखित प्रयोजनों के लिए विधिमान्य है।
Licence is valid only for the following purpose. : possess for use of Nitrate Mixture, Safety Fuse, Detonating Fuse, Electric and/or Ordinary Detonators, - के उपयोग के लिए

4. अनुज्ञप्ति विस्फोटकों के निम्नलिखित किस्मों, प्रकार और मात्रा के लिए विधिमान्य है।
Licence is valid for the following kinds and quantity of explosives: – (क) (a)

क्र Sr. No.	नाम और विवरण Name and Description	वर्ग और प्रभाग Class & Division	उप-प्रभाग Sub-division	मात्रा किसी एक समय में Quantity at any one time
1.	Nitrate Mixture	2 ,0	0	1000 Kg.
2.	Safety Fuse	6 ,1	0	10000 Mtrs
3.	Detonating Fuse	6 ,2	0	5000 Mtrs
4.	Electric and/or Ordinary Detonators	6 ,3	0	20000 Nos.

(ख) किसी एक कलैंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञप्ति के लिए]
(b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)] : : 15 times as abov

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्त परिसर की पुष्टि होती है।
The licensed premises shall conform to the following drawing(s): . : रेखाचित्र क्र. (Drawing No.) E/SC/TN/22/432(E23992)
दिनांक (Dated) 06/01/2006

6. अनुज्ञप्ति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:
Survey No(s). 422/B1 , ग्राम (Town/Village) : Keeranur

जिला (District) ERODE पुलिस थाना (Police Station) : KANGAYAM
दूरभाष (Phone) राज्य (State) Tamil Nadu पिनकोड (Pincode)
ई. मेल (E-Mail) फैक्स (Fax)

7. अनुज्ञप्ति परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।
The licensed premises consist of following facilities. : MAIN MAGAZINE, DETONATOR MAGAZINE AND A LOBBY

8. अनुज्ञप्ति समय – समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबन्धों के अधीन रहते हुए अनुदत्त की जाती है।
The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions additional conditions and the following Annexures.

1. उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, सन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुए)।
Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
2. अनुज्ञप्ति प्राधिकारी व्दारा हस्ता.क्षरित इस अनुज्ञप्ति की शर्तें और अतिरिक्ति शर्तें।
Conditions and Additional Conditions of this licence signed by the licensing authority.
3. दूरी प्ररूप DE-2 | Distance Form DE-2.

9. यह अनुज्ञप्ति तारीख 31 मार्च 2007 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2007.
यह अनुज्ञप्ति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट सेट-VII के अधीन तथा उपवर्णित इस अनुज्ञप्ति की शर्तों का अधिक्रमण करने या यदि अनुज्ञप्त परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंहृत की जा सकती है, जहां वह लागू हो।
This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attached hereto.

तारीख | The Date - 06/01/2006

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives, South Circle, Chennai

Amendments :
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 27/09/2011
- Change in Postal Address dated : 04/04/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 23/02/2022

नवीनीकरण के पृष्ठांकन के लिए स्थान
Space for Endorsement of Renewal

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
06/02/2024	31/03/2029	Jt, Chief Controller of Explosives, South Circle, Chennai

कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरूपयोग विधि के अधीन गंभीर दांडिक अपराध होगा।
Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANULINGAM
Reason: Licence No. : E/SC/TN/22/432
Location:Chennai [E23992]

भारत सरकार | Government of India
वाणिज्य और उद्योग मंत्रालय | Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो) | Petroleum & Explosives Safety Organisation (PESO)
पूर्व नाम- विस्फोटक विभाग | Formerly- Department of Explosives
A और D - विंग, ब्लॉक 1-8, दूसरा तल, शास्त्री भवन| A & D - Wing, Block 1-8, IInd Floor, Shastri Bhavan
26 हड्डोउस रोड, नुंगमबक्कम चेन्नै| 26 Haddous Road, Nungambakkam Chennai 600006
फोन (Phone):- 28281023 | फैक्स (Fax):- 28284848
ई-मेल | Email: jccochennai@explosives.gov.in

उत | To/E/SC/TN/30/2563(E150220)

To,
M.V.JEYAN S/O VENKATACHALAM,
NO.4/180 A, MELPADIYUR THOTTAM, PUDUR MALAIYAMPATTI, PATTANAM, MUNIYAPPAMPALAYAMM, NAMAKKAL
NAMAKKAL, State: Tamil Nadu, Pincode-637407

दिनांक | Dated : 04/09/2023

विषय | Subject: **श्री: M.V.JEYAN S/O VENKATACHALAM, NO.4/180 A, MELPADIYUR THOTTAM, PUDUR MALAIYAMPATTI, PATTANAM, MUNIYAPPAMPALAYAMM, NAMAKKAL को विस्फोटक नियम, 2008 के अंतर्गत LE-10 में जारी शॉर्ट फायर कर्ता प्रमाण-पत्र संख्या. E/SC/TN/30/2563(E150220) - प्रमाण-पत्र जारी करने के संबंध में ।**
Shotfirer's Certificate No. E/SC/TN/30/2563(E150220) issued to M.V.JEYAN S/O VENKATACHALAM, NO.4/180 A, MELPADIYUR THOTTAM, PUDUR MALAIYAMPATTI, PATTANAM, MUNIYAPPAMPALAYAMM, NAMAKKAL granted in Form LE-10 of Explosives Rules, 2008 - Issue of Certificate regarding.

महोदय | Sir,

आपके पत्र संख्या. 97089 दिनांक 31/08/2023 तथा दिनांक 04/09/2023 को आयोजित अनुवर्ती परीक्षण का संदर्भ ग्रहण करें । विस्फोटक नियम 2008 के नियम 107 के प्रावधानों के अनुसार
श्रेणी: सामान्य जमीन के ऊपर, जमीन के ऊपर ब्लास्टिंग आपरेशन
प्रयोजन के लिए शॉट फायर कर्ता प्रमाण-पत्र संख्या. E/SC/TN/30/2563(E150220) इस पत्र के साथ संलग्न किया जा रहा है जो दिनांक 04/09/2028 तक वैध है ।

We refer to your letter No. 97089 dated 31/08/2023 and the subsequent examination held on 04/09/2023. Please find enclosed herewith Shotfirer's Certificate No.E/SC/TN/30/2563(E150220) valid upto 04/09/2028 for the purpose of Category : General aboveground, All phases of aboveground blasting operation
provisions of Rule 107 of Explosives Rules, 2008.

कृपया नोट करें कि उपरोक्त प्रमाण-पत्र के बल पर कोई भी विस्फोटक ना खरीदा जाए । यह सुझाव दिया जाता है कि ब्लास्टिंग आपरेशन करते समय, विस्फोटक नियम, 2008 के नियम 89 से 98 का सख्ती से पालन किया जाए । It may please be noted explosives should be purchased on the strength of the above certificate. You are advised to strictly follow Rules 89 to 98 of Explosives Rules 2008 while undertaking blasting operations.

प्रमाण-पत्र की वैधता बढाने के मामले में, निम्नलिखित दस्तावेजों के साथ आवेदन प्रस्तुत किया जाए :
In case of validity of the certificate to be extended , application with following documents shall be submitted :

1. फॉर्म एई-10 में आवेदन । Application in Form AE-10.
2. फॉर्म एलई-10 में मूल शॉट फायर कर्ता प्रमाण-पत्र । Original Shot firer's Certificate in Form LE-10.
3. विस्फोटक नियम, 2008 के तहत ऑनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान सुविधा के माध्यम से पुनर्वैधीकरण का संवीक्षा शुल्क रू. 400/-. ऑनलाइन जमा किया जाना है।
Scrutiny fee of revalidation Rs. 400/-. To be submitted online through e-payment facility available on online application portal under the Explosives Rules, 2008.
4. सामने काले रंग अमिट स्याही से विधिवत हस्ताक्षरित, धारक के कलर पासपोर्ट साईज फोटो की पांच प्रतियां । Five copies of holder's colour passport size photographs duly singed 'in front' by 'black color indelible ink'.
5. पंजीकृत चिकित्सक द्वारा जारी शारीरिक स्वस्थता प्रमाण पत्र । A physical fitness certificate from Registered medical practitioner.
6. फॉर्म एलई-3 में अनुज्ञप्ति धारक वर्तमान नियोक्ता से सहमति पत्र जो प्रमाण पत्र धारक से सेवा लेने का इच्छुक है । A consent letter from the present employer holding Licence in Form LE-3 and intending to hire the services of Certificate holder.
7. शॉर्ट फायर कर्ता प्रमाण पत्र धारक को पुनरीक्षण/पुनर्वैधीकरण प्राधिकारी के समक्ष स्वयं को प्रत्यक्ष रूप से प्रस्तुत करना होगा । The shot firer certificate holder has to present himself physically before reviewing/revalidating Authority.
8. ब्लास्टिंग आपरेशन के दौरान विस्फोटक नियम, 2008 के प्रावधानों का उल्लंघन करने के परिणामस्वरूप मानवीय जीवन के नुकसान होने से, इस प्रमाण पत्र को वापस ले लिया/रद्द किया जा सकता है ।
This certificate is liable to be cancelled/withdrawn on contravention of provisions of Explosive Rules, 2008 committied during blasting operations, resulting in loss of human life.

भवदीय / Yours faithfully,
(डा.टी.एल.आनुलिंगम) | Dr. T. L. THANULINGAM)
संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

प्रतिलिपि प्रेषित | Copy Forwarded to:
1. Superintendent of Police, PATTANAM, NAMAKKAL, Tamil Nadu with reference to his Noc No: SS792300289729 Dated: 26/08/2023

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट http://peso.gov.in देखें |
For more information regarding status, fees and other details, please visit our web site http://peso.gov.in|

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANULINGAM
Reason: Licence No. : E/SC/TN/30/2563
Location:Chennai [E150220]
Date:04-09-2023 13:49:25 PM

अनुज्ञप्ति प्ररूप एल.ई. -10 | Form LE-10

शॉर्ट फायर कर्ता प्रमाण-पत्र | Shot Firer's Certificate

(अनुसूची IV के भाग I का अनुच्छेद 10 देखें | See article 10 of Part I of Schedule IV)

[विस्फोटक नियम, 2008 का नियम 107(5) देखें | see rule 107(5) of Explosives Rules, 2008]

(खान अधिनियम,1952 के अधीन न आने वाले क्षेत्र में विस्फोट करने के लिए सक्षमता प्रमाणपत्र)

(Certificate of competency to carry out blasting of explosives in area not coming under the Mines Act, 1952)

संख्या | No.: E/SC/TN/30/2563(E150220)



प्रमाणित किया जाता है कि *श्री M.V.JEYAN S/O VENKATACHALAM,*
जिनका जन्म, 02/09/1994 को हुआ था, जो NO.4/180 A, MELPADIYUR THOTTAM, PUDUR MALAIYAMPATTI, PATTANAM, MUNIYAPPAMPALAYAMM, NAMAKKAL, NAMAKKAL, Tamil Nadu - 637407 के निवासी है ने संयुक्त मुख्य विस्फोटक नियंत्रक,चेन्नै द्वारा तारीख 04/09/2023 को आयोजित शॉर्ट फायर की परीक्षा तारीख को 04/09/2023 उत्तीर्ण कर ली है और विस्फोटक अधिनियम, 1884 और उसके अधीन विरचित नियमों के उपबंधों के अधीन रहते हुए खान अधिनियम,1952की परिधि के अधीन आनेवाले खानों से अन्यथा क्षेत्र में नीचे यथा उल्लिखित विस्फोटकों का उपयोग करते हुए विस्फोट प्रचालन करने के लिए प्राधिकृत है।

This is to certify that *Shri M.V.JEYAN S/O VENKATACHALAM,*
born on 02/09/1994 ,resident of NO.4/180 A, MELPADIYUR THOTTAM, PUDUR MALAIYAMPATTI, PATTANAM, MUNIYAPPAMPALAYAMM, NAMAKKAL, NAMAKKAL, Tamil Nadu - 637407 passed the **shotfirer's examination** held on **04/09/2023** conducted by **Joint Chief Controller of Explosives, Chennai** and is authorised to conduct blasting operations as mentioned below using explosives in mines other than mines coming under the purview of the Mines Act 1952, subject to the provisions of the Explosives Act, 1884 and the rules framed thereunder.

विस्फोट करने के प्राधिकृत वर्ग, प्रवर्ग और प्रकार :
वर्ग:(ख), श्रेणी: सामान्य जमीन के ऊपर, जमीन के ऊपर ब्लास्टिंग आपरेशन

Authorised class, category and type of blasting :
Class : (B), Category : General aboveground, All phases of aboveground blasting operation
[नियम 107 का उप-नियम (5) का स्पष्टीकरण देखें | See explanation of sub-rule (5) of rule 107]

यह प्रमाणपत्र 04/09/2028 (जारी करने की तारीख से पांच वर्ष) तक विधिमान्य होगा |
This certificate shall remain valid till 04/09/2028 (five years from the date of issue)

यह प्रमाण-पत्र, अधिनियम या उसके अधीन विरचित नियमों अथवा इस प्रमाण-पत्र की शर्तों का कोई अधिक्रमण करने पर या यदि आवेदक द्वारा आवेदन प्ररूप में दी गई सूचना में कोई फर्क या विचलन होता है तो निलम्बित या अभिखंडित कर दिया जाएगा।

This certificate is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this certificate or if there is any discrepancy or deviation in the information or suppression of facts furnished by the applicant in his application form.

स्थान | Place : **चेन्नै | Chennai**
दिनांक | Date: **04/09/2023**

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

पुनर्विधिमान्यनकरण के लिए पृष्ठांकन | Endorsement for revalidation

पुनर्विधिमान्यनकरण की तारीख Date of Revalidation	समाप्ति की तिथि Date of Expiry	अनुज्ञप्ति प्राधिकारी के हस्ताक्षर Signature of licensing authority

कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरूपयोग विधि के अधीन गंभीर दांडिक अपराध होगा।
Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANULINGAM
Reason: Licence No. : E/SC/TN/30/2563
Location:Chennai [E150220]
Date:04-09-2023 13:49:12 PM

(सेटConditions | Conditions)

शॉर्ट फायर कर्ता प्रमाण-पत्र के लिए प्ररूप एल.ई.-10 में विस्फोटक नियंत्रक व्दारा प्रदान किए जानेवाले प्रमाण-पत्र संख्या E/SC/TN/30/2563(E150220) की शर्तें निम्नलिखित हैं।

The following are the conditions of licence number E/SC/TN/30/2563(E150220) to Shot Firer's Certificate in Form LE-10 granted by Controller of Explosives.

1. यह परमिट,परमिट धारक को ब्लास्टिंग करने के लिए तब तक अधिकृत करता है जब तक कि वह विस्फोटक नियम, 2008 के अंतर्गत फॉर्म एलई-3 में वैध अनुज्ञप्ति धारक (अनुज्ञप्ति संख्या E/SC/TN/22/432(E23992)). Sri Selvanayagi Explosives के नौकरी/अनुबंध के अधिन काम कर रहा है।
This permit authorizes the permit holder to conduct blasting so long as he is working under the employment/contract of Sri Selvanayagi Explosives holding valid licence (Licence no. E/SC/TN/22/432(E23992)) in Form LE-3 of Explosives Rules, 2008.
2. विस्फोटक सामग्री प्राप्त करने, उसके स्वामित्व परिवहन भंडारण, उठाई धराई और उपयोग करने के लिए सभी स्थानीय विधियों और विनियमों का अनुसरण किया जाएगा।
All local laws and regulations applicable for obtaining, owning, transporting, storing, handling and using explosive materials shall be followed.
3. विस्फोटक सामग्री को अप्राधिकृत कब्जे से संरक्षित किया जाएगा तथा उसे परित्यक्त नहीं किया जाएगा।
Explosive materials shall be protected form unauthorised possession and shall not be abandoned.
4. विस्फोटक सामग्री का उपयोग केवल ऐसे अनुभवी व्यक्तियों व्दारा किया जाएगा जो उसमें अंतर्ग्रस्त परिसंकट को जानते हों और जिनके पास अपेक्षित अनुज्ञापत्र हों।
Explosive materials shall be used only by experienced persons who are familiar with the hazards involved and who hold all required permits.
5. लदाई और फायरिंग या उसका पर्यवेक्षण केवल ऐसे व्यक्ति व्दारा किया जाएगा जिसके पास समुचित शाट फायरकरता प्रमाणपत्र और विस्फोट के लिए अनुज्ञापत्र हों।
Loading and firing shall be performed or supervised only by a person possessing an appropriate shot firer certificate and permit to blast.
6. प्रशिक्षार्थी सहायक और अन्य व्यक्ति, जिनके पास अपेक्षित शाट फायरकर्ता प्रमाणपत्र या अनुज्ञापत्र नहीं है, केवल ऐसे अनुज्ञापत्र धारण करने वाले व्यक्तियों के पर्यवेक्षण के अधीन काम करेंगे।
Trainees helpers and other persons who do not hold the required shot firer certificate or permits shall work only under the supervision of persons holding such permits.
7. ऐसे स्थान पर कोई विस्फोटक सामग्री अवस्थित या भंडारित नहीं की जाएगी जहां अत्यधिक गर्मी या उसके प्रभाव से उनका विस्फोट हो सकता है।
No explosive materials shall be located or stored where they may be exposed to flame excessive heat sparks or impact.
8. ऐसे स्थापन के 15 मीटर के भीतर धूम्रपान करने की अनुमति नहीं दी जाएगी जहां विस्फोटकों को जमा किया गया है या उनका उपयोग किया गया है।
No smoking shall be permitted within 15 metre of any location where explosive are being handled or used.
9. कोई व्यक्ति ऐसे स्थान के 15 मीटर के भीतर कोई माचिस, बिजली या अन्य प्रकार की अग्नि या ज्वाला नहीं जलाएगा, जहां विस्फोटकों को जमा किए गए है या उनका उपयोग किया जा रहा है। तथापि इस अपेक्षा से सुरक्षित फ्यूज जलाने के लिए उपयुक्त युक्तियों को छूट प्राप्त होगी।
No person with in 15 metres of any location where explosive are being handled or used shall carry any matches open light or other fire or flame. However, suitable devices for lighting safety fuse are exempted form this requirement.
10. मादक, शराब, स्वापक या अन्य खतरनाक औषधियों से प्रभावित किसी व्यक्ति को विस्फोटक सामग्री के उपयोग की अनुज्ञा नहीं होगी।
No person under the influence of intoxicating liquors narcotics or other dangerous drugs shall be allowed to handle explosive materials.
11. भंडारण मैगजीन और विस्फोट स्थान के बीच परिवहन के दौरान विस्फोटक सामग्री बंद अनुमोदित पात्र या पैकेज में रखे जाएंगे।
Explosive materials shall be kept in close approved containers or packages while being transported between the storage magazine and the blasting site.
12. विस्फोट करने का शाट फायरकर्ता प्रमाणपत्र और अनुज्ञापत्रधारक व्दारा प्राप्त की गई और फायर की गई या इससे निबटाई गई सभी विस्फोटक सामग्री का दैनिक अभिलेख रखेगा। ऐसा अभिलेख पांच वर्ष तक प्रतिधारित किया जाएगा।
A holder of a shot firer certificate and Permit to Blast shall keep a daily record of all explosive materials received and fired or otherwise disposed of by the permit holder. Such records shall be retained for five years.
13. शॉर्ट फायरकर्ता और कर्मचारी आपातकाल के दौरान बरती जानेवाली प्रक्रिया से अवगत होंगे।
The shot firer and the employee shall be conversant with procedure to be taken during the emergency.
14. शॉर्ट फायरकर्ता प्रमाण-पत्र का धारक जो सुरक्षा के हित में नियंत्रक व्दारा समय-समय पर दिए गए उन सभी या किन्हीं निदेशों का पालन करेगा।
The holder of the shot firer certificate shall comply with all or any of the directions as may be given by the Controller from time to time in the interest of safety.
15. अग्नि या विस्फोटक के कारण होने वाली दुर्घटना और विस्फोटकों की हानि,कमी या चोरी के बारे में निकटतम पुलिस स्टेशन और अनुज्ञापन प्राधिकारी तथा अनुज्ञापन प्राधिकारी के स्थानीय कार्यालय में तुरंत रिपोर्ट की जाएगी।
Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the Controller of Explosives having jurisdiction over the area.

कृते संयुक्त मुख्य विस्फोटक नियंत्रक
For Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANULINGAM
Reason: Licence No. : E/SC/TN/30/2563
Location:Chennai [E150220]
Date:04-09-2023 13:48:50 PM

TOPOGRAPHICAL VIEW OF PERUNTHOLAVU ROUGH STONE AND GRAVEL QUARRY LEASE APPLIED AREA



Name of the Applicant	:	**Tvl. VKP Engineering Ind Pvt., Ltd.,**
		Thiru. P. Jagadeesan, Director
Address	:	No.11/32, Vettukattu Valasu,
		Ingur, Perundurai,
		Erode District,
		Tamil Nadu State– 638 052.

Location:

S.F.Nos.	:	538/2A, 538/2B and 539/2(P)
Extent	:	2.90.0 Ha
Village	:	Peruntholuvu
Taluk	:	Tiruppur South
District	:	Tiruppur

Signature of the Applicant

Tvl. VKP Engineering Ind Pvt., Ltd.,

P. Jagadeesan

(Director)

3/3/2025

கிராம நிர்வாக அலுவலர்

பிறப்பு இறப்பு பதிவாளர்

பெருந்தொழுவு கிராமம்

திருப்பூர் வட்டம்

(Village Administrative officer)

Attestation

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அறிக்கை

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம் 10, பெருந்தொழுவு கிராமம் க.ச. எண்கள் 538/2A, 538/2B, 539/2 part (மொத்தம் 2.90.00 ஹெக்டர்) ஆகிய காளைக்கு 500 மீட்டர் சுற்றளவில் வழிபாட்டுத்தளங்களோ, புராதானச் சின்னங்களோ, அரசு கட்டிடங்களோ, பள்ளிக்கூடங்களோ ஏதுமில்லை பின்னும் 1.0 கி.மீ சுற்றளவில் காப்புக்காடுகள் ஏதுமில்லை என்பதை இதன் மூலம் தெரிவித்துக் கொள்கிறேன்.

// அலுவலக உபயோகம் மட்டும் //

(கனிம வளத்துறைக்கு மட்டும்)

ஜ. [illegible] 13/3/2025

கிராம நிர்வாக அலுவலர்

பிறப்பு.இறப்பு பதிவாளர்

17. பெருந்தொழுவு கிராமம்

திருப்பூர் வட்டம்

File No: 11961
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), TAMIL NADU)
***

Dated **15/06/2025**

To,

Thiru.P Jagadeesan
vkp engineering ind private limited
No. 11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District. ,TAMIL NADU, 638052
vkpeindpvtltd@gmail.com

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

Sir/Madam,

Sub:SEIAA, Tamil Nadu – Proposed Rough Stone and Gravel Quarry lease over an extent 4.51.0Ha at S.F. Nos. 536, 537/1, 537/2 & 537/3 of Peruntholuvu Village, Tiruppur South Taluk, Tirupur District, Tamil Nadu by Tvl. VKP Engineering Ind Pvt., Ltd – "B1" and Schedule S.No.1(a) – ToR issued along with Public Hearing- preparation of EIA report – Regarding.
Ref:
1. Online proposal No. SIA/TN/MIN/529538/2025, Dated:15.03.2025
2. Your application submitted for Terms of Reference dated:17.03.2025
3. Minutes of the 565th Meeting of SEAC held on 15.05.2025
4. Minutes of the 833rd Meeting of Authority held on 03.06.2025

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO25B0108TN5609691N
(ii) File No.	11961
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	VKP Engineering Ind Pvt Ltd., Extent: 4.51.0ha, Rough Stone and Gravel Quarry Project
(viii) Name of Company/Organization	vkp engineering ind private limited
(ix) Location of Project (District, State)	TIRUPPUR, TAMIL NADU
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	no

(xiii) Applicability of Specific Conditions no

3. In view of the particulars given in the Para 1 above, the project proposal interalia 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.

4. The above-mentioned proposal has been considered by SEIAA in the meeting held on 03.06.2025 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.

5. 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).

6. 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 Tvl. VKP Engineering Ind Pvt., Ltd under the provisions of EIA Notification, 2006 and as amended thereof.

7. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.

8. 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.

9. This issues with the approval of the Competent Authority.

10. 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 Principal Secretary to Government, Environment and Forests Department, Tamil Nadu.
3. The Additional Chief Secretary to Government, Natural Resources Department, Tamil Nadu.
4. The Additional Principal Chief Conservator of Forests, Regional Office (SZ), 34, HEPC Building, 1st& 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
6. The Chair Person, TNPC Board,76, Mount Salai, Guindy, Chennai-32
7. The District Collector, Tiruppur District,
8. The Commissioner of Geology and Mines, Guindy, Chennai-32
9. Assistant Director, Department of Geology & Mining, Tiruppur District,
10. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
11. File Copy.

Annexure 1

Specific Terms of Reference for (Mining Of Minerals)

1. Seac Standard Conditions

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S. No	Terms of Reference
1.1	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, 13. What was the period of the operation and stoppage of the earlier mines with last work permit

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S. No	Terms of Reference
	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,

S. No	Terms of Reference
	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

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S. No	Terms of Reference
	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.

2. Seiaa Specific Conditions:

S. No	Terms of Reference
2.1	The authority noted that the subject was placed in the 565th SEAC-II meeting held on 15.05.2025. SEAC-II has furnished its recommendations for granting Terms of Reference subject to the conditions stated therein. After detailed discussions, the Authority accepts the recommendation of SEAC-II and **decided to grant Terms of Reference (ToR) along with Public Hearing for the production quantity of 8,33,355m^3 of Rough Stone, & 75,408m^3 of Gravel for an ultimate depth of 72m (12m AGL + 60m BGL)** 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-II & normal conditions & the conditions mentioned in Annexure of this minutes.

3. Seiaa Standard Conditions:

S. No	Terms of Reference
3.1	**<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.

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S. No	Terms of Reference
	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. **Forests** 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. **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 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: 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. **Energy** 28. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy 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. 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

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S. No	Terms of Reference
	local livelihood. **Mine Closure Plan** 32. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued. **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. 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. **Risk Assessment** 35. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining. **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. **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.

Standard Terms of Reference for (Mining of minerals)

1.

S. No	Terms of Reference
1.1	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
1.2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given
1.3	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
1.4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the areashould be provided. Such an

S. No	Terms of Reference
	Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone)
1.5	Information should be provided in Survey of India Toposheet 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
1.6	Details about the land proposed for mining activities should be givenwith 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
1.7	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
1.8	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
1.9	The study rea 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
1.10	Land use of the study rea 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
1.11	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
1.12	A 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
1.13	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
1.14	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

S. No	Terms of Reference
1.15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given
1.16	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
1.17	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 Wildlifeand copy furnished
1.18	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 alongwith 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
1.19	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 Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered
1.20	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 w.r.t 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)
1.21	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
1.22	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

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S. No	Terms of Reference
	composition of PM10, particularly for free silica, should be given
1.23	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
1.24	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
1.25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided
1.26	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
1.27	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
1.28	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 State Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished
1.29	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
1.30	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
1.31	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
1.32	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

S. No	Terms of Reference
1.33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report
1.34	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
1.35	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
1.36	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
1.37	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
1.38	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
1.39	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
1.40	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given
1.41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out
1.42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report
1.43	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
1.44	Besides the above, the below mentioned general points are also to be followed:- a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) 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. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF 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. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR)

S. No	Terms of Reference
	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. h) 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. i) 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

e-KYC CAF DSS e-Processing e-Payments e-Compliance KYA PARIVESH CPC GREEN Nature Protects if She is Protected

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SEAC SPECIFIC CONDITIONS:

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 PP shall complete the consent registration for the quarry lease area before the submission of EIA report.
3. The Boundary pillars to be erected as per the mine rules and the evidence should be submitted along with the EIA report.
4. The details of enumeration of structures including schools, colleges, primary health centres should be submitted along with the EIA report.
5. The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m & 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.
6. 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.
7. The Proponent shall carry out Bio diversity study as a part of EIA study and the same shall be included in the Report.
8. 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.
9. The PP shall carry out the comprehensive studies on the cumulative environmental impacts of the existing & proposed quarries which included drilling & blasting, loading

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& hauling on the surrounding village and structures.

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.

A. 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.

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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

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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

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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,

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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

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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 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

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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 is acquisition, nearby (in 2-3 km.) water body, population, with in 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

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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 -l1013/77/2004-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 willtake 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.

Signature Not Verified
Digitally Signed by : A Ramesh Nadh IAS
Member Secretary, SEIAA
Date: 15/06/2025

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From

Thiru.V.Sasikumar, M.Sc.,
Deputy Director (i/c),
Geology and Mining,
Tiruppur

To

Tvl.V.K.P.Engineering Ind Pvt Ltd.,
Thiru.P.Jagadeesan, Director,
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District.

R.c. No.668/ Mines / 2023 dated: 29.07.2024

Sub: Mines and Minerals – Minor Mineral – Rough Stone and Gravel- Tiruppur District – Tiruppur South Taluk – Peruntholuvu Village- S.F.Nos. 536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0) – totally over an extent of 4.51.0 Hectares of patta land- Quarry lease for Rough Stone and Gravel - Application preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd. - Precise area communicated for the proposed grant of quarry lease - Mining Plan Approved - details of quarries located within 500 mts radius called for - details furnished – Regarding.

Ref:
1. Application for grant of Rough Stone and Gravel quarry lease preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., dated: 09.10.2023
2. G.O. Ms. No. 79 / Industries (MMC 1) Department dated 06.04.2015.
3. The Deputy Director (i/c), Geology and Mining, Tiruppur letter R.C. No.668/Mines/2023 dated 24.07.2024
4. Tvl.V.K.P.Engineering Ind Pvt Ltd., letter dated:nil received on 26.07.2024.
5. This office letter in even no. dated.29.07.2024 (Mining Plan approved)

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In the reference 4th cited above, Tvl.V.K.P.Engineering Ind Pvt Ltd., has requested to furnish details of other quarry leases of expired, existing and proposed within 500mtr radius from the proposed rough stone and gravel lease over an extent of 4.51.0 Hect. in S.F.Nos. 536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0) in Peruntholuvu village, Tiruppur South Taluk, Tiruppur District for the period of 10 years.

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As requested by the applicant, the details of existing, proposed and expired quarries situated within the radius of 500 meters from the subject area are furnished as follows:-

1. Existing quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Collector's proceedings No. & Date	Lease period
1	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	538/1(P), 539/1(P), 539/2(P)	4.94.95	738/ Mines/2019 dated 19.06.2020 & 285/2021/Mines dated 26.02.2021	19.06.2020-18.06.2030

2. Proposed quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Lease period
1	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0)	4.51.00	Proposed quarry
2	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	543/2	1.64.38	Proposed quarry
3	Tvl.V.K.P. Engineering Ind Pvt Ltd.,	Peruntholuvu	538/2A (0.92.95), 538/2B(0.92.25), 539/2B(1.05.50)	2.90.00	Proposed quarry

3. Lease expired quarries:

S. No	Name of the lessee	Village	S.F. No	Extent Hect.	Collector's proceedings No. & Date	Lease period
----Nil-----						

Deputy Director (I/c)
Geology and Mining,
Tiruppur

Copy to : State Level Environment Impact Assessment Authority-Tamil Nadu,3rd Floor, Panagal Maaligai,No.1 Jeenis Road, Saidapet, Chennai-15

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From

Thiru.V.Sasikumar, M.Sc.,
Deputy Director (i/c),
Geology and Mining,
Tiruppur

To

Tvl.V.K.P.Engineering Ind Pvt Ltd.,
Thiru.P.Jagadeesan, Director,
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District.

R.c. No. 668/ Mines / 2023 dated: 29.07.2024

Sub: Mines and Minerals – Minor Mineral – Rough Stone and Gravel- Tiruppur District – Tiruppur South Taluk – Peruntholuvu Village- S.F.Nos. 536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0) – totally over an extent of 4.51.0 Hectares of patta land- Quarry lease for Rough Stone and Gravel - Application preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., - Precise area communicated for the proposed grant of quarry lease - Mining Plan Submitted for approval - Approved - regarding.

Ref:
1. Application for grant of Rough Stone and Gravel quarry lease preferred by Tvl.V.K.P.Engineering Ind Pvt Ltd., dated: 13.09.2023
2. G.O. Ms. No. 79 / Industries (MMC 1) Department dated 06.04.2015.
3. The Deputy Director (i/c), Geology and Mining, Tiruppur letter R.C. No.668/Mines/2023 dated 24.07.2024
4. Tvl.V.K.P.Engineering Ind Pvt Ltd., letter dated: nil received on 26.07.2024

****

Tvl.V.K.P.Engineering Ind Pvt Ltd., has preferred an application for the grant of Rough Stone and Gravel quarry lease over an extent of 4.51.0 Hectares of Patta land in S.F.Nos. 536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0) of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District vide the reference 1st cited and the precise area was communicated to the applicant vide the reference 3rd cited with a direction to submit the approved mining plan and Environmental Clearance.

As directed, the applicant submitted three copies of mining plan for approval vide the reference 4th cited. The Mining Plan has been verified and found that, The applicant intends to apply and obtain permission from

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Director of Mines Safety, Chennai under Regulation 111(3) of Metalliferous Mines Regulations, 1961 for working Common mine boundary with two adjacent quarries ie.,

i) Proposed quarry lease applied by the same company (M/s.V.K.P.Engineering Ind Pvt Ltd.,) over an extent of 2.90.0 Hectares of patta lands in S.F.Nos.538/2A, 538/2B, 539/2(P) of Peruntholuvu village situated on the Western side of the proposed quarry lease area and

ii) Existing quarry lease held by the same company (M/s.V.K.P.Engineering Ind Pvt Ltd.,) over an extent of 4.94.95 Hectares of patta lands in S.F.Nos.538/1(P), 539/1(P), 539/2(P) of Peruntholuvu village situated on the Western side of the proposed quarry lease area.

Hence, the year wise productions are calculated with two categories i) including common boundaries ii) excluding common boundary. The yearwise production including common boundary between the proposed rough stone quarry in S.F.Nos. 536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0) and Rough stone quarry appllied in S.F.Nos. 538/2A, 538/2B, 539/2(P) and rough stone quarry held in 538/1(P), 539/1(P), 539/2(P) is given below.

Yearwise production after leaving safety distance and benches for the first five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
1st Year	52400	31416
2nd year	51725	24192
32035	204630	19800
4th year	56295	-
5th year	52620	-
Total	**417670**	**75408**

Yearwise production after leaving safety distance and benches for the second five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
6th Year	50500	-
7th year	200645	-
8th year	49580	-
9th year	59540	-
10th year	55420	-
Total	**415685**	**-**

Yearwise production excluding common mine boundary for the first five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
1st Year	62080	35700
2nd year	61360	28620
3rd year	255165	13860
4th year	62380	-
5th year	61925	-
Total	**502910**	**78180**

Yearwise production excluding common mine boundary for the second five years

Year	Recoverable Reserves (m^3) @ 100%	Gravel (m^3)
6th Year	254850	-
7th year	64070	-
8th year	63140	-
9th year	68190	-
10th year	59870	-
Total	**510120**	**-**

The Mining Plan has been verified in detail and found that it was prepared in accordance with the guidelines / instructions issued by the Commissioner of Geology and Mining in letter RC. No. 3868 / LC / 2012 dated 19.11.2012.

Therefore, in exercise of the powers conferred under Rule 41(2) of Tamil Nadu Minor Mineral Concession Rules, 1959, read with G.O. (Ms). No.79 / Industries (MMC 1) Department dated 06.04.2015, the mining plan is hereby approved, subject to the following conditions:

(i) 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.

(ii) This approval of the mining plan does not in any way convey the approval of the Government in terms or 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, Explosives Act, 1884 (Central Act IV of 1884) Minor Mineral Concession and Development Rules, 2010 and the Rules made there under and the Tamil Nadu Minor Mineral Concession Rules, 1959.

(iii) The mining plan is approved without prejudice to any other order or direction from any court of competent jurisdiction.

(iv) The validity of the mining plan is co-terminus with the lease period.

(v) Quarrying shall be done in accordance with 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.

(vi) If anything is found to be concealed as required by the Mines Act in the contents of the Mining Plan and the proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.

(vii) A safety distance of 7.5 meters shall be provided for the patta lands situated adjacent to the applied area.

viii) A safety distance of 10 meters shall be provided for the cart track situated on the Northen side of the applied area.

ix) All the conditions mentioned in the precise area communicated to the applicant shall be followed during quarry operation as per Act & Rules.

Special Condition:

Only after obtaining appropriate permission for common boundary from the Directorate General of Mines Safety under Regulation 111(3) of the Metaliferous Mines Regulations,1961, the lessee shall work in the areas of common boundary between the proposed roughstone quarry in 536 (0.47.0), 537/1 (1.27.50), 537/2 (1.39.50) and 537/3 (1.37.0) and Rough stone quarry appllied in S.F.Nos. 538/2A, 538/2B, 539/2(P) and rough stone quarry held in 538/1(P), 539/1(P), 539/2(P) of Peruntholuvu Village. No quarry works shall be extended into the common boundary unless permission for the effect is obtained from the Directorate General of Mines Safety and submitted the same to the Deputy Director, Department of Geology and Mining, Tiruppur

Encl.: Approved Mining Plan.

Deputy Director (I/c),
Geology and Mining,
Tiruppur

29/7/24

MINING PLAN AND PROGRESSIVE QUARRY CLOSURE PLAN FOR PERUNTHOLAVU ROUGH STONE AND GRAVEL QUARRY

(PREPARED UNDER RULES 41 & 42 AS PER THE AMENDED UNDER TAMIL NADU MINOR MINERAL CONCESSION RULES, 1959)

Patta Land/ Lease period = Ten years

IN

LOCATION OF THE QUARRY LEASE APPLIED AREA



EXTENT	: 4.51.0 Ha
S.F.Nos.	: 536, 537/1, 537/2 AND 537/3,
VILLAGE	: PERUNTHOLUVU
TALUK	: TIRUPPUR SOUTH
DISTRICT	: TIRUPPUR
STATE	: TAMIL NADU

FOR

APPLICANT

Tvl. VKP Engineering Ind Pvt., Ltd.,

Thiru. P. Jagadeesan, Director

No.11/32, Vettukattu Valasu,

Ingur, Perundurai,

Erode District,

Tamil Nadu State– 638 052.

PREPARED BY

Dr. P. Thangaraju, M.Sc., Ph.D.,

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ABBREVIATIONS

- EIA - Environmental Impact Assessment
- SEAC - State Expert Appraisal Committee
- SEIAA - State Level Environment Impact Assessment Authority
- MoEF&CC - Ministry of Environment, Forest and Climate changes
- MSL - Mean Sea Level
- CPCB - Central Pollution Control Board
- TNPCB - Tamil Nadu Pollution Control Board
- S.F.No. - Survey Field Number
- DMS - Director of Mines Safety
- DGMS - Director General of Mines Safety
- MMR - Metalliferous Mines Regulations
- MCR - Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules
- TNMMCR - Tamil Nadu Minor Mineral Concession Rules
- EMP - Environment Management Plan
- NONEL - Non Electric
- PPV - Peak Particle Velocity
- CRZ - Coastal Regulatory Zone
- HACA - Hill Area Conservation Authority
- QP - Qualified Person

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Tvl. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

GEOLOGY AND MINING * TIRUPUR * ASSISTANT DIRECTOR

CONSENT LETTER FROM THE APPLICANT

The Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholavu Rough Stone and Gravel Quarry lease applied area over an extent of 4.51.0 Hectares Patta lands in S.F.Nos. 536, 537/1, 537/2 and 537/3 of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared by

Dr. P. Thangaraju, M.Sc., Ph.D.,
Qualified Person

We have entrust the works to prepared the Mining Plan based upon the production requirements to me as per the Mines Acts, Rules, Regulations and Amendments as on date. We request to the Deputy Director (i/c), Department of Geology and Mining, Tiruppur District, Tamil Nadu State to make further correspondence regarding the modification of the Mining Plan with the said Qualified Person at his following address.

Dr. P. Thangaraju, M.Sc., Ph.D.,
No.17, Advaitha Ashram Road,
Alagapuram, Salem District – 636 004.
Mobile No.: +91 94433 56539.

We hereby undertake that all the responsibilities of contents in the Mining Plan and if any corrections made in the Mining Plan by the Qualified Person may be deemed to have been made with our knowledge and consent and shall be acceptable to me and binding on me in all respects. If there is any substantial change during operation we will carried out a Modified Mining plan and seek its approval from concerned Authorities.

Signature of the Applicant
Tvl. VKP Engineering Ind Pvt., Ltd.,

P. Jagadeesan
(Director)

Place: Erode
Date: 25.07.2024

Tvl. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.



DECLARATION OF THE APPLICANT

The Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholavu Rough Stone and Gravel Quarry lease applied area over an extent of 4.51.0 Hectares Patta lands in S.F.Nos. 536, 537/1, 537/2 and 537/3 of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared in full consultation with me.

I have understood its contents and agree to implement the same in accordance with Laws, Rules and Act applicable to quarry from time to time as per Tamil Nadu Minor Mineral Concession Rules, 1959.

Signature of the Applicant
Tvl. VKP Engineering Ind Pvt., Ltd.,

P. Jagadeesan
(Director)

Place: Erode
Date: 30.07.2024



CERTIFICATE

Certified that I am, **Dr. P. Thangaraju, M.Sc., Ph.D.,** having an office at Regd. Off. No. 17, Advaitha Ashram Road, Alagapuram, Salem – 636 004, holding a Post Graduate Degree in Geology (M.Sc. Geology) from Madras University, Chennai and I worked in the field of Mining in a role of Geologist.

Rule 15(I)(a) and (b) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 stipulates the eligibility for preparing Mining plans as "(I)(a) a degree in mining engineering or a post-graduate degree in geology granted by a university established" and (I)(b) "Professional experience of five years of working in a supervisory capacity in the field of mining after obtaining the degree". Since my qualification and experience are satisfied the Rule (I)(a) and (I)(b) of 15 of the said Rules, I am eligible to prepare Mining Plans for both Major and Minor Minerals.

Accordingly, I prepared this Mining Plan and Progressive Quarry Closure Plan in Respect of Peruntholavu Rough Stone and Gravel Quarry over an extent of 4.51.0 Hectares Patta lands in S.F.Nos. 536, 537/1, 537/2 and 537/3 of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District for **Tvl. VKP Engineering Ind Private Limited,** Thiru. P. Jagatheesan is a director, residing at No.11/32, Vettukattu Valasu, Ingur, Perundurai, Erode District, Tamil Nadu State–638 052. Since the Mining Plan is prepared as per the provisions contained in Rule 15(I)(a) and (I)(b) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016.

Signature of the Qualified Person

Dr. P. Thangaraju, M.Sc., Ph.D.,

Place: Salem
Date: 30.07.2024

Dr. P. Thangaraju, M.Sc., Ph.D.,
Regd. off. No.17, Advaitha Ashram Road,
Alagapuram, Salem – 636 004.
Cell: 94433 56539.

GEOLOGY AND MINING * TIRUPUR * ASSISTANT DIRECTOR *

CERTIFICATE FROM THE QUALIFIED PERSON

This is to certify that the Provisions of Prepared under Rules 41 & 42 as Amended in Tamil Nadu Minor Mineral Concession Rules, 1959. The preparation of Mining Plan and Progressive Quarry Closure Plan for Peruntholavu Rough Stone and Gravel Quarry lease applied area over an extent of 4.51.0 Hectares Patta lands in S.F.Nos. 536, 537/1, 537/2 and 537/3 of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared for

Tvl. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

Whenever specific permissions / exemptions / relaxations and approvals are required, the applicant will approach the concerned authorities of the Deputy Director (i/c), Department of Geology and Mining, Tiruppur District, Tamil Nadu State for such permissions / exemptions / relaxations and approvals.

It is also certified that information furnished in the above Mining Plan are true and correct to the best of my knowledge.

Signature of the Qualified Person

Dr. P. Thangaraju, M.Sc., Ph.D.,

Place: Salem
Date: 30.07.2024

Dr. P. Thangaraju, M.Sc., Ph.D.,
Regd. off. No.17, Advaitha Ashram Road,
Alagapuram, Salem – 636 004.
Cell: 94433 56539.

GEOLOGY AND MINING * TIRUPUR * ASSISTANT DIRECTOR *

CERTIFICATE FROM THE QUALIFIED PERSON

Certified that the Provisions of Mines Act, Rules and Regulations or Orders made there under have been observed in the preparation of Mining Plan and Progressive Quarry Closure Plan for Peruntholavu Rough Stone and Gravel Quarry lease applied area over an extent of 4.51.0 Hectares Patta lands in S.F.Nos. 536, 537/1, 537/2 and 537/3 of Peruntholavu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State has been prepared for

Tvl. VKP Engineering Ind Pvt., Ltd.,
Thiru. P. Jagadeesan, Director
No.11/32, Vettukattu Valasu,
Ingur, Perundurai,
Erode District,
Tamil Nadu State– 638 052.

Whenever specific permissions / exemptions / relaxations and approvals are required, the Applicant will approach the concerned authorities of Director of Mines Safety (DMS), No.5, II Street, Block–AA, Anna Nagar, Chennai-40, Tamil Nadu State for such permissions / exemptions / relaxations and approvals.

It is also certified that information furnished in the Mining Plan are true and correct to the best of my knowledge.

Signature of the Qualified Person

Dr. P. Thangaraju, M.Sc., Ph.D.,

Place: Salem
Date: 30.07.2024

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MINING PLAN ALONG WITH PROGRESSIVE QUARRY CLOSURE PLAN FOR PERUNTHOLUVU ROUGH STONE AND GRAVEL.

(PREPARED UNDER RULES 41 & 42 AS PER THE AMENDMENT OF TAMIL NADU MINOR MINERAL CONCESSION RULES, 1959)

1.0 INTRODUCTION AND EXECUTIVE SUMMARY

The Company **Tvl. VKP Engineering Ind Private Limited,** Thiru. P. Jagadheesan is a Director, residing at No.11/32, Vettukattuu Valasu, Ingur, Perunthurai, Erode District, Tamil Nadu State– 638 052 has entrust and given consent to preparation of Mining plan and Progressive Mine Closure Plan as per the provisions of Mines Act, Rules, Regulations and as amended till date.

The Company has applied quarry lease for quarrying of Rough stone and Gravel over an extent of 4.51.0 Hectares Patta lands in S.F.Nos. 536, 537/1, 537/2 and 537/3 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State for a period of ten years under Rules 19 of Tamil Nadu Minor Mineral Concession Rules, 1959. The following are the statutory requirements with respect to Rough stone and Gravel quarry (Refer Annexure No. I).

1. Tvl. VKP Engineering Ind Private Limited, Director: Thiru. P. Jagatheesan residing at No. 11/32, Vettukadu Valasu, Ingur, Perunthurai, Erode District applicant application Dated: 22.09.2023.
2. Deputy Director(i/c), Department of Geology and Mining, Tiruppur, letter Rc.No. 668/Mines/2023 dated: 22.09.2023.
3. The Tashildar, Tiruppur South letter R.C.No.3642/2024/A1 dated: 15.02.2024.
4. The Sub Collector(i/c), Tiruppur, Letter Roc. No.5353/2023/A3 dated: 05.05.2024.
5. The Block Development Officer, Pongalur letter R.c.No.1200/2024/A2 dated:23.05.2024.
6. Assistant Geologist, Department of Geology and Mining, Tiruppur, inspection report dated: 11.06.2024.
7. Other related Documents.

The application was examined, Scrutinized, Inspected and processed by the Deputy Director(i/c), Department of Geology and Mining, Tiruppur and issued a Precise Area Communication letter vide letter **R.C. No. 668/Mines/2023, dated: 24.07.2024** for preparation of Mining plan as per the Rule 41 & 42 of Tamil Nadu Minor Mineral Concession Rules, 1959 within 90 days and getting approval from the Department of Geology and Mining, Tiruppur to obtain Environmental Clearance from the State Level Environment Impact Assessment Authority (SEIAA), Tamil Nadu, with the following conditions to provide (Refer Annexure No. I):

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General Conditions:

- The quarried out minerals should be transported after paid the necessary seniorage fee as per Appendix- II of Tamil Nadu Minor Mineral Concession Rules, 1959.
- A safety distance of 7.5 meters should be provided to the adjacent patta lands from the lease applied area.
- Quarrying should be carried out using low explosives with qualified blaster.
- The applicant should submit the DGPS survey report for the area applied for lease area.
- Explosives should be carried out by experienced explosives operators using low power explosives without No Encroachment shall be caused to the adjacent Government Poramboke lands and Patta lands while quarry operation.
- As per the rules, approved mining plan should be submitted within due time.
- The applicant should submit the Mining plan and Environmental Clearance before grant of quarry lease.

Specific conditions as prescribed in the precise area communication letter:

- A safety distance of 10m should be provided to the Cart track situated on the North Side of the lease applied area.

This Mining Plan along with Progressive Mine closure Plan is prepared in full consultation with **Tvl. VKP Engineering Ind Private Limited,** Thiru. P. Jagadheesan is a director residing at No.11/32, Vettukadu Valasu, Ingur, Perunthurai, Erode District, Tamil Nadu State– 638 052 for Rough stone and Gravel quarry over an extent of 4.51.0 Hectares Patta lands in S.F.Nos. 536, 537/1, 537/2 and 537/3 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State under Rules 19 of Tamil Nadu Minor Mineral Concession Rules, 1959 with obtained full consent as per the application and Production schedule in preparation of Mining plan as per the provisions of Mines Act, Rules, Regulations as on date.

The Mining plan has been prepared after carrying the field survey, collection of Primary & secondary data, environmental setting, geological features and tentatively estimated the Resources & Reserves, depth of mining as identified in the field with best our knowledge and experience. This mining plan is prepared by considering the Rule 41 & 42 as Amended in Tamil Nadu Minor Mineral Concession Rules, 1959 and as per the EIA Notification 2006 and its subsequent Amendments.

In order to ensure compliance of the order of the Honourable Supreme Court Dated: 27.02.2012 in I.A.No.12-13 of 2011 in Special Leave Petition (SLP) (C) No 19628-19629/2009, it has been now decided that all mining projects of minor minerals including their renewal is require prior environmental clearance. As per amendment in EIA Notification 2006 vide S.O. 1886(E), Dated:20.04.2022 "All mining lease area in respect of minor mineral mining leases and $\leq$ 250 ha mining lease area in respect of major mineral mining lease other than coal" would be treated as category B and will be considered by the state notified by Ministry of Environment, Forest and Climate Change as prescribed procedure under EIA notification 2006.

The field survey carried out by the Qualified Person and Team as on 27.07.2024.

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Short Notes of Mining plan:

a. Village Panchayat - Peruntholuvu

b. Panchayat Union - Pongalur

c. Total extent of the lease applied area is 4.51.0Ha.

d. Topography of the area - The area is Undulated topography.

e. The Estimated Reserves and Resources are given table below:

The applicant intends to apply and obtain permission from Director of Mines Safety, Chennai Under Regulation 111(3) of Metalliferous Mines Regulations, 1961 for **amalgamating with the two adjacent mine lease boundaries on the Western side of this lease applied area belongs to the same Company Tvl. VKP Engineering Ind Private Limited one is existing quarry over an extent 4.94.95 Ha of Patta land in S.F.Nos. 538/1(P), 539/1(P) and 539/2(P) and another proposed quarry lease** area for **over an extent 2.90.0 Ha of Patta land in S.F.Nos. 538/2A(P), 538/2B and 539/2B,** This relaxation for amalgamating the mine boundaries will be applied only after grant of this lease by the provision given under Rule 111(1) of Metalliferous Mines Regulations, 1961 (Refer Plate No. VI). The mineral reserves locked up under safety distance and benches will be removed only after obtained permission and approval from the competent authority.

Hence, the mineral reserves are calculated with two categories, one is Amalgamating the mine boundaries on the Western side as requested by the company (Refer Plate No. III) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. III-A). The Estimated Reserves and Resources are given table below:

Table – 1

Description			Rough stone (m^3)	Weathered rock (m^3)	Gravel (m^3)
Estimated Geological Resources			27,37,500	4,22,845	91,250
Tentative Mineable Reserves	As per proposed amalgamating mine boundaries		10,13,030	3,24,228	78,180
	After leaving safety distance and Benches		8,33,355	3,05,978	75,408
Proposed production for Ten years lease period	As per Amalgamating mine Boundaries	Proposal for 1st Five years	5,02,910	3,24,228	78,180
		Proposal for 2nd Five years	5,10,120	-	-
		Peak Production 3rd Year	2,55,165	69,700	13,860
	After leaving safety distance and Benches	Proposal for 1st Five years	4,17,670	3,05,978	75,408
		Proposal for 2nd Five years	4,15,685	-	-
		Peak Production 3rd Year	2,04,630	70,488	19,800

The EIA and EMP will be prepared for maximum reserves and the Impact will be accounting an annual peak production value.

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TIRUPUR * ASSISTANT DIRECTOR * GE

f. Proposed Depth of mining = 72m [12m AGL + 60 BGL] (R.L. 330m – 258m).

g. Lease Period = Ten years

h. Mining Plan Period = Five years

i. It is a fresh lease applied area, at present the area is virgin. Hence no existing pit.

j. Method of mining / level of mechanization.

Opencast mechanized method.

k. Type of machineries proposed in the quarrying operation is given below.

Excavators attached with 0.90m³ Bucket and rock breaker.

Crawler Mounted Drill machine - 110mm diameter drill,

Jack hammer, Compressor (Diesel drive) (4 Jack hammer capacity)

Trucks.

l. No trees will be uprooted due to this quarry operation.

m. The approach road from the main road to quarry will be constructed and same has been maintained in a good condition for the haulage of quarry materials and machineries.

n. There is No Export of this Rough stone and Gravel.

o. Topo sketch covering 10km and 1km radius around the proposed area with markings of habitations, water bodies including streams, rivers, roads, major structure like bridges, wells, archaeological importance and places of worships is marked and enclosed as Plate Nos. IA & IB.

p. The lease applied area is about 4.51.0Ha bounded by ten corners; the corners are designated as 1 – 12 clockwise from the Southwest corner and the Co – ordinates for all the corners are clearly marked in the Quarry Lease Plan and Surface Plan enclosed as Plate No. II.

q. The plans of proposed quarrying area showing the dimensions of the pit, their proposed depth and maximum area of proposed quarrying are enclosed as Plate Nos. IV, IV-A, V and V-A.

r. General conditions will not applicable for the proposed area. The area applied for lease is 10Km away from the,

i) Interstate Boundary,

ii) Protected area under wild life protection ACT, 1972,

iii) Critically polluted areas as identified by CPCB,

iv) Notified Eco sensitive areas.

s. There is no waste anticipated during this quarry operation, hence waste dump is not proposed.

t. Around 38 employees are proposed to deploying the quarrying operation.

u. Total Cost of the project is about **Rs. 6,25,35,000/-.**

2.0 GENERAL INFORMATION

2.1 a) Name of the Applicant : **Tvl. VKP Engineering Ind Private Limited.**
Thiru. P. Jagadheesan is a director

b) Address of the Applicant (With Phone No and Aadhaar No.)

Address	:	No.11/32, Vettukadu Valasu, Ingur, Perunthurai, Erode District,
State with Pin Code	:	Tamil Nadu – 638 052.
Mobile No	:	+91 98428 30265 and 98422 30265
Aadhaar No	:	7091 1371 8745 (Refer Annexure No. X)
E-mail	:	vkpeindpvtltd@gmail.com

c) Status of the Applicant (Individual / Company / Firm):

The applicant is a Private limited company. incorporated with five Directors under the companies act 2013 (Refer Annexure No. VIII). Thiru P. Jagadheesan is an authorized person to signing all the documents on behalf of the company (Refer Annexure No. IX)

2.2 a) Mineral which the Applicant intends to mine:

The Applicant intends to quarry Rough stone and Gravel only.

b) Precise area communication letter details received from the Competent Authority of the Government:

The precise area communication letter was received from the Deputy Director, Department of Geology and Mining, Tiruppur District vide **R.C. No. 668/Mines/2023, dated: 24.07.2024** (Refer Annexure No. I) and was given to us for the preparation of mining plan to meet out the applicant production schedule.

c) Period of permission / lease to be granted:

Ten Years as mentioned in Precise area Communication letter.

d) Name and address of the Qualified Person who preparing the Mining Plan:

Name	:	**Dr. P. Thangaraju, M.Sc., Ph.D.,** Qualified Person (As per Rule 15(I)(a) and (I)(b) of MCR, 2016)
Address	:	No.17, Advaitha Ashram Road, Alagapuram, Salem District – 636 004.
Mobile	:	+91 94433 56539.
Email	:	infogeoexploration@gmail.com

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ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

3.0 LOCATION AND ACCESSIBILITY:

a) Details of the area with location map:

The lease applied area is about 14.7km Southeatern side of Tiruppur, 11.6km Northwestern side of Kangayam and 3.8km Northeastern side of Peruntholuvu Village.

	26.5km		14.7km		3.8km	
Tiruppur	→	Kangayam	→	Peruntholuvu	→	Lease applied area
	Southeast		Northwest		Northeast	

Location Map of the Lease Applied area

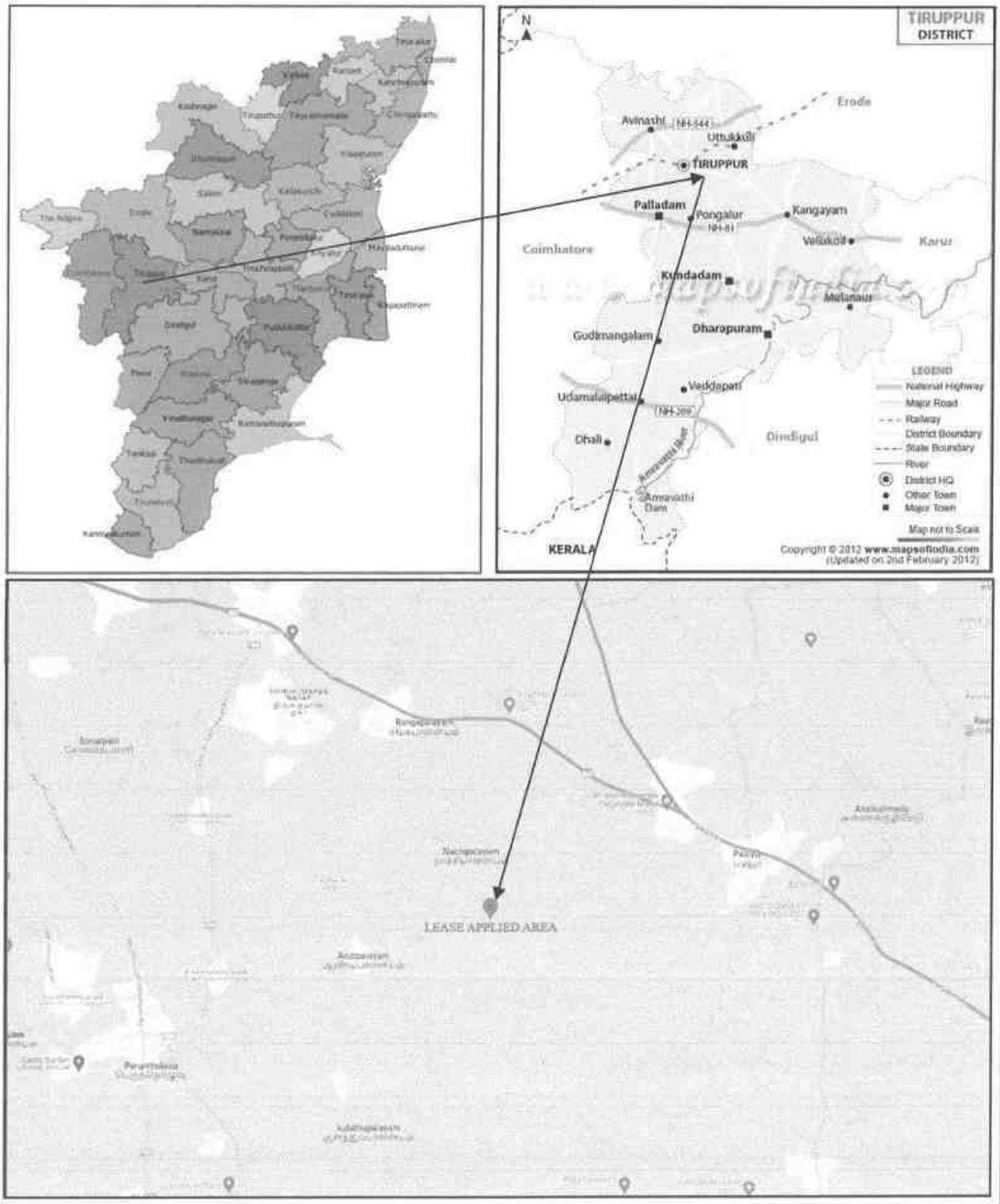


Table – 2

District	Taluk	Village	S.F. No.	Area (Ha.)	Patta No.
Tiruppur	Tiruppur South	Peruntholuvu	536	0.47.0	2138
			537/2	1.27.5	
			537/1	1.39.5	2136
			537/3	1.37.0	
Total Extent				**4.51.0**	

Source: As per the FMB and 'A' register record furnished by the applicant.

b) Classification of the area (Ryotwari/ Poramboke / others):

It is Patta lands, classified as Punsei (Barren land) (Refer Annexure Nos. IV & VI).

c) Ownership / Occupancy of the applied area (surface right):

It is Patta lands, S.F.Nos. 536 & 537/2, jointly registered in the name of Thiru. Palanisamy, Tmt. Bhuvaneswari and Thiru. Gnanasundari vide patta No. 2138 and S.F.No. 537/1, 537/3 registered in the name of applicant (Thiru. P. Jagatheesan Director of Tvl. VKP Engineering Ind Pvt, Ltd), Thiru. Mahendran, Tmt. Bhuvaneswari and Thiru. Gnanasundari vide patta No. 2136 (Refer Annexure Nos. IV & VI). The Company has obtained consent form the Pattadhar (Refer Annexure No. VII).

d) Toposheet No. with latitude and longitude:

The lease applied area falls in the Toposheet No: **58 E/08** Latitude between: **11°03'21.3662"N to 11°03'28.4846"N** and Longitude between: **77°27'54.6440"E to 77°28'03.4751"E** on WGS datum-1984. Please refer the Plate Nos. I to II as per the GSI Toposheet.

e) Existence of public road / Railway line, if any nearby and approximate distance:

The approach road is situated on the Eastern side which is connects to the Cart track located at 180m on Northern side of the lease applied area.

Road access is available from the quarry to State Highways and National Highway, no towns are enrooted hence the traffic density is not much more due to the transportation of Rough stone and Gravel.

The approach road from the quarry will be constructed and the same has been utilized for haulage and maintained during the entire lease period.

The Nearest Railway line is Coimbatore - Salem which is located about 10.8km on the Northwestern side of the area as per the GSI Toposheet and Google Map.

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PART – A

4.0 GEOLOGY AND MINERAL RESERVES

4.1 Brief description of the Topography and general Geology of the area (with plans):

The lease applied area is exhibits Undulated topography. The area has gentle sloping towards Eastern side and altitude of the area varies from 325m to 330m above from Mean Sea Level. The area is covered by 2m thickness of Gravel, 10m Weathered rock and followed by Massive Charnockite which is clearly inferred from the adjacent existing quarry pit. The Water level in the surrounding area is 96m – 93m below from general ground profile which is observed from the nearby bore wells. Average annual rainfall is about 607mm.

Peninsular gneiss forms the oldest rock formations, in which the massive formation of Charnockite lies over with rich accumulation of recent quaternary formation. On regional scale of the Charnockite body is N40°E – S40°W with dipping towards SE60°.

The general geological sequences of the rocks in this area are given below:

AGE		FORMATION
Recent	-	Quaternary formation (Gravel)
---------Unconformity----------		
Archaean	-	Charnockite
		Peninsular Gneissic complex

4.2 Details of exploration already carried out if any:

State Geology and Mining Dept, Govt. of Tamil Nadu, has carried out the regional prospecting and exploration in these areas during 1992 to 1993.

Geological Survey of India has carried out detailed mapping in Tiruppur District. Besides, the Qualified Person and his team members made a detailed geological study of the proposed area. The Rough stone formation is clearly inferred from the adjacent existing quarry pit.

4.3 Estimation of Reserves:

a) Geological Resources with geological sections on a scale of 1:1000 / 1:2000

As far as Rough stone (Charnockite) is concerned, the only practical method is the systematic geological mapping and delineation of Rough stone within the field and careful evaluation of body luster, physical properties, engineering properties, commercial aspects etc.,

Totally two sections have been drawn, one section drawn length wise as (X-Y) and other two cross sections are drawn Width wise as (A-B and C-D) to cover the maximum area considered for lease upto 72m depth [2m Gravel + 10m Weathered rock + 60m Rough stone].

The Topographical, Geological plan and sections demarcated the commercial marketable Rough stone (Charnockite) deposit has been prepared in the scale of 1:1000 (please refer the Geological plan and sections Plate Nos. III and VII). As the sale of Rough stone are in terms of cubic metres (Volume) only and not in terms of tonnage. No Exploration has been carried out.

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Estimation of Geological Resources (Plate No. III):

The Geological Resources are calculated up to a depth of 72m [2m Gravel + 10m Weathered rock + 60m Rough stone]. The total geological resources are given table below:

TABLE – 3

Section	Bench	Length (m)	Width (m)	Depth (m)	Rough Stone @ 100% (m^3)	Weathered Rock (m^3)	Gravel (m^3)
XY-AB	i	135	173	2	-	-	46710
	ii	135	173	5	-	116775	-
	iii	135	173	5	-	116775	-
	iv	135	173	5	116775	-	-
	v	135	173	5	116775	-	-
	vi	135	173	5	116775	-	-
	vii	135	173	5	116775	-	-
	viii	135	173	5	116775	-	-
	ix	135	173	5	116775	-	-
	x	135	173	5	116775	-	-
	xi	135	173	5	116775	-	-
	xii	135	173	5	116775	-	-
	xiii	135	173	5	116775	-	-
	xiv	135	173	5	116775	-	-
	xv	135	173	5	116775	-	-
Total					**1401300**	**233550**	**46710**
XY-CD	i	131	170	2	-	-	44540
	ii	131	170	3.5	-	77945	-
	iii	131	170	5	-	111350	-
	iv	131	170	5	111350	-	-
	v	131	170	5	111350	-	-
	vi	131	170	5	111350	-	-
	vii	131	170	5	111350	-	-
	viii	131	170	5	111350	-	-
	ix	131	170	5	111350	-	-
	x	131	170	5	111350	-	-
	xi	131	170	5	111350	-	-
	xii	131	170	5	111350	-	-
	xiii	131	170	5	111350	-	-
	xiv	131	170	5	111350	-	-
	xv	131	170	5	111350	-	-
Total					**1336200**	**189295**	**44540**
Grand Total					**2737500**	**422845**	**91250**

The Geological Resources of Gravel : **91,250m^3**

Total Geological Resources of Weathered rock : **4,22,845m^3**

The Geological Resources of Rough Stone : **27,37,500m^3**

Geological Resources has been computed based on the physical investigation and filed survey data.

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Tentative Mineable Reserves (Refer Plate No. III and III-A):

The Tentative mineable reserves are estimated after deducting the mineral locked up under safety distance, bench loss and existing quarry pit.

TABLE – 4

MINEABLE RESERVE – **AFTER LEAVING SAFETY DISTANCE AND BENCHES**							
Section	**Bench**	**Length (m)**	**Width (m)**	**Depth (m)**	**Rough Stone @ 100% (m^3)**	**Weathered Rock (m^3)**	**Gravel (m^3)**
XY-AB	i	126	154	2	-	-	38808
	ii	125	152	5	-	95000	-
	iii	120	142	5	-	85200	-
	iv	115	131	5	75325	-	-
	v	110	121	5	66550	-	-
	vi	105	111	5	58275	-	-
	vii	100	101	5	50500	-	-
	viii	95	91	5	43225	-	-
	ix	90	81	5	36450	-	-
	x	85	70	5	29750	-	-
	xi	80	60	5	24000	-	-
	xii	74	50	5	18500	-	-
	xiii	69	40	5	13800	-	-
	xiv	64	30	5	9600	-	-
	xv	59	20	5	5900	-	-
Total					**431875**	**180200**	**38808**
XY-CD	i	122	150	2	-	-	36600
	ii	121	108	3.5	-	45738	-
	iii	116	138	5	-	80040	-
	iv	111	128	5	71040	-	-
	v	106	118	5	62540	-	-
	vi	101	108	5	54540	-	-
	vii	96	98	5	47040	-	-
	viii	91	88	5	40040	-	-
	ix	86	78	5	33540	-	-
	x	81	68	5	27540	-	-
	xi	76	58	5	22040	-	-
	xii	71	48	5	17040	-	-
	xiii	66	38	5	12540	-	-
	xiv	61	28	5	8540	-	-
	xv	56	18	5	5040	-	-
Total					**401480**	**125778**	**36600**
Grand Total					**833355**	**305978**	**75408**

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The applicant intends to apply and obtain permission from Director of Mines Safety, Chennai for **amalgamating with the two adjacent mine lease boundaries on the Western side of this lease applied area belongs to the same Company Tvl. VKP Engineering Ind Private Limited one is existing quarry over an extent 4.94.95 Ha of Patta land in S.F.Nos. 538/1(P), 539/1(P) and 539/2(P) and another proposed quarry lease** area for **over an extent 2.90.0 Ha of Patta land in S.F.Nos. 538/2A(P), 538/2B and 539/2B,** This relaxation for amalgamating the mine boundaries will be applied only after grant of this lease by the provision given under Rule 111(1) of Metalliferous Mines Regulations, 1961 (Refer Plate No. VI). The mineral reserves locked up under safety distance and benches will be removed only after obtained permission and approval from the competent authority.

Hence, the mineral reserves are calculated with two categories, one is Amalgamating the mine boundaries on the Western side as requested by the company (Refer Plate No. III) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. III-A). The Estimated Mineable Reserves are given table below.

TABLE – 4A

TENTATIVE MINEABLE RESERVE AS PER PROPOSED AMALGAMATING MINE BOUNDARIES ON THE WESTERN SIDE

Section	Bench	Length (m)	Width (m)	Depth (m)	Rough Stone @ 100% (m^3)	Weathered Rock (m^3)	Gravel (m^3)
XY-AB	i	135	154	2	-	-	41580
	ii	135	152	5	-	102600	-
	iii	135	142	5	-	95850	-
	iv	135	131	5	88425	-	-
	v	135	121	5	81675	-	-
	vi	135	111	5	74925	-	-
	vii	135	101	5	68175	-	-
	viii	135	91	5	61425	-	-
	ix	135	81	5	54675	-	-
	x	135	70	5	47250	-	-
	xi	135	60	5	40500	-	-
	xii	135	50	5	33750	-	-
	xiii	135	40	5	27000	-	-
	xiv	135	30	5	20250	-	-
	xv	135	20	5	13500	-	-
Total					**611550**	**198450**	**41580**

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XY-CD	i	122	150	2	-	-	36600
	ii	121	108	3.5	-	45738	-
	iii	116	138	5	-	80040	-
	iv	111	128	5	71040	-	-
	v	106	118	5	62540	-	-
	vi	101	108	5	54540	-	-
	vii	96	98	5	47040	-	-
	viii	91	88	5	40040	-	-
	ix	86	78	5	33540	-	-
	x	81	68	5	27540	-	-
	xi	76	58	5	22040	-	-
	xii	71	48	5	17040	-	-
	xiii	66	38	5	12540	-	-
	xiv	61	28	5	8540	-	-
	xv	56	18	5	5040	-	-
Total					**401480**	**125778**	**36600**
Grand Total					**1013030**	**324228**	**78180**

The mineable reserves have been computed as **10,13,030m³** of Rough stone at the rate of 100% recovery, **3,24,228m³** of Weathered rock and **78,180m³** of Gravel for a period of Ten years up to a depth of 72m.

5.0 MINING

5.1. Method of mining (opencast / underground):

Open cast Mechanized Mining is being carried out with 5.0 meter vertical bench with a bench width is not less than the bench height.

However, as far as the quarrying of Rough Stone is concerned, observance of the provisions of Regulation 106 (2) (b) is available with Director General of Mines Safety. If the applicant/lessee intends to modify the dimensions of benches, relaxation and permission are available with Director General of Mines Safety under 106 (2) (b) of Metalliferous Mines Regulations, 1961.

The applicant intends to apply and obtain permission from Director of Mines Safety, Chennai for amalgamating the mine boundaries with adjacent existing and proposed quarry lease under Regulation 111(3) of Metalliferous Mines Regulations, 1961. The relaxation will be applied and obtained after execution of lease deed/ commencement of quarry operation. In such a scenario if there is any drastic change in the Resources and Reserves a modified plan will be submitted to the concerned authority for necessary relaxation, clearance and permission.

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5.2. Mode of working (mechanized/ manual):

The Rough Stone is proposed to quarry at 5m bench height & width with conventional Opencast Mechanized Method.

The quarry operation involves Drilling, Blasting, Rock breaking, Excavation, Loading and Transportation of Rough Stone to the needy crusher.

The production of Rough stone in this quarry involves the following method which is typical for Rough Stone quarrying in contrast to other major mineral mining.

Splitting of rock mass by considerable volume from the parent rock mass by drilling with Crawler Mounted drill machine, Hand Jack Hammer drilling and blasting, the liberated Rough stone will be loaded into the Trucks by hydraulic excavators are used for loading the Rough Stone from pithead to the needy crushers.

Hydraulic excavators are attached with rock breakers for fragmentation of large boulders to avoid secondary blasting and easy handling of material. The primary boulders thus splitted are removed from the pits by excavators and further made to smaller sizes by rock breakers attached in excavators. It is a conventional opencast mechanized method of mining.

5.3. Proposed Bench Height and Width:

The bench height is proposed 5.0meter vertical bench the width of the bench is not less than the Height. After obtaining relaxation as per 106 2(b) and 111(3) of Metalliferous Mines Regulations, 1961 from the DMS, the realignment of benches will be carried out.

5.4. Indicate the overburden / mineral production expected pit wise as detailed below (composite plan and section showing pit layout, dumps, disposal of waste if any etc.):

The yearwise proposed production schedule are arrived with two categories based on the company's requirement, one is Amalgamating the mine boundaries on the South and Eastern side as requested by the company (Refer Plate No. IV, IV-A) and another category is leaving the safety distance and Benches on all sides (Refer Plate No. V and V-A).

The overburden in the form of Gravel and Weathered rock. The proposed and existing gravel and Weathered rock will be directly loaded into Truck for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fees to the Government. The excavated Rough stone will be directly loaded into trucks to the needy customers. The Composite year wise Development and production plan and sections indicating the Pit lay out, Greenbelt development are shown in Plate No. IV, IV-A, V and V-A.

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YEAR WISE DEVELOPMENT AND PRODUCTION – AFTER LEAVING SAFETY AND BENCHES ON ALL SIDES

TABLE – 5

YEAR WISE DEVELOPMENT AND PRODUCTION FOR FIRST FIVE YEARS (Refer Plate No. IV-A)

Year	Section	Bench	Length (m)	Width (m)	Depth (m)	Rough Stone @ 100% (m^3)	Weathered Rock (m^3)	Gravel (m^3)
I	XY-AB	i	102	154	2	-	-	31416
		ii	100	152	5	-	76000	-
		iii	90	142	5	-	63900	-
		iv	80	131	5	52400	-	-
	Total					**52400**	**139900**	**31416**
II	XY-AB	i	24	154	2	-	-	7392
		ii	25	152	5	-	19000	-
		iii	30	142	5	-	21300	-
		iv	35	131	5	22925	-	-
	XY-CD	i	56	150	2	-	-	16800
		ii	55	108	3.5	-	20790	-
		iii	50	138	5	-	34500	-
		iv	45	128	5	28800	-	-
	Total					**51725**	**95590**	**24192**
III	XY-AB	v	110	121	5	66550	-	-
		vi	60	111	5	33300	-	-
	XY-CD	i	66	150	2	-	-	19800
		ii	66	108	3.5	-	24948	-
		iii	66	138	5	-	45540	-
		iv	66	128	5	42240	-	-
		v	106	118	5	62540	-	-
	Total					**204630**	**70488**	**19800**
IV	XY-AB	vi	45	111	5	24975	-	-
	XY-CD	vi	58	108	5	31320	-	-
	Total					**56295**	-	-
V	XY-CD	vi	43	108	5	23220	-	-
		vii	60	98	5	29400	-	-
	Total					**52620**	-	-
Grand Total						**417670**	**305978**	**75408**

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TABLE – 5A

YEARWISE DEVELOPMENT AND PRODUCTION FOR SECOND FIVE YEARS – (Refer Plate No. V-A)

Year	Section	Bench	Length (m)	Width (m)	Depth (m)	Rough Stone @ 100% (m^3)
VI	XY-AB	vii	100	101	5	50500
	Total					**50500**
VII	XY-AB	viii	95	91	5	43225
		ix	90	81	5	36450
		x	85	70	5	29750
	XY-CD	vii	36	98	5	17640
		viii	91	88	5	40040
		ix	86	78	5	33540
	Total					**200645**
VIII	XY-CD	x	81	68	5	27540
		xi	76	58	5	22040
	Total					**49580**
IX	XY-AB	xi	80	60	5	24000
		xii	74	50	5	18500
	XY-CD	xii	71	48	5	17040
	Total					**59540**
X	XY-AB	xiii	69	40	5	13800
		xiv	64	30	5	9600
		xv	59	20	5	5900
	XY-CD	xiii	66	38	5	12540
		xiv	61	28	5	8540
		xv	56	18	5	5040
	Total					**55420**
Grand Total						**415685**

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YEAR WISE DEVELOPMENT AND PRODUCTION AS PER AMALGAMATING THE MINE BOUNDARIES ON THE WESTERN SIDE

TABLE – 6

YEAR WISE DEVELOPMENT AND PRODUCTION FOR FIRST FIVE YEARS (Refer Plate No. IV)

Year	Section	Bench	Length (m)	Width (m)	Depth (m)	Rough Stone @ 100% (m^3)	Weathered Rock (m^3)	Gravel (m^3)
I	XY-CD	i	119	150	2	-	-	35700
		ii	117	108	3.5	-	44226	-
		iii	107	138	5	-	73830	-
		iv	97	128	5	62080	-	-
	Total					**62080**	**118056**	**35700**
II	XY-AB	i	90	154	2	-	-	27720
		ii	90	152	5	-	68400	-
		iii	85	142	5	-	60350	-
		iv	80	131	5	52400	-	-
	XY-CD	i	3	150	2	-	-	900
		ii	4	108	3.5	-	1512	-
		iii	9	138	5	-	6210	-
		iv	14	128	5	8960	-	-
	Total					**61360**	**136472**	**28620**
III	XY-AB	i	45	154	2	-	-	13860
		ii	45	152	5	-	34200	-
		iii	50	142	5	-	35500	-
		iv	55	131	5	36025	-	-
		v	135	121	5	81675	-	-
		vi	135	111	5	74925	-	-
	XY-CD	v	106	118	5	62540	-	-
	Total					**255165**	**69700**	**13860**
IV	XY-CD	vi	101	108	5	54540	-	-
		vii	16	98	5	7840	-	-
	Total					**62380**	**-**	**-**
V	XY-CD	vii	80	98	5	39200	-	-
	XY-AB	vii	45	101	5	22725	-	-
	Total					**61925**	**-**	**-**
Grand Total						**502910**	**324228**	**78180**

The Recoverable reserves have been computed as **5,02,910m³** of Rough stone at 100% recovery, **3,24,228** of Weathered rock and **78,180** of Gravel for first five years upto a depth of 32m [12m above ground level + 20m below ground level] (Refer Plate No. IV).

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TABLE – 6A

YEARWISE DEVELOPMENT AND PRODUCTION FOR SECOND FIVE YEARS – (Refer Plate No. V)

Year	Section	Bench	Length (m)	Width (m)	Depth (m)	Rough Stone @ 100% (m^3)
VI	XY-AB	vii	90	101	5	45450
		viii	135	91	5	61425
		ix	135	81	5	54675
	XY-CD	viii	91	88	5	40040
		ix	86	78	5	33540
		x	58	68	5	19720
	Total					**254850**
VII	XY-AB	x	135	70	5	47250
		xi	30	60	5	9000
	XY-CD	x	23	68	5	7820
	Total					**64070**
VIII	XY-AB	xi	105	60	5	31500
	XY-CD	xi	76	58	5	22040
		xii	40	48	5	9600
	Total					**63140**
IX	XY-AB	xii	135	50	5	33750
		xiii	135	40	5	27000
	XY-CD	xii	31	48	5	7440
	Total					**68190**
X	XY-AB	xiv	135	30	5	20250
		xv	135	20	5	13500
	XY-CD	xiii	66	38	5	12540
		xiv	61	28	5	8540
		xv	56	18	5	5040
	Total					**59870**
Grand Total						**510120**

The Recoverable reserves have been computed as **5,10,120m^3** of Rough stone at 100% recovery to a depth of 72m below from existing ground profile for remaining five years of the lease period (Refer Plate No. IV-A). Total excavation will be proposed **10,13,030m^3** of Rough stone **3,24,228m^3** of Weathered rock and **78,180m^3** of Gravel for the period of ten years. The peak production capacity in the quarry is 2,55,165m^3 of Rough stone on 3rd year and the proposed production schedule is arrived as per applicant's requirement and the EIA and EMP will be prepared an annual peak production.

The applicant ensures the total quantity proposed in the benches will not exceed during the quarrying operation. Besides the rough stone locked up in benches will be exploited after obtaining necessary permission from the office of Director of Mine Safety, Chennai region by submitting relevant documents, appropriate safety plans and its Mitigation measures.

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One lorry load	=	12m³ (approx.)
Total No of Working days	=	300 Days per year
Total quantity to be removed during the ten years lease period	=	10,13,030m³
Peak production capacity during the 3rd year	=	2,55,165m³
Hence total Lorry loads per day	=	2,55,165m³/12m³
	=	21,264 Lorry loads
	=	21,264/300 days
Rough Stone (Maximum)	=	**71 Lorry loads per day**
Total Weathered rock to be removed during 3rd year	=	69,700m³
Hence total Lorry loads per day	=	69,700m³/12m³
	=	5,808 Lorry loads
	=	5,808/300 days
Weathered rock	=	**19 Lorry loads per day**
Total Gravel to be removed during 3rd year	=	13,860m³
Hence total Lorry loads per day	=	13,860m³/12m³
	=	1,155 Lorry loads
	=	1,155/300 days
Gravel	=	**4 Lorry loads per day**

Working hours = 9.00 am to 6.00 pm (with 1.00-2.00 P.M. lunch break).

5.5. Machineries to be used:

For Mining:

The following machineries are utilized for the development and production work at this quarry.

TABLE – 7

I. DRILLING MACHINE:

S. No.	Type	Nos.	Dia Hole mm	Size Capacity	Motive power
1	Crawler mounted drill machine	2	110	3m to 9m	Diesel Drive
2	Hand Jackhammer	4	32	1.2m to 2.0m	Air Compression
3	Compressor	1	-	400 psi	Diesel Drive

II. EXCAVATION & LOADING EQUIPMENT:

S. No.	Type	Nos.	Capacity	Motive Power
1	Excavator with Bucket and Rock Breaker	3	300	Diesel Drive

III. HAULAGE WITHIN THE MINE & TRANSPORT EQUIPMENT:

S. No.	Type	Nos.	Capacity	Motive Power
1	Truck	4	30 tonnes	Diesel Drive
2	Water Sprinkling Tanker	1	10,000 litres	Diesel Drive

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5.6. Disposal of Overburden/Waste:

There is no Waste anticipated during this plan period hence, disposal of waste does not arise. The overburden in the form of Gravel and Weathered rock. The quarried out and existing gravel and Weathered rock will be directly loaded into Truck for the filling and levelling of low-lying areas, this will be done only after obtaining permission and paying necessary seigniorage fees to the Government. The excavated rough stone (100%) will be directly loaded into Trucks to the applicant's own crusher unit situated at adjacent on the Southern side also needy customers.

5.7. Use of the Mineral:

The excavated rough stone (100%) will be directly loaded into Trucks as raw form to the lessee's own crushing unit situated at adjacent on the Southern side also needy nearby crushing unit to making Road metals and construction materials.

5.8. Brief note on conceptual mining plan for the entire lease period base on the geological, mining and environmental considerations:

Conceptual mining plan is prepared with an object of long-term systematic development of benches, layouts, selection of permanent structures, depth of quarrying and ultimate pit dimensions, selection of sites for construction of infrastructure, etc.,

The ultimate pit size is designed based on certain practical parameters such as economical depth of mining, safety zones, permissible area, etc.,

As the applicant has applied quarry lease for Ten years, the ultimate pit limit (dimension) at the end of this mining plan period is given below:

Table – 8

Proposal	Length (m) (Max.)	Width (m) (Max.)	Depth (m) (Max.)
As per proposed Amalgamation	258	155	72m (AGL 12m + 60m BGL) (R.L. 330m – R.L. 258m)
Leaving safety and Benches	250	155	72m (AGL 12m + 60m BGL) (R.L. 330m – R.L. 258m)

All the base line information studies like Air quality monitoring, Noise and vibration monitoring, Water analysis studies will be carried out every year as per the MoEF & CC Norms. As per the NGT orders the applicant is directed to plant 500 trees per hectares along the quarry site and in the haul road either at the regular or the phased manner by planting native species.

There is no waste anticipated during the entire life of quarry. Hence, backfilling is not proposed in this Rough stone quarry. After completion of quarry operation the quarried out pit will be allowed to collect the seepage and rainwater and the water storage will be kept as temporary reservoir for charging the nearby wells and the water will be utilized for Green belt development purpose. The Conceptual Mining is based upon the entire ROM proposed for the life of the quarry.

The quarry area will be fenced with barbed wire fencing also safety bund constructed around the quarry to prevent inadvertent entry of public and cattle (Refer Plate No. VI, VI-A, VII and VII-A).

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6.0 BLASTING

6.1 Blasting pattern:

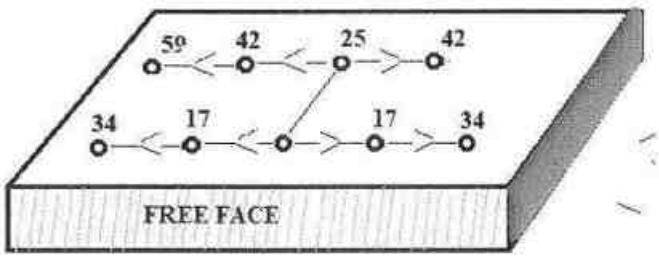
Selection of drilling pattern for blasting varies with the type and size of the drills used, depth of hole, kind of rock, quantity, rapidity of the explosives and amount of steaming. The quarrying operation is proposed to carried out by Crawler mounted drill machine and Jack hammer drilling and blasting of shattering effect for loosen the Rough Stone with NONEL initiation. Crawler mounted machine drilling will be proposed for primary Drilling and blasting for splitting the boulders from parent rock mass followed by rock breaker attached with excavator for secondary fragmentation of large size boulders to avoid secondary blasting. Nonel initiation provides reasonably good solution to fly rock problem. The main objectives of Nonel Blasting are to reduce the ground vibration, noise, flyrocks generated due to blasting operations. The overall cost of blasting in NONEL is very less compared to electrical blasting hence it optimizes the cost of blasting.

Drilling and blasting parameters are as follows:

Depth of Each hole	:	5m
Spacing between holes	:	3.5m
Burden for hole	:	2.75m
Diameter of hole	:	110mm
Pattern of hole	:	Staggered pattern
Inclination of holes	:	80°from horizontal
Use of delay detonators	:	NONEL
Hole to Hole	:	17 milli second delay (ms)
Row to Row	:	25 milli second delay (ms)

BLASTING PATTERN DRAWING

NONEL DELAY PATTERN



Spacing (S)	=	**3.5m**
Burden (B)	=	**2.75m**
Depth of the hole	=	**5m**
No. of holes proposed per day (Peak Production)	=	**18 Holes**

6.2 Type of explosives to be used:

85mm Slurry explosives are proposed to be used for shattering and heaving effect for removal and winning of Rough stone. No secondary blasting is proposed. NONEL blasting and muffle blasting may be adopted after permission from DGMS.

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6.3 Measures proposed to minimize ground vibration due to blasting:

The quarry is situated more than 300m away from the nearby villages. Controlled blasting measures by NONEL initiation is being adopt for minimizing ground vibration and fly rock.

Crawler mounted machine and jackhammer drilling with blasting is proposed to be carried out with minimum use of explosive mainly to give heaving effect in Rough stone for easy excavation and to control fly rock.

NONEL Delay detonators:

NONEL blasting permits for bottom initiation and lesser charge per delay.

The major advantages of NONEL blasting are:

- Reduction of ground vibration.
- Reduction in air blast.
- Reduction in over break.
- Improved fragmentation.
- Better control of fly-rock.

Blasting program for the production per day (As per Peak production capacity):

The Hydraulic excavators are attached with rock breakers for breaking the rock mass to reduce the blasting and explosive usage also to avoid secondary blasting. Anyhow, as per day's production schedule the maximum blasting program proposed as given below.

Peak production (3rd Year)	= 2,55,165m^3 x 2.6(Bulk Density) = 6,63,429 Tons
No of Holes	= 18 Holes
Yield	= 2250 Tons
Powder factor	= 5 Tons/ Kg of explosives
Maximum explosive required	= 450 Kg-Slurry explosives
Charge/ hole	= 25 Kg
Blasting at day time only	= 12.00 – 12.30 P.M. (whenever required)

Anticipated theoretical calculation of PPV

The empirical equation for assessment of peak particle velocity (PPV) is:

$$V = K\,[R/Q^{0.5}]^{-B}$$

Where –

V = peak particle velocity (mm/s)

K = site and rock factor constant

Q = maximum instantaneous charge (kg)

B = constant related to the rock and site (usually 1.6)

R = distance from charge (m)

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PREDICTED PPV VALUES DUE TO BLASTING

Table – 9

Maximum Charge per day (kg)	Number of Round Blast per day	Maximum Charge per Round (kg)	Number of holes blasted per round	Number of holes blasted per day	Maximum Charge blast at a time by NONEL (kg)	Nearest Infrastructure (m)	PPV (mm/s)
450	2	225	9	18	50 (2 Holes)	620	1.297

From the above table, the charge per blast of 225kg is well below the Peak Particle Velocity of 8 mm/s as per Directorate General of Mines Safety for safe level criteria through Circular No. 7 dated 29/8/1997. Anyhow, the applicant ensures that carry out the blasting **twice a day based on the site condition** under the supervision of competent qualified statutory personnel employed. However, as per statutory requirement control measures will be adopted to avoid the impacts due to ground vibrations and fly rocks due to blasting.

6.4 Storage and safety measures to be taken while blasting:

The applicant will engage authorized explosive agency to carry out the small amount of blasting and it will be supervised by competent and statutory foreman/Permit Mines Manager. The explosives agencies should be having the valid Blaster certificate. He will blast holes in the quarry site. After the completion of Blasting the explosives Agencies will take it out back the remaining quantity of Explosives. The Competent Qualified Statutory personnel appointed by the applicant will maintain the records of Explosives as per the Indian Explosives Act.

7.0 MINE DRAINAGE

7.1 Depth of water table (based on nearby wells and water bodies):

The area is a undulatory topography; since the lease applied area consists the most common type of dendritic drainage pattern. The water table in the area is about 96m – 93m which is observed from the existing private boreholes. The lease area is fully covered by Massive Charnockite formation. The quarry operation confined to well above the water table hence, the Ground Water problem will not arise. If water seepage may occur due to the fracture, the same will be used for Greenbelt. Anyhow, Garland drain will be constructed all along the boundary to prevent surface run-off water entering into the quarry.

TABLE – 10

Type	Distance & Direction	Location
Bore Well	380m Southeastern side	11° 03'18.70"N 77°28'15.32"E

7.2 Arrangements and places where the mine water is finally proposed to be discharged:

The quarry operations are confined to well above the water table during the entire lease period. If water is encountered at quarry due to rain water and seepage, the same will be pumped out by 5HP water pump and discharge to the Green belt development areas. Besides, the water will also be used for dust suppression on haul roads during Haulage of machineries.

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8.0 OTHER PERMANENT STRUCTURES (also shown in the map)

TABLE – 11

S.No.	Description	Particulars	Aerial Distance & Direction
1	Nearest National Highway	(NH-381) Tiruppur – Oddanchatram	8.2km – West
2	State Highways	(SH-172) Tiruppur– Kangayam	1.7km – NE
3	Railway station	Uttukuli Railway station	10.9km – NW
4	Airport	Coimbatore Airport	46.6 km – SW
5	Nearest Habitation	620m – SE	
6	Nearest Town	Kangayam	11.6 km – SE
7	Nearest Government School	Andipalayam - Govt. Primary School	1.2km – SW
8	Government Hospital	Kangayam	11.5km – SE
9	Reserved Forest	Villikaradu R.F. – 12.4m – NE.	
10	Defense Installation/Historical Monuments/ Archaeological	Nil within 500m radius.	
11	Nearby Water Bodies	Nil within 50m radius.	
12	Interstate Boundary	Around 67.5 km – SW (Kerala State Boundary)	
13	Critically Polluted areas identified by the CPCB	Around 57.6km – SW (Coimbatore – SIDCO)	
14	Protected areas Notified under wildlife (Protection) Act, 1972.	Around 11.3km – NW (Nanjarayan birds Sanctuary)	
15	Applicability of CRZ, Notification 2011 as amended.	Not Applicable	
16	Applicability of Hill Area Conservation Authority (HACA) Clearance.	Not Applicable	
17	Housing area, EB line (HT & LT Line)	There is no EB-LT/HT line or Housing area situated within 50m radius from the lease area.	
18	Boundaries of the permitted area.	The boundaries of the permitted areas are as follows (Refer Plate No. II): North - S.F.No. 534 East - S.F.Nos. 535 and 547 South - S.F.Nos. 546 and 545 West - S.F.No. 538	
19	Adjacent Patta lands / Govt. Land	See below	

Direction	Classification	Safety Distance
North	Govt. land	10m
East	Patta land	7.5m
South	Patta land	7.5m
West	Patta land	7.5m

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STRUCTURE WITHIN **0 - 100m** Number of Structures - 2 Nos. TABLE – 12					
Number of Structure	**Type of Structure**	**Usage Purpose**	**Commercial / industry/ residential/ farm house/ Govt. building**	**Occupants of Building/ Structure**	**Remarks**
1	Crusher plant (1 No.)	Stone crushing	Industry	Owned by Applicant	No resident
1	Labour shed	Labour rest shed	Non residential	Owned by Applicant	Nil
STRUCTURE WITHIN **100 - 200m** Number of Structures - 3 Nos.					
2	Labour shed (2 No.)	Labour rest shed	Non residential	Owned by Applicant	Nil
STRUCTURE WITHIN **200 - 300m** Number of Structures – 1 No.					
2	Labour shed and office (2Nos)	Thar plant's Labour rest shed and office	Non residential	Owned by Applicant	Nil

9.0 EMPLOYMENT POTENTIAL & WELFARE MEASURES

9.1 Employment potential (skilled, semi-skilled, un skilled):

TABLE – 13

Designation	Present Employment position	Employees Requirement	Total
a) Supervisory category			
Mine Manager	-	1	1
Geologist	-	1	1
b) Skilled labour			
Mine Foreman	-	1	1
Blaster/Mate	-	1	1
Excavator – Operator	-	3	3
Crawler drill machine operator	-	2	2
Truck Driver	-	4	4
Water sprinkler Driver	-	1	1
Jack-Hammer Drillers	-	8	8
c) Unskilled			
Security	-	2	2
Labour & Helper	-	2	2
Co-operator and Cleaner	-	12	12
Total	-	**38**	**38**

The proposed output per man shift:

TABLE – 14

Peak Production on 3rd year		2,55,165m^3
No. of days likely to be worked		300 days
Average ROM production per day		851m^3
OMS =	Average Production per day / Average employment per day	851m^3 / 38 = 22.4m^3

The above manpower is adequate to meet out the production schedule and the machinery strength envisaged in the mining plan and to comply with the statutory provisions of the Mines Safety Regulations. It is been ensured that the labour will not be employed less than 18 years, **No child labour** will engaged or entertained for any kind of quarrying operations. All the labours engaged for quarrying operations will be insured during the quarry lease period.

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9.2 Welfare Measures:

a) Drinking Water:

Packaged drinking water is available from the nearby water vendors in Padiyur which is located about 2.6km on the Northeastern side of the lease applied area.

b) Sanitary Facilities:

Hygienic modern Sanitary Facilities will be constructed in the safety area as semi-permanent structure and it will be maintained periodically.

c) First aid facility:

First aid kits are kept in Mines office room, in case of such eventuality is the victim will be given first aid immediately at the site by the competent and statutory foreman/permit manager/mate will be in charge of first aid and injured person will be taken to the hospital by the applicant's vehicle. Hospital is available in Kangayam located at a distance of 11.5km on the Southeastern side.

d) Labour Health:

Periodically medical check-up related to occupational health safety will be conducted to all the workers in applicant own cost.

e) Precautionary safety measures to the labourers:



- Helmets,
- Reflector Jackets,
- Dust mask,
- Mine Goggles,
- Ear plugs,
- Ear muffs,
- Safety Shoes,

All personnel protective equipment as per the DGMS standard will be provided as per the specification approved by Director of mines safety. Periodically medical check-up will be conducted for all workers for any mine health related problems. Proper training and vocational education will be given by qualified and experienced safety officer to all the employees about the safety and systematic Rough stone quarrying operations. The drillers and workers will be sent for vocational training periodically, to carry out the quarrying operations scientifically and to safe guard the men and machinery and to create awareness about conventional opencast quarrying operations.

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PART – B

10.0 ENVIRONMENT MANAGEMENT PLAN

The EMP is prepared based on the Mines act, Rules & amendment from by state & central government. If the SEIAA/SEAC instructed the modification and alter the EMP the outcome of their recon would be final and the applicant is instructed to followed the EIA / EMP for its compliance as per the CPCB / TNPCB Norms.

Environment	Anticipated impact	Mitigation measure
Land Environment	i. Topography of the area will change due to mining activity.	i. No waste will be anticipated during entire life of quarry. Hence, backfilling is not proposed in this quarry operation. Anyhow, barbed wire fencing and safety bund will be constructed around the quarry to prevent inadvertent entry of public and cattle. ii. The excavated benches shall be developed for plantation with grasses, herbs and shrubs of local species to improve aesthetic of the area and to prevent any soil erosion and landslide. iii. Mining benches will not exceed beyond the approved height and width. iv. Leftover foreign material like polythene bag, jute bag and useless articles will not be allowed to litter and no ill managed dumping will be used for filling the excavated pits
	ii. Soil quality and agriculture land on surrounding land environment will impact due to; a) Dust propagation during quarry operation like drilling, blasting,	i. Regular water sprinkling on dust prone area like haul road and other active area to arrest the dust generation. ii. Greenbelt will be developed in the safety zone with thick long leave plants to arrest the fugitive dust and vehicular emissions propagation. iii. Wet drilling with dust extractor unit by proper drilling pattern and controlled

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	loading, unloading and movement of men, Vehicle and machineries. b) Vehicular and machineries emissions and spillage of oil and grease. iii. Propagation of foreign material like polythene bag, jute bag, Plastic water and cool drink containers and undecomposed waste materials dumping.	blasting with NONEL initiation will be carried out to minimize the dust generation. iv. Excavated benches shall be developed by planting with grasses, herbs and shrubs of local species to prevent soil erosion and landslide. v. PUC (Pollution under control) certified vehicles will be used for transportation and all vehicles and their exhausts would be well maintained and regularly tested for pollutant concentrations. vi. Oiling and greasing will be managed in respective places at vehicle maintenance shed and oil tray will be use to collect the spillage during maintenance and the same will be disposed in manner. vii. Leftover foreign material like polythene bag, jute bag, undecomposed materials or ill managed dumping will not be allowed.
Water Environment	Surface Mining can have direct impact on physico-chemical characteristics of the local drainage and groundwater resources. The detrimental effects, if any, to water resources resulting from surface mining are caused by following: i. Flow direction of Surface run off water will be interrupting during rainy season due to modification of topography. ii. Surface water will be contaminated due to dust propagation and vehicle emission. iii. Contamination of groundwater if mining	i. Garland drain with check dam will be constructed all along the boundary barrier to prevent the water entering into the pit. ii. The pit water due to rain and seepage will be utilized for water sprinkling on haul Roads and plantations. iii. Greenbelt will be developed in the safety zone with thick long leaves plants to arrest the fugitive dust and vehicular emissions. iv. Further mining will be completely stopped during the monsoon for free flow of surface run off and allowing natural recharge of groundwater. v. No wastewater will be generated from the quarry activity. Proper drainage will be Maintained to eliminate inundation of working pit during rain from run-off water. vi. Septic tanks and soak pits will be provided for the disposal of domestic/ washroom

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	intersects with the water table.	effluents, the same will be disposed to the waste water recycling unit. vii. The deposit will be worked from the top surface up to a depth of 72m [12m above ground level + 60m below ground level] and shall not in any case intersect and contaminate the ground water as the depth of the water table in the area is 96m – 93m.
Air Environment	In surface mining operations, the source of air pollution may cause deterioration of air quality due to; a) The fugitive dust emissions from drilling/blasting, scooping, loading-unloading operation of extracted mineral and its transportation. Drilling/blasting and loading of quarry material would be associated with the fugitive dust emission in the active area whereas fugitive emission during transportation would affect the areas/villages situated adjacent to the road side. Another source of air pollution would be emission from the drilling machinery and excavators/trucks vehicles to be used for loading.	i. Regular water sprinkling on haul road and dust prone area to arrest the dust generation. ii. Green belt will be developed in the safety zone with thick long leaves plants to arrest the fugitive dust and vehicular emissions. iii. Wet drilling with dust extractor unit by proper drilling pattern and controlled blasting with NONEL initiation will be carried out to minimize the dust generation. iv. Quarry material will be handled under wet condition during scooping, loading and unloading to minimize the dust propagation, besides loaded materials are covered by Tarpaulin until to reaches its destination. v. Provision of dust filters/ Nose mask to workers working at dust prone areas. vi. Vehicular emission as a result of combustion of diesel generates particulate matter (PM_{10} & $PM_{2.5}$), Nitrogen oxides and Sulphur dioxide (NO_2 & SO_2). High quality diesel will be used in the motor vehicles to control these pollutants. vii. PUC (Pollution under control) certified vehicles will be used for transportation and all vehicles and their exhausts would be well maintained and regularly tested the pollutant concentrations. viii. CPCB Prescribed emission standards for the vehicles would be followed.
Noise and Vibration	In the present mining activity for building material, noise will be generated from drilling machinery, blasting and vehicular movement. Noise level in the working environment is	i. Selection of innovative low – noise equipment for the quarry operation. ii. The noise levels shall be maintained within the permissible levels by involving all the noise regulating measures in vehicles and drilling/blasting operations. iii. To ensure minimum vibrations and noise due to blasting, Nonel in continuous sequence is proposed.

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	compared with the standards prescribed by Central Pollution Control Board as adopted and enforced by the Govt. of India through Noise Pollution (Regulation and Control) Rules, 2000.	iv. Personnel Protective Equipment (PPE) like earmuffs and earplugs shall be provided to the employees whose in critical operation like drilling, blasting and excavation as occupational safety measures. v. Proper maintenance done with regular interval by the Oiling and greasing for the machineries and vehicles to control the Source of noise. vi. Transporting vehicles are enforcing the speed limits of 20km/hour within quarry area and not exceed 40km per hour from quarry to destination to reduce Noise and vibration. vii. There would be restrictions on mining activity and vehicular movement during night hours.
Biological Environment	The area having main floras are Neem, Palm, Cocos nucifera, Palm, Senna auriculata, Calotropis, Casuarina, Teak, Acacia nilotica, Thorney bushes and shrubs. No plants of botanical interest or animals of zoological interest recorded within 500m radius. The anticipated impacts on biological environment as follows: i. Diversity of living insects in the overburden material. ii. Natural habitats of the existing faunas and its breeding will change due to the noise and vibration during operation. iii. Access roads crossing the riparian areas will have impact on the species disturbing the ecosystem. iv. Deposition of dust on the plant and crop leaves is affecting the photosynthesis, Pollination, ratio of growth and reduction in the yield of agriculture.	i. The area will be fenced with Barbed wire fencing also safety bund constructed around the quarry to prevent inadvertent entry of public and cattle. ii. The natural habitats of the existing flora and fauna will not be disturbed. iii. No mining will be carried out during the monsoon season to minimize impact on aquatic life which is mainly breeding season for many species. iv. Fruit bearing trees will be planted to survive the existing faunas. v. No clearance of vegetation will be done during the entire mining operations. vi. Regular Water sprinkling on haul roads would be reduces the dust propagation, thus avoiding damage to the crops and plants. vii. No night hour mining will be carried out which may catch the attention of faunas.

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Socio – Economic Environment	Any activity during mining will have adverse impact on Environment, careful mitigation measures are proposed to balance the impact on the existing environment and the applicant is always instruct to carry out safe, sustainable, eco-friendly mining operations at all times. The following positive impact on the society due to this mining activity. i. It is proposed to provide employment to about 38 persons for carrying out mining operations and give preference to the local people in providing employment. In addition, there will be opportunity for indirect employment to many people in the form of contractual jobs, business opportunities, service facilities etc. the economic status of the local people will be enhanced due to mining project. ii. The employment opportunities both direct and indirect will contribute to enhanced money incomes to job seekers with minimal skill sets especially among the local communities. iii. Improvement of Physical structure like Road Transport facilities, Communications, Medical, Educational and social benefits will be made available to the nearby civilian population in addition to the workmen employed in the mine. iv. The continuation of opportunity for the employments, the nearby villages, living peoples and their life style would be improved. v. The applicant is advised to invest the CER cost (@ 2% from the total Project Cost) to develop the local Panchayat.	Does not arise.

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10.1 Environmental impact assessment statement describing impact of mining on the next Ten years:

In the mining plan proposed for a production of Rough stone. Such limited mining activity is not likely to cause any impact adversely on the environment. As far as pollution of air, water and noise concerned, the environmental impact studies will be conducted as per EIA notification issued by MoEF& CC. It is B Category mine. The compliance monitoring will be carried out for every six months as prescribed by the MOEF&CC and with state concerned authorities.

10.2 Proposal for waste management:

There is no waste anticipated in this Rough stone and Gravel quarrying operation. The entire quarried out materials will be utilized (100%). The maintenance of machineries & fuelling will be carried out as per the TNPCB Norms and the waste will be disposed in the Norms.

10.3 Proposal for reclamation of land affected during mining activities and at the end of mining (refilling / fencing etc.):

In the mining plan only to a maximum depth of 72m [12m above ground level + 60m below ground level] has been envisaged as workable depth for safe & economic quarrying operation during entire life of quarry. There is no waste generated hence, backfilling is not possible. After completion of quarry operation the quarried out pit will be allowed to collect the seepage and rainwater and the water storage will be kept as temporary reservoir for charging the nearby wells and the water will be utilized for Green belt development purpose. The quarry area will be fenced with Barbed wire fencing also safety bund constructed around the quarry to prevent inadvertent entry of public and cattle.

10.4 Programme of Greenbelt development (indicate extend, number, name of species to be afforested):

The safety zone along the boundary barrier has been identified to be utilized for Greenbelt development. Around 5,500m^2 area will be utilized for green belt development by planting 1500 numbers along the safety zone during entire lease period also around 300 tree saplings in the approach road at first year of the plan period and 800 tree saplings from third year onwards in quarried out top benches with 2m height tree saplings with an anticipated survival rate of 80% with maintain atleast 2000 plants at the end of life of the quarry.

As per the SEIAA recommendation the plantation will be carried out based on the output Environmental Clearance and the recommended species will be carried out for green belt development. Appropriate species of trees will be planted in a phased manner as described below.

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TABLE – 15

Year	No. of tress proposed to be planted	Area to be covered (m^2)	Name of the species	Survival %	No. of trees expected to be grown
I	150	550	Neem, Pongamia Pinnata, Cordia dichotoma, Mango, Thespesia populnea, Mantharai, etc.,	80%	120
II	150	550		80%	120
III	150	550		80%	120
IV	150	550		80%	120
V	150	550		80%	120
VI	150	550		80%	120
VII	150	550		80%	120
VIII	150	550		80%	120
IX	150	550		80%	120
X	150	550		80%	120

10.5 Proposed financial estimate / budget for the Project:

Budget Provision for the Mining Plan period:

TABLE – 16

<table>
<tr><th colspan="2">A. Operational Cost / Project Cost / Investment:</th><th>Cost (Rs.)</th></tr>
<tr><td>i) Land cost</td><td>The Land value as per the Government Guideline land cost is calculated as follows,
<table>
<tr><th>SF. Nos</th><th>Extent</th><th>Cost / Ha</th><th>Total Cost</th></tr>
<tr><td>536</td><td>0.47.0</td><td rowspan="4">2224000</td><td>1045280</td></tr>
<tr><td>537/1</td><td>1.39.5</td><td>3102480</td></tr>
<tr><td>537/2</td><td>1.27.5</td><td>2835600</td></tr>
<tr><td>537/3</td><td>1.37.0</td><td>3046880</td></tr>
<tr><td></td><td>4.51.0</td><td></td><td>10030240</td></tr>
</table>
Round of Rs. 10030000/-
(source : https://tnreginet.gov.in/portal/)</td><td>1,00,30,000</td></tr>
<tr><td>ii) Machinery cost</td><td>The following machineries are proposed to meet out the productions.
i. Excavator (3 Nos.)
ii. Crawler Mounted Drill Machine (2 Nos.)
iii. Rock breaker (2 Nos.)
iv. Trucks (4 Nos.)
v. Compressor (1 No.)
vi. Hand jack hammer and loose tools (4 Nos)</td><td>1,50,00,000
60,00,000
2,00,000
1,00,00,000
7,50,000
2,00,000</td></tr>
<tr><td></td><td>Total</td><td>3,21,50,000</td></tr>
<tr><td>iii) Blasting Cost</td><td>Explosives, Detonator, etc., (Rs. 6 per ton) (26,33,878 Tons x Rs. 6)</td><td>1,58,04,000</td></tr>
<tr><td>iv) Labourers shed</td><td>Labour shed will be constructed as semi-permanent structure. The cost is around</td><td>5,00,000</td></tr>
<tr><td>v) Sanitary facility</td><td>Adequate latrine and urinal accommodation has provided at conveniently accessible places the cost would be around.</td><td>1,00,000</td></tr>
<tr><td>vi) Drinking water facility for the labourers</td><td>Packaged drinking water will be provided for all the Labours. Drinking water will be readily available at conveniently accessible points during the whole of the working shift the cost would be around.</td><td>1,00,000</td></tr>
</table>

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vii) Sanitary arrangement	The latrine and urinal will keep clean and sanitary condition. The maintenance cost would be around.	50,000
viii) Safety kit	All the Safety kit such as Helmet, Earmuffs, Goggles, Reflector Jackets, Safety shoes etc., will be provided to the workers by the applicant own cost which would be around.	50,000
Total Cost		**5,87,84,000**

B. EMP Cost:		**Cost (Rs.)**
1. Environmental Monitoring Program (Air Quality, Water Quality Sampling, Noise and Ground vibration test) Rs. 76,000/ year.		7,60,000
2. Water will be sprinkled in the haul roads by own water sprinklers for dust suppression (1 No.). The cost would be around.		6,00,000
3. Fencing constructed around the lease area to prevent the inadvertent entry of public and cattle cost would be around (Total Peripheral length 850m x Rs. 300/meter).		2,55,000
4. Construction of Garland drain with check dam to prevent surface run-off rain water entering to the quarry pit, the construction cost is around (Total Peripheral length 800m x Rs. 300/meter).		2,40,000
5. First aid room & accessories		50,000
6. Dust extractor unit for Jackhammer (4 Nos.)		1,00,000
7. Greenbelt development for dust suppression & Noise control measures	Greenbelt development will be carried out along the safety barrier; the cost would be around (1,500 saplings x Rs. 200/sapling).	3,00,000
	Greenbelt development will be carried out along the quarried out top benches; the cost would be around (800 saplings x Rs. 200/sapling).	1,60,000
	Greenbelt development will be carried out on haul road; the cost would be around (300 saplings x Rs. 200/sapling).	60,000
Total EMP Cost (B)		**25,25,000/-**

Description	**Cost (Rs.)**
A. Operational Cost	**5,87,84,000/-**
B. EMP Cost	**25,25,000/-**
Total Project Cost (A+ B)	**6,13,09,000/-**
C. The applicant indents to involve corporate environment responsibilities (CER) activity like Water Purifier, Plantation, Books to Library, Smart class board, class room renovation, painting, sanitary facility and as per requirement to the Andipalayam - Govt. Primary School at 2.0% from the total project cost. The Cost would be around **Rs.12,26,000.** If the concerned authority is directed to modify the CER cost and mode of utilization of the cost, the same will be implement by the Lessee.	**12,26,000/-**
Total Cost (A+B+C)	**6,25,35,000/-**
The total cost would be around six crores twenty five lakhs and thirty five thousand only.	

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11.0 PROGRESSIVE QUARRY CLOSURE PLAN

11.1 Introduction:

The entire area is proposed for a short period of 10 years only hence, the progressive quarry closure plan may not be applicable to this quarry. Anyhow, during temporary discontinuance of quarry the following measures will be taken.

a. Barbed wire fencing will be constructed around the quarry.
b. Benches will be smoothening.
c. Quarry will be closed & sentries will be posted round the clock.
d. Green belt development will be maintained.
e. Machineries will be removed from pit and engaged in another site.

11.2 Present and Post Land use pattern:

LAND USE TABLE – 17

Description	Present Area (Ha)	Proposed Amalgamation		Leaving safety and Benches	
		Area required during the first five year (Ha)	Area at the end of lease period (Ha)	Area required during the first five year (Ha)	Area at the end of lease period (Ha)
Area Under Quarry	Nil	3.93.0	3.93.0	3.80.0	3.80.0
Site Services	Nil	0.01.0	0.01.0	0.01.0	0.01.0
Roads	Nil	0.02.0	0.02.0	0.02.0	0.02.0
Green Belt	Nil	0.55.0	0.55.0	0.68.0	0.68.0
Unutilized Area	4.51.0	Nil	Nil	Nil	Nil
Grand Total	**4.51.0**	**4.51.0**	**4.51.0**	**4.51.0**	**4.51.0**

11.3 Statutory obligations:

The applicant ensures to comply all the conditions stipulated in the precise area communication letter before grant of quarry lease and during the course of quarry operations as per the DGMS, Department of Geology and Mines, Labour Enforcement officer, controller of Explosives etc., circulars, Norms, Rules, Regulations and Act.

11.4 Progressive quarry closure plan preparation:

Name and address of the Qualified Person who prepared the progressive closure plan and name, address and register number of the executing agency who is involved in the Preparation of progressive quarry closure plan.

Name : **Dr. P. Thangaraju, M.Sc., Ph.D.,**
Qualified Person (As per Rule 15(I)(a) and (I)(b) of MCR, 2016)
Address : No.17, Advaitha Ashram Road,
Alagapuram,
Salem District – 636 004.
Mobile : +91 94433 56539.
Email : infogeoexploration@gmail.com

The applicant will himself implement the closure plan; no outside agency will be involved.

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(i) Safety & Security:

Safety measures will be implemented to prevent access in the excavation area an un-authorized persons as per Mine Act 1952, MMR 1961.

- Safety measures will be implemented as per Mine Act 1952, MMR 1961, and Mines Rules 1955.
- Provisions of MMR 1961 shall be strictly followed and all roads shall be wider than the height of the bench or equal to the height of the bench and have a gradient of not more than 1 in 16.
- The bench height will be 5.0m.
- Width of working bench will be kept about 5.0 m for ease of operations and provide sufficient room for the movement of equipment.
- Protective equipment like dust masks, ear-plugs/ muffs and other equipment shall be provided for use by the work persons.
- Notices giving warning to prevent inadvertent entry of persons shall be displayed at all conspicuous places and in particular near mine entries.
- Danger signs shall be displayed near the excavations and proper signal by siren alarm will be given to the public before blasting to prevent accident.
- Security guards will be posted.
- In the event of temporary closer, approaches will be fenced off and notice displayed.
- Installation of CCTV cameras in the quarry and entrance of the quarry.
- Monitoring of Quarrying operation by external agency as directed by authorities.

(ii) Disaster Management and Risk Assessment:

This should deal with action plan for high risk accidents like landslides, subsidence, flood, fire, seismic activities, tailing dam failures etc. and emergency plan proposed for quick evacuation, ameliorative measures to be taken etc. The capability of applicant to meet such eventualities and the assistance to be required from the local authorities should be described.

- The mechanized mining activities in the area may involve any high risk accident due to side falls/collapse, flying stones due to blasting etc.
- The complete mining operation will be carried out under the Management and control of experienced and qualified Mines Manager having Certificate of Competency to manage the mines granted by DGMS.
- All the provisions of Mines Act 1952, MMR 1961 and Mines Rules 1955, TNMMCR 1959 and other laws applicable to mine will be strictly complied with.
- During heavy rainfall the mining activities will be suspended.
- All persons in supervisory capacity will be provided with proper communication facilities.
- Competent persons will be provided FIRST AID kits which they will always carry.
- The Greenbelt Development will be formed in around the quarried out top benches and panchayat road of the lease applied area.

Environmental Monitoring Cell:

A dedicated team nominated by the mine manager or Agent will monitor and maintain the environmental compliances of the quarry as per the approved Environment Management Plan and report the Compliance to the Mine Manager half yearly.

Disaster Management Cell:

The Competent Qualified Statutory managers appointed by the applicant as per the Director of Mines Safety will be responsible for Disaster Management. It care any eventualities his mobile number will be displayed and he will take all the precautions and safety measures as per Mines and Minerals (Development and Regulations) Act, 1957.

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(iii) Disposal of mining machinery

All the Machineries will be purchased fresh; the same has been maintained in good condition during entire life of quarry. After completion of quarry operation all machineries will be utilized at another quarry area or sold out to the second hand. Hence, disposal or decommissioning of mining machinery does not arise.

(iv) Care and Maintenance during Temporary Discontinuance:

In case of any temporary discontinuance due to court order or due to statutory requirement or any other unforeseen circumstance following measures shall be taken for care, maintenance and monitoring of conditions.

- Notice of temporary discontinuance of work in mine shall be given to the DGMS as per the MMR 1961.
- All the mining machinery shall be shifted to a safe place.
- Entrance to the mine or part of the mine, to be discontinued shall be fenced off. Fencing shall be as per the circular 11/1959 from DGMS.
- Security Guards shall be posted for the safety and to prevent any unauthorized entry to the area.
- Carry out regular maintenance of the facilities/area detailed below in such a way as would have been done as if the mines were operation:

  Quarry roads and approach roads,

  Fencing on approach roads,

  Checking and maintenance of machines and equipment,

  Drinking water arrangements,

  Quarry office, first aid stations etc.
- Competent persons shall inspect the area regularly.
- Air, water and other environmental monitoring shall be carried out as per CPCB and IBM Guideline.
- Care and upkeep of plantation shall be carried out on regular basis.
- Status of the working and status monitoring for re-opening of the mines shall be discussed daily.

In case of discontinuance due to any natural calamities/abnormal conditions, mining operation will be restarted as early as possible after completing rescue work, restoring safety and security, repairs of roads etc.

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(v) Economic Repercussion of Closure of Quarry and manpower Retrenchments:

The quarry lease is granted for a period of ten years only. As per the production Programme envisaged, there will be no effect on the man power as the majority of persons belong to nearby villages and will have an option either to be available for employment for the next contract/ lease or do the agriculture in their fields.

(vi) Abandonment Cost:

As at present mining is not going to be closed so abandonment cost could not be assessed. However, based on the progressive quarry closure activities during the plan period, cost is assessed as given below at present scenario:

TABLE – 18

ACTIVITY		YEAR										RATE	COST (Rs.)
		I	II	III	IV	V	VI	VII	VIII	IX	X		
Plantation under safety zone	No. of sapling	150	150	150	150	150	150	150	150	150	150	Rs.200 Per sapling Rs.200 Per sapling	3,00,000
	Cost	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000		
Plantation in quarried out top benches and approach road		Approach Road		Quarried out top Benches									
	No. of sapling	150	150	100	100	100	100	100	100	100	100		2,20,000
	Cost	30000	30000	20000	20000	20000	20000	20000	20000	20000	20000		
Wire Fencing for 850 Mtrs length		255000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	2,55,000
Garland Drain with settling tanks for 800 Mtrs length		240000	-	-	-	-	-	-	-	-	-	Rs. 300 Per Meter	2,40,000
Total													**10,15,000**

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12.0 ANY OTHER DETAILS INTEND TO FURNISH BY THE APPLICANT

This Mining plan for Rough stone (Charnockite) and Gravel is under Rules 41 & 42 as per the Amended under Tamil Nadu Minor Mineral Concession Rules, 1959. The provisions of the Mines Act, Rules and Regulations and orders made there under shall be complied within the quarrying operation, so that the safety of the mine, machinery and person will be well protected. Permission, relaxation or exemption wherever required for the safe and scientific quarrying of the deposit will be obtained from the Department of Mines Safety. Any violation pointed out by the inspecting authorities shall be rectified and modified after scrutiny comments as per the guidelines of the Concerned Department and Authorities.

This Mining Plan and mine design is prepared based on the requirement instructed by the applicant to me. If there is any change in the production schedule, change of technology, change in product mix during the course of operations, the applicant is advice to prepare a modified mining plan and get approval by the concerned authority for subsequent clearance and approval. The same will be monitored by the inspecting authority of Department of Geology and mining and other Concerned Departments under Rule 25 and sub rule (5)(d) in Rule 36 of Tamil Nadu Minor Mineral Concession Rules, 1959.

I hereby ensure that the information provided is correct to best of my knowledge and experience, some of the information contained in this report has been provided by external sources and by the applicant and is presented as the form as submitted by the applicant. The information is not intended to serve as legal advice related to the individual situation. I do not owe and specifically disclaim any liability resulting from the use during the course of quarrying operations after the grant of lease. The document may be scrutinized by the competent authority before approval.

Prepared by

Dr. P. Thangaraju, M.Sc., Ph.D.,
Qualified Person

This Mining Plan is approved as per the Powers conferred under rule 41(2) of Tamil Nadu Minor Mineral Concession Rules, 1959

Place: Salem
Date: 30.07.2024

This Mining Plan is approved subject to the Conditions indicated in the Mining Plan approval Letter
Rc. 668/MINES/2023
29.07.2024

29/7/2024

DEPUTY DIRECTOR I/c
Geology and Mining
Tiruppur

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TOPOGRAPHICAL VIEW OF PERUNTHOLAVU ROGH STONE AND GRAVEL QUARRY LEASE APPLIED AREA.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR





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ANNEXURE 1

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

ந.க.எண்.668/கனிமம்/ 2023

புவியியல் மற்றும் சுரங்கத்துறை
மாவட்ட ஆட்சியர் அலுவலகம்,
திருப்பூர்.

நாள்: 24.07.2024.

குறிப்பாணை

பொருள் : கனிமங்களும் சுரங்கங்களும் - சிறு கனிமம் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - பட்டா புல எண்கள். 536 (0.47.0), 537/1 (1.27.5) 537/2(1.39.5) மற்றும் 537/3(1.37.0) ஆகியவற்றில் மொத்தம் 4.51.0ஹெக்டர் பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி குத்தகை உரிமம் கோரி தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியா பிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) விண்ணப்பம் அளித்தது - புலத்தணிக்கை அறிக்கை சமர்பிக்கப்பட்டது - தகுதியான நிலப்பரப்பாக கருதி ஏற்பளிக்கப்பட்ட சுரங்க திட்டம் மற்றும் சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணைய இசைவிணை பெற்று சமர்பிக்கக் கோருதல் - தொடர்பாக.

பார்வை :

1. தி/ள்.V.K.P.இன்ஜினியரிங் பிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்), 11/32, வெட்டுக்காட்டு வலசு,ஈங்கூர், பெருந்துறை,ஈரோடு என்பவரின் மனு நாள்: 13.09.2023.
2. இவ்வலுவலக கடிதம் ந.க.எண். 668/கனிமம்/2023 நாள்:22.09.2023.
3. வட்டாட்சியர், திருப்பூர் தெற்கு கடிதம் ந.க. 3642/2024/அ1 நாள்: 15.02.2024.
4. சார் ஆட்சியர் (பொ), திருப்பூர் கடிதம் மூ.மு.எண்.5353/ 2023/அ3 நாள்.05.05.2024.
5. வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர் கடிதம் ந.க. 1200/2024/ஆ2. நாள்:23.05.2024.
6. உதவி புவியியலாளர் (கனிமம்) மற்றும் தனி வருவாய் ஆய்வாளர் (கனிமம்) திருப்பூர் புலத்தணிக்கை அறிக்கை நாள்:11.06.2024.
7. மற்றும் உரிய ஆவணங்கள்

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள். 536 (0.47.0), 537/1 (1.27.5) 537/2(1.39.5) மற்றும் 537/3(1.37.0) ஆகியவற்றில் மொத்தம் 4.51.0ஹெக்டர் பரப்புள்ள பட்டா பூமியிலிருந்து 10 வருடங்களுக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்), 11/32, வெட்டுக்காட்டு வலசு,ஈங்கூர், பெருந்துறை, ஈரோடு என்ற நிறுவனத்தார்பார்வை 1-ல் கண்டுள்ளவாறு உரிய ஆவணங்களுடன் விண்ணப்பம் அளித்துள்ளனர்.



2. மேற்படி விண்ணப்பங்கள் தொடர்பாக, வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர், வட்டாட்சியர்,திருப்பூர் தெற்கு, சார் ஆட்சியர்(பொ), திருப்பூர், மற்றும் உதவிப்புவியியலாளர் (கனிமம்), திருப்பூர் ஆகியோர் புலத்தணிக்கை மேற்கொண்டு திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள். 536 (0.47.0), 537/1 (1.27.5) 537/2(1.39.5) மற்றும் 537/3(1.37.0) ஆகியவற்றில் மொத்தம் 4.51.0ஹெக்டர் பரப்பில் தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) என்ற நிறுவனத்திற்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி உரிமம் வழங்க கீழ்கண்ட நிபந்தனைகளுக்குட்பட்டு அனுமதி வழங்கலாம் என பரிந்துரை செய்துள்ளனர்.

நிபந்தனைகள்:

- 1959ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், அட்டவணை II-ல் கண்டுள்ளபடி குவாரி செய்யப்படும் கனிமங்களுக்குரிய சீனியரேஜ் தொகை அவ்வப்போது செலுத்தி கனிமம் கொண்டு செல்லப்பட வேண்டும்.
- புலத்தை சுற்றி அமைந்துள்ள பட்டா நிலங்களுக்கு 7.5 மீட்டர் பாதுகாப்பு இடைவெளி விட்டு குவாரி பணிபுரிய வேண்டும்.
- பிரஸ்தாப புலத்தின் வடக்குப் பகுதியில் அமைந்துள்ள வண்டிப்பாதைக்கு 10 மீட்டர் பாதுகாப்பு இடைவெளி அளித்து குவாரிப்பணி புரிய வேண்டும்.
- தகுதிவாய்ந்த பிளாஸ்டருடன் கூடிய லேசான வெடிபொருட்களைப் பயன்படுத்தி குவாரி நடவடிக்கை மேற்கொள்ளப்பட வேண்டும்.
- குத்தகை உரிமம் கோரும் புலத்திற்கு DGPS முறையில் அளவீடு செய்து அதற்கான சான்றினை சமர்ப்பிக்க வேண்டும்.
- அனுபவம் வாய்ந்த வெடிபொருள் பயன்படுத்துவோர் மூலம் குறைந்த அளவு சக்தி கொண்ட வெடிபொருட்களை பயன்படுத்தி அருகிலுள்ள பட்டாதாரர்களுக்கு எவ்வித இடையூறுமின்றி / அருகிலுள்ள பட்டா மற்றும் அரசு புலங்களில் எவ்வித ஆக்கிரமிப்பும் இன்றி குவாரிப்பணி மேற்கொள்ள வேண்டும்.
- விதிகளின் படி ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தினை உரிய காலத்திற்குள் சமர்பிக்க வேண்டும்.
- குவாரி உரிமம் வழங்க உள்ள பகுதிக்கு சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் முன் அனுமதி பெற்று சமர்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும்.

3. எனவே,வட்டார வளர்ச்சி அலுவலர் (கி.ஊ), பொங்கலூர், வட்டாட்சியர், திருப்பூர் தெற்கு, சார் ஆட்சியர்(பொ), திருப்பூர், மற்றும் உதவிப் புவியியலாளர் (கனிமம்),ஆகியோரின் பரிந்துரை மற்றும் நிபந்தனைகளின் அடிப்படையில்,திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள். 536 (0.47.0), 537/1 (1.27.5) 537/2(1.39.5) மற்றும் 537/3(1.37.0) ஆகியவற்றில் மொத்தம் 4.51.0ஹெக்டர் பரப்பில் மட்டும் 1959ம் வருட தமிழ்நாடு சிறுகனிம விதிகள், விதி எண்.19-ன் படி மேற்கண்ட நிபந்தனைகளுக்குட்பட்டு 10 (பத்து) வருட

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காலத்திற்கு தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட் நிறுவனத்தார் (இயக்குநர்: திரு.P.ஜெகதீசன்) நிறுவனத்தாருக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி உரிமம் வழங்குவதற்குரிய தகுதியான நிலப்பரப்பாக கருதப்படுகிறது.

4. மேலும், தமிழ்நாடு சிறு கனிம சலுகை விதிகள்-1959 விதி எண். 41-ன்படி குவாரிப்பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்க திட்டத்தினை 90 தினங்களுக்குள் சமர்ப்பிக்குமாறு மனுதாரரைக் கேட்டுக்கொள்ளப்படுகிறது. மேலும் ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தின் தொடர்ச்சியாக 1959ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.42-ன் படி சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும் என இதன் மூலம் தெரிவிக்கப்படுகிறது.

துணை இயக்குநர் (பொ),
புவியியல் மற்றும் சுரங்கத்துறை,
திருப்பூர்.

பெறுநர்:

தி/ள்.V.K.P.இன்ஜினியரிங் இந்தியாபிரைவெட் லிட்
(இயக்குநர்: திரு.P.ஜெகதீசன்),
11/32, வெட்டுக்காட்டு வலசு,
ஈங்கூர், பெருந்துறை,
ஈரோடு மாவட்டம்.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR *

இலவைபடிவம் எண் 23

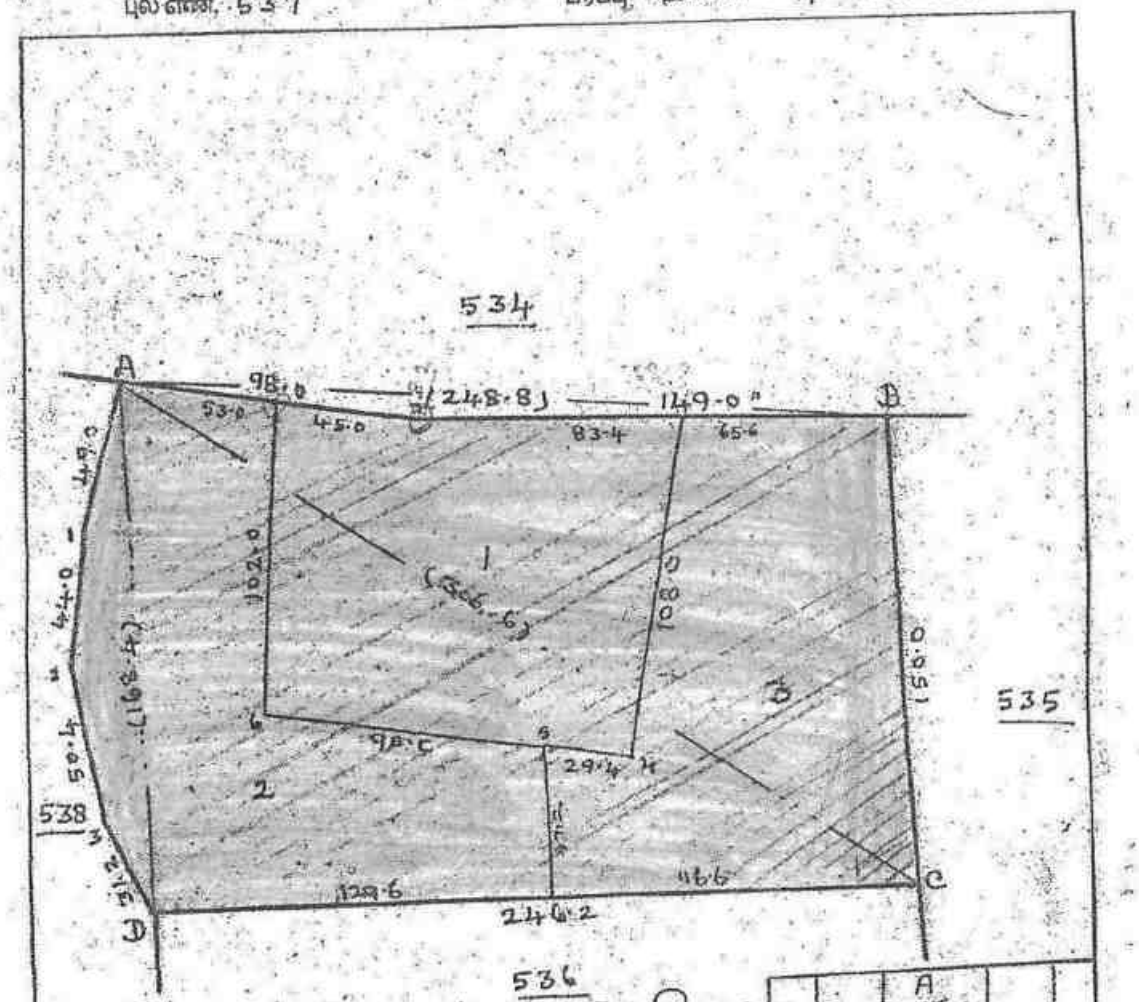
மாவட்டம். கோயம்புத்தூர்.

வட்டம். திருப்பூர்

புலஎண். 537

கிராமம் { எண். 22
பெயர். பெருந்தொழுவு

பரப்பு: ஹெக்டேர். 4 ஏர். 04.0



சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க குத்தகை உரிமை கோரும் மனு

[illegible] 11.10.2021

கிராம நிர்வாக அலுவலர்
பிறப்பு இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

		A (306.6)		
6	65.8	208.2		
5	26.0	126.0		
4	13.4	100.0		
		C		
		D (118.4)		
		140.4	13.6	3
		90.2	19.4	2
		46.6	13.6	1
		A		

		B (248.8)		
		97.8	7.8	7
		A		

அளவு பதிவு உள்ளது

LEASE APPLIED AREA

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

மாவட்டம். கோயம்புத்தூர்.

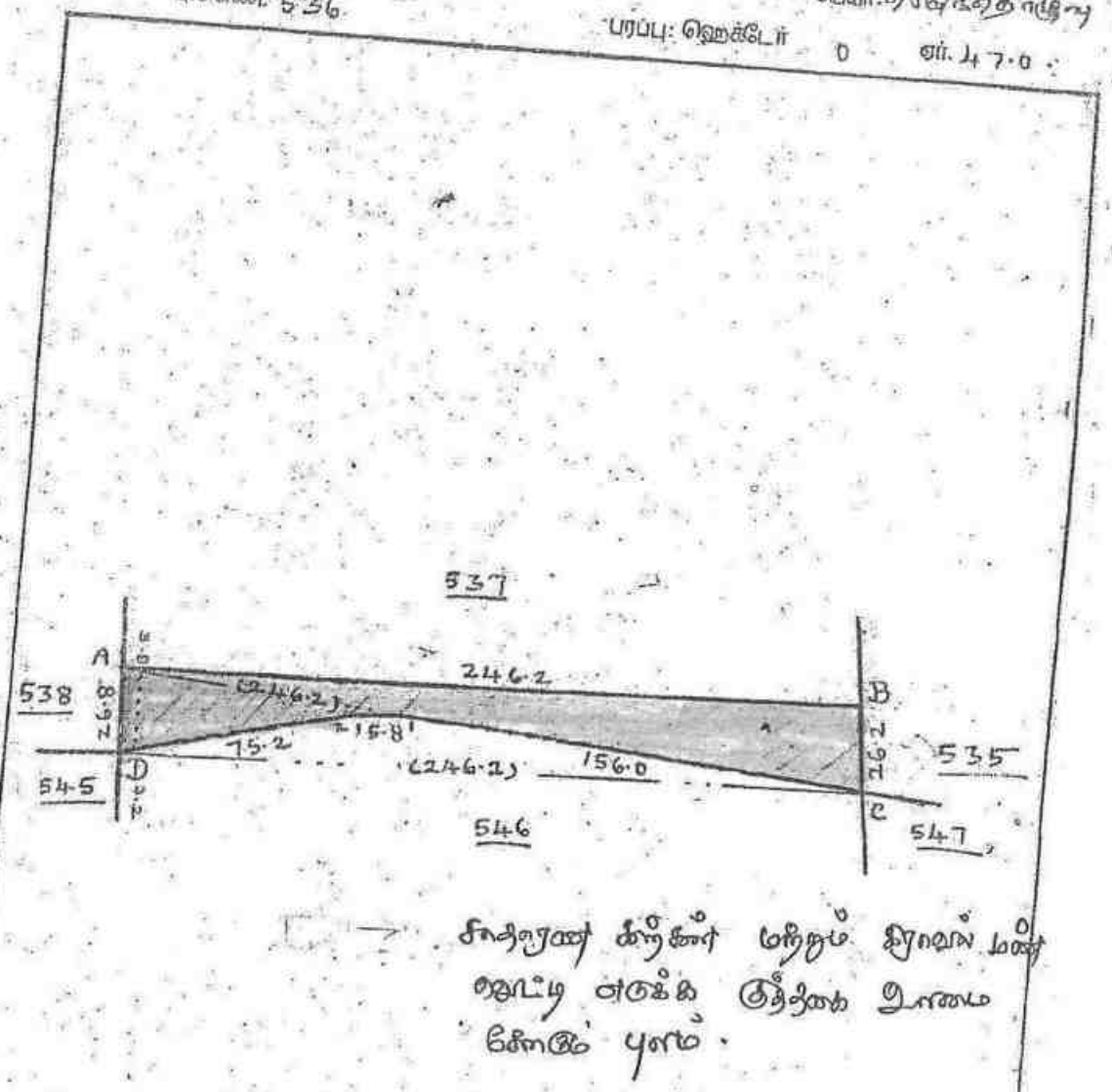
வரைபடவு. எண் 23

வட்டம். திருப்பூர்

கிராமம் { எண். 22
பெயர். பெரியதொழுவு

புல எண். 536

பரப்பு: ஹெக்டேர் 0 ஏர். 47.0



சுண்ணாம்பு கற்கள் மற்றும் சிறுவன் மண் வெட்டி எடுக்கும் குத்தகை பரப்பு கோரும் புலம்.

4/10/2021

கிராம நிர்வாக அலுவலர்
பிறப்பு. இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

		D		
		(246.2)		
		171.2	15.0	2
		155.4	16.8	1
		1.4	26.2	B
		C		

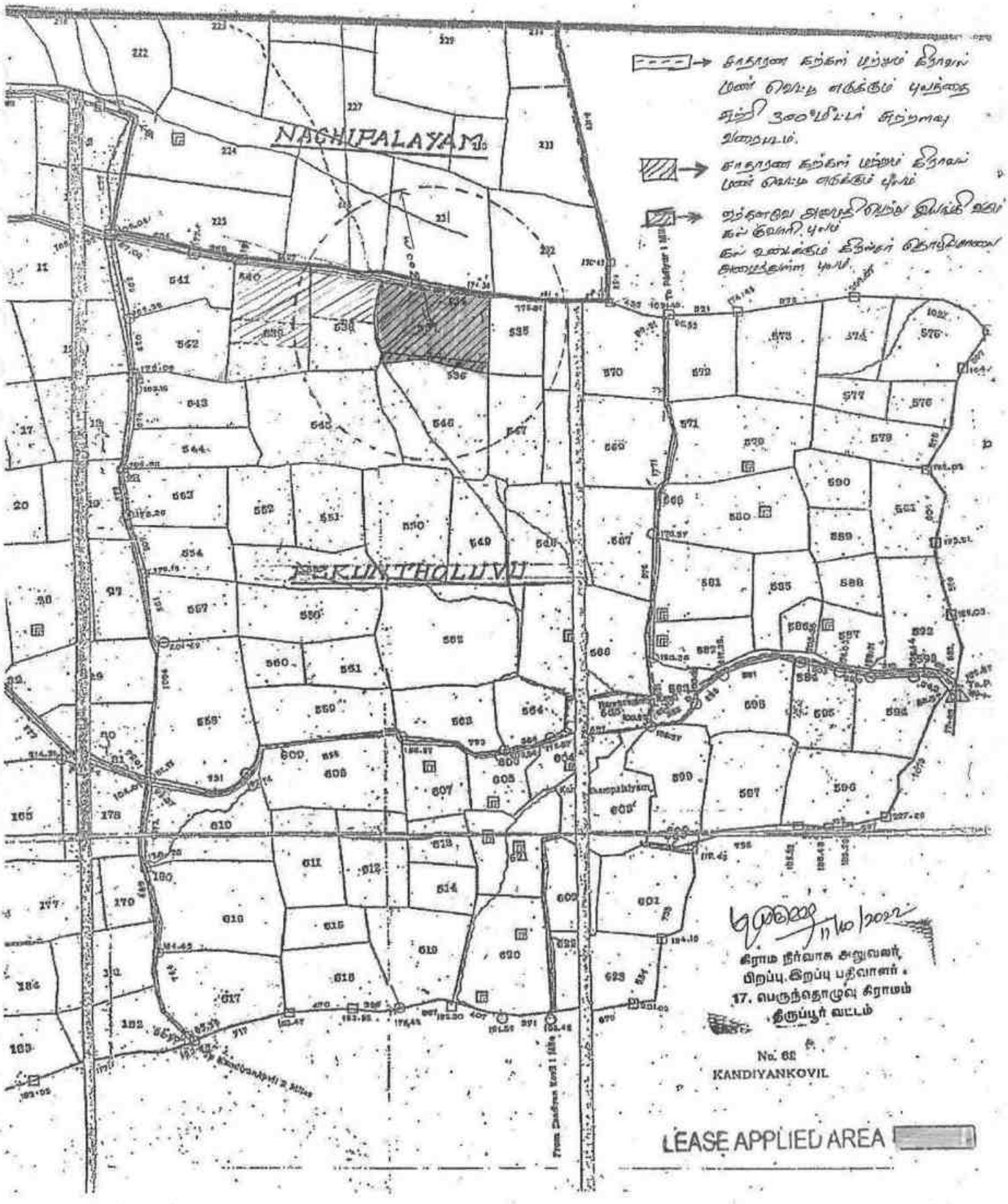
அளவு. 1மி மீ 2000மிமீ

LEASE APPLIED AREA

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ANNEXURE III

திருப்பூர் மாவட்டம், திருப்பூர் தென்னி வட்டம் திருத்துறை மற்றும் கோத்தி மாவையம் இரண்டு சுரங்கம் வரைபடம்



ANNEXURE IV





தமிழக அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. என் 10(1) பிரிவு

மாவட்டம் : திருப்பூர் வட்டம் : திருப்பூர் தெற்கு

வருவாய் கிராமம் : பெருந்தொழுவு பட்டா என் : 2138

உரிமையாளர்கள் பெயர்

1.	கொழுந்தவேலப்ப கவுண்டர்	மகன்	பழனிசாமி	-
2.	மகேந்திரன்	மனைவி	புவனேஸ்வரி	-
3.	ஜெகதீசன்	மனைவி	ஞானசுந்தரி	-

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏ	ரூ - பை	ஹெக் - ஏ	ரூ - பை	ஹெக் - ஏ	ரூ - பை	
536	-	0 - 47.00	0.63	--	--	--	--	2019/0103/32/207859------ 01-10-2019
537	2	1 - 39.50	1.94	--	--	--	--	2019/0103/32/207859------ 01-10-2019
538	1	1 - 84.50	2.55	--	--	--	--	2019/0103/32/207859------ 01-10-2019
		3 - 71.00	5.12					

குறிப்பு2 :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 32/08/017/02138/20764 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 10-06-2022 அன்று 03:44:59 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

✓ செயலாளர்

பெருந்துறை கூட்டுறவு தொடக்க
வேளாண்மை மற்றும் ஊரக வளர்ச்சி
வங்கி லிட்., எண்: கே. 598, பெருந்துறை

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தமிழக அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் **10(1)** பிரிவு

மாவட்டம் : திருப்பூர் வட்டம் : திருப்பூர் தெற்கு

வருவாய் கிராமம் : பெருந்தொழுவு பட்டா எண் : **2136**

உரிமையாளர்கள் பெயர்

1.	பழனிசாமி	மகன்	ஜெகதீசன்	-
2.	பழனிசாமி	மகன்	மகேந்திரன்	-
3.	மகேந்திரன்	மனைவி	புவனேஸ்வரி	-
4.	ஜெகதீசன்	மனைவி	ஞானசுந்தரி	-

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	
537	1	1 - 27.50	1.76	--	--	--	--	2018/0103/32/152669---- 31-10-2018
537	3	1 - 37.00	1.89	--	--	--	--	2018/0103/32/152669---- 31-10-2018
539	1	2 - 32.50	3.22	--	--	--	--	2018/0103/32/152669---- 31-10-2018
539	2	2 - 33.00	3.22	--	--	--	--	2018/0103/32/152669---- 31-10-2018
		7 - 30.00	10.09					

குறிப்பு2 :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **32/08/017/02136/20742** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 10-06-2022 அன்று 03:45:48 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

செயலாளர்
பெருந்துறை கூட்டுறவு தொடக்க
வேளாண்மை மற்றும் ஊரக வளர்ச்சி
வங்கி லி., எண். 893, பெருந்துறை

1431 - ஆம் பசலியில் திருப்பூர் கிராமக் கணக்கு மாவட்டம் திருப்பூர் தாலுக்கா 10, பெருந்தொழு

எண் 2

கிராமத்தில் வருடவாரி புலவாரி கைப்பற்று சாகுபடி அடங்கல் கணக்கு

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.					கைப்பற்று தாருடைய பெயரும் எண்ணும் அல்லது அநுபோக தாருடைய பெயர்.	சாகுபடி பயனின் கொள்.	முதல் போகம்.					இரண்டாம் போகம்.					கீழ்க்கண்டவகையில் பயிரிடப்படாத உள்ள நிலத்தில் தன்மை மற்றும் பரப்பின் விவரங்கள் ஒவ்வொரு நில அளவை எண் அல்லது அதன் பகுதியில்.	பயிர் செய்வதிலும் தவறினால், ஏற்படுவதாகும்
நில அளவை எண். (1)	உட்பிரிவு எண். (2)	பரப்பு. (3)	தீர்வை. (4)	திரு போகம் அல்லது இரு போகம். (5)	(6)	நிலத்தின் எந்த பகுதி யாவது சாகுபடியாகாமல் விடப்பட்டுள்ளதா. (7)	எந்த பாகத்தில் பயிர் செய்யப்பட்டது எந்த பாகத்தில் அறுவடை செய்யப்பட்டது. (8)	பயிரின் பெயர். (9)	பயிரான / அறுவடையான பரப்பு. (10)	உண்மையான பாய்ச்சல் ஆதாரம். (11)	விளைச்சல் அளவு விழுக்காடு. (12)	எந்த பாகத்தில் பயிர் செய்யப்பட்டது எந்த பாகத்தில் அறுவடை செய்யப்பட்டது. (13)	பயிரின் பெயர். (14)	பயிரான / அறுவடையான பரப்பு. (15)	உண்மையான பாய்ச்சல் ஆதாரம். (16)	விளைச்சல் அளவு விழுக்காடு. (17)	கிராம அலுவலரின் முறிப்புணை :- (1) புலன்களின் பகுதிகளில் பயிரிடப்பட்ட விவரங்கள் அனைத்தும் (2) கைப்பற்றில் இல்லாத புலன்களில் காரணமும் (3) முந்தைய வாரத்தில் உறுதியளித்தபடி பயிரிடப்பட்டவை என்று பரிசோதனையின் மூலம் பிறரை மாதங்களில் நீர் பாய்ச்சப்பட்ட விவரங்கள். (18)	(அ) வளம், (ஆ) பயனற்ற பயிர் செய்யவாத நிலம், (இ) விவசாயம் மற்றும் தோட்ட காரியங்களுக்கு பயன் படுத்தப் படும் நிலம், (ஈ) பயிரிடத்தக்க தரிசு (உ) நிலையான புல் தாவரமும் மற்றும் இதர மேய்ச்சல் நிலங்களும், (ஊ) விதைக்கப்பட்ட நிகர பரப்பில் சேர்க்கப்படாத மலைகைப் பயிர்களும் தோப்புகளும், (எ) நடப்புத் தரிசுகள் (ஏ) இதர தரிசு நிலங்கள். (18அ)	(19)
536	—	0.07	0.63	2138	பழனிசாமியும்		—	—										
537	1	1.20	1.76	2138	சுகுதீஸ்வரனும்		—	—										
537	2	1.395	1.94	2138	பழனிசாமியும்		—	—										
537	3	1.37	1.87	2138	சுகுதீஸ்வரனும்		—	—										

/ உண்மைநகல் /

12.12.2022

கிராம நிர்வாக அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

GEOLOGY AND MINING • TIRUPUR • ASSISTANT DIRECTOR

ANNEXURE V

415 A

380/18-R.F.III-A10-5,00,000 Cps.-GBP.-Mdu-7-2021.

ANNEXURE VI

அ-பதிவேடு விவரங்கள்

மாவட்டம் : திருப்பூர்

வட்டம் : திருப்பூர் தெற்கு

கிராமம் : பெருந்தொழுவு

1. புல எண்	536	9. மண் வயனமும் ரகமும்	8 - 4	
2. உட்பிரிவு எண்	-	10. மண் தரம்	6	
3. பழைய புல உட்பிரிவு எண்	536	11. தீர்வை (ரூ - ஹெ)	1.38	
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 47.00	
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.63	
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	2138	
7. பாசன ஆதாரம்	-	15. குறிப்பு	கால்பாதை	
8. இரு போகமா	1	16. பெயர்	பழனிசாமிமற்றும	2பேர்

குறிப்பு 1:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் http://eservices.tn.gov.in என்ற இணைய தளத்தில் 50764 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

செயலாளர்
பெருந்துறை கூட்டுறவு தொடக்க
வேளாண்மை மற்றும் ஊரக வளர்ச்சி
வங்கி லிட்., எண்: கே. 598, பெருந்துறை

அ-பதிவேடு விவரங்கள்

மாவட்டம் : திருப்பூர்

வட்டம் : திருப்பூர் தெற்கு

கிராமம் : பெருந்தொழுவு



1. புல எண்	537	9. மண் வயனமும் ரகமும்	8 - 4
2. உட்பிரிவு எண்	1	10. மண் தரம்	6
3. பழைய புல உட்பிரிவு எண்	537-1	11. தீர்வை (ரூ - பை)	1.38
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 27.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.76
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	2136
7. பாரன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	1	16. பெயர்	ஜெகதீசன்மற்றும 3பேர்



குறிப்பு 1:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **http://eservices.tn.gov.in** என்ற இணைய தளத்தில் **50742** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

செயலாளர்
பெருந்துறை கூட்டுறவு தொடக்க
வேளாண்மை மற்றும் ஊரக வளர்ச்சி
வங்கி லிட்., எண்: கே. 598, பெருந்துறை

அ"பதிவேடு விவரங்கள்

மாவட்டம் : திருப்பூர்

வட்டம் : திருப்பூர் தெற்கு

கிராமம் : பெருத்தொழுவு

பொது சேவை மையம்
138 அக்ரஹார வீதி
பெருந்துறை.

1. புல எண்	537	9. மண் வயனமும் ரகமும்	8 - 4
2. உட்பிரிவு எண்	2	10. மண் தரம்	6
3. பழைய புல உட்பிரிவு எண்	537/	11. தீர்வை (ரூ - பை)	1.38
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 39.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.94
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	2138
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	1	16. பெயர்	பழனிசாமிமற்றும 2பேர்

குறிப்பு 1:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **http://eservices.tn.gov.in** என்ற இணைய தளத்தில் **50764** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

✓ செயலாளர்
பெருந்துறை கூட்டுறவு தொடக்க
வேளாண்மை மற்றும் ஊரக வளர்ச்சி
வங்கி லிட்., எண்: கே. 598, பெருந்துறை

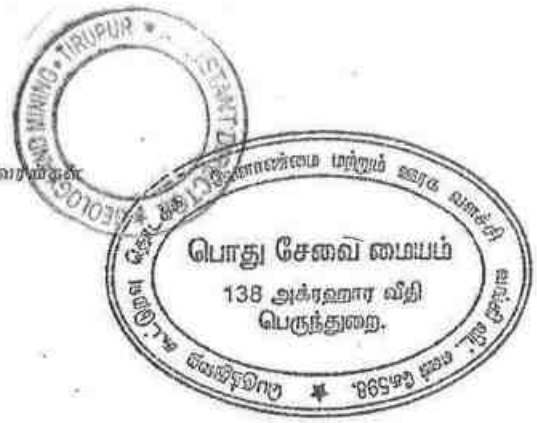
418 A

அ-பதிவேடு விவரங்கள்

மாவட்டம் : திருப்பூர்

வட்டம் : திருப்பூர் தெற்கு

கிராமம் : பெருந்தொழுவு



1. புல எண்	537	9. மண் வயனமும் ரகமும்	8 - 4
2. உட்பிரிவு எண்	3	10. மண் தரம்	6
3. பழைய புல உட்பிரிவு எண்	537/	11. தீர்வை (ரூ - ஹெ)	1.38
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 37.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.89
6. நிலத்தின் வகை	புஞ்சை	14. ப ா எண்	2136
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	1	16. பெயர்	ஜெகதீசன்மற்றும 3பேர்

குறிப்பு 1:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை நாங்கள் http://eservices.tn.gov.in என்ற இணைய தளத்தில் 50742 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

செயலாளர்
பெருந்துறை கூட்டுறவு தொடக்க
வேளாண்மை மற்றும் ஊரக வளர்ச்சி
வங்கி லிட்., எண்: கே. 598. பெருந்துறை.

ANNEXURE VII



தமிழ்நாடு तमिलनाडु TAMIL NADU 12.10.22.

VKP ENGINEERING IND PVT LTD

PERUNDURAI-

15AC 828311

எஸ். ஜெயக்குமார் வேதலேன்
முத்திரைத்தாள் விற்பனையாளர்
உரிமை எண்: 3/1997
பெருந்துறை.

சம்மதக் கடிதம்.

ஈரோடு மாவட்டம், பெருந்துறை வட்டம், ஈங்கூர் கிராமம், வெட்டுக்காட்டுவலசு, கதவு எண். 11/32 என்ற முகவரியில் வசிக்கும் காலஞ்சென்ற கொழந்தவேலப்ப கவுண்டர் மகன் V.K. பழனிச்சாமி (1), மேற்படி முகவரியில் வசிக்கும் திரு. V.K. பழனிச்சாமி மகன P. மகேந்திரன் (2), மருமகள்கள் M. புவனேஸ்வரி (3), J. ஞானசுந்தரி (4) ஆகிய நாங்கள், ஈரோடு மாவட்டம், பெருந்துறை வட்டம், ஈங்கூர் கிராமம், வெட்டுக்காட்டுவலசு, கதவு எண். 11/32 என்ற முகவரியில் வசிக்கும் V.K. பழனிச்சாமி மகன் P. ஜெகதீசன் (5) ஆகிய நாங்களுக்கு எழுதிக் கொடுக்கும் சம்மதக் கடிதம் என்னவென்றால்,

1. V. பழனிச்சாமி
2. M. Puvaneswari
3. M. Bhuvaneswari
4. J. Gnanasundari
5. P. Jegadeesan

NOTARY
Name: S. MANIAN, M.A., B.L.,
Area: Perundurai Tk
Regd. No.G.O. Ms.No.341/18
INDIA
Pin: 638 052
GOVT. OF TAMIL NADU

12.10.22

Mobile 99655 41074 ☎ 220074
S. MANIAN, M.A.,B.L.,
Advocate & Notary Public
305, 306, Ram Nagar,
PERUNDURAI -638 052. Erode Dt.
Tamilnadu, India.
Book No. XXI Serial No. 3773

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண். 536-ல் 0.47.00 ஹெக்டர் பரப்பு மற்றும் 537/2-ல் 1.39.50 ஹெக்டர் பரப்பும் பட்டா பூமி பட்டா எண். 2138-ன்படி நம்மில் (1), (3) மற்றும் (4) இலக்கமிட்டவர்கள் பெயரிலும், புல எண்கள். 537/1-ல் 1.27.5 ஹெக்டர் மற்றும் 537/3-ல் 1.37.0 ஹெக்டர் ஆகியன பட்டா எண். 2136-ன்படி நம்மில் (2), (3), (4) மற்றும் (5) இலக்கமிட்டவர்கள் பெயரிலும் கூட்டுப்பட்டாவாக தாக்கலாகியுள்ளது. மேற்படி புல எண்களான புல எண். 536-ல் 0.47.00 ஹெக்டர் , 537/1-ல் 1.27.50 ஹெக்டர் மற்றும் 537/2-ல் 1.39.50 ஹெக்டர் மற்றும் 537/3-ல் 1.37.00 ஹெக்டர் ஆகியவற்றில் மொத்தம் 4.51.00 ஹெக்டர் பரப்பில் Tvl. V.K.P. Engineering IND Pvt. Ltd., என்ற பெயரில் சாதாரண கற்கள் / கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்கக் கோரி திருப்பூர் மாவட்ட ஆட்சியரிடம் மனு செய்துள்ளார். மேற்படி விண்ணப்பத்தின் பேரில் மாவட்ட ஆட்சியர் அனுமதி வழங்கும் நாளிலிருந்து பத்து ஆண்டுகளுக்கு குவாரி குத்தகை உரிமம் பெற்று சாதாரண கற்கள் / கிராவல் குவாரி நடத்த நம்மில் (1) முதல் (5) இலக்கமிட்டவர்களான எங்களுக்கு எவ்விதமான ஆட்சேபணையும் இல்லை. பின்னிட்டு எவ்வித பிரச்சனையும் செய்யமாட்டோம். முழுமனதுடன் சம்மதம் அளிக்கிறேன் என உறுதி கூறுகிறோம். மேலும், மேற்படி நிறுவனத்தின் நிர்வாகப் பங்குதாரர் என்ற முறையில் மேற்படி உரிமத்திற்காக அனைத்து ஆவணங்களிலும் கையொப்பமிடும் அதிகாரத்தினை நம்மில் (1) முதல் (4) இலக்கமிட்டர்களான நாங்கள் நம்மில் (5) இலக்கமிட்ட திரு. P. ஜெகதீசன் என்பவருக்கு கூட்டுப்பட்டதாரர் என்ற முறையிலும், நிறுவனத்தின் நிர்வாக பங்குதாரர்கள், பங்குதாரர்கள் என்ற முறையிலும் சம்மதம் தெரிவிக்கிறோம்.

இப்படிக்கு,

1. V.K.P.
2. V.K.P.
3. M. Bhuvaneswari
4. S. Gayathri
5. P.

SOLEMNLY AFFIRMED AND SIGNED BEFORE ME AT PERUNDURAI, ERODE Dt.,
PIN : 638 052 ON 12.10.2021

S. MANIAN, M.A.,B.L.,
ADVOCATE & NOTARY PUBLIC
306, RAM NAGAR,
PERUNDURAI - 638 052.
ERODE DT., TAMILNADU, INDIA.
APP/NR.N/ERD2204/00002

Mob: 99655 41074 ☎ 220074
S. MANIAN, M.A.,B.L.,
Advocate & Notary Public
305, 306, Ram Nagar,
PERUNDURAI -638 052. Erode Dt.
Tamilnadu. India.
Book No. XXI Serial No. 3728

12.10.2021

ANNEXURE VIII



COMPANY LIMITED BY SHARES

(THE COMPANIES ACT, 2013)

MEMORANDUM OF ASSOCIATION OF VKP ENGINEERING IND PRIVATE LIMITED

I The name of the company is VKP ENGINEERING IND PRIVATE LIMITED

II The registered office of the company will be situated in the State of Tamilnadu.

III The objects for which the company is established are:

(A) MAIN OBJECTS OF THE COMPANY TO BE PURSUED BY THE COMPANY ON IT'S INCORPORATION ARE:

1. To carry on the business to construct, alter, act as civil, architectural engineer, contractor for constructing, reconstructing, improving, commercial complexes, shops, offices, industrial estates, flats, houses, hotels, restaurants, bungalows and to manage construction and developmental work of roads, highways and bridges and to acquire license or lease mines for extracting blue metals, gravels, such other items and to trade or manufacture in construction materials in India or elsewhere.

[B] THE OBJECTS INCIDENTAL AND ANCILLARY TO THE ATTAINMENT OF THE MAIN OBJECTS ARE:

1. To enter into contracts, agreements and arrangements with any other company, firm or person in India or abroad on behalf of the company for the objects for which the company is formed.
2. To employ experts to investigate and examine into the conditions, prospects, value, character and circumstance of any business concerns or undertakings or of any assets, properties, and rights in connection with the business of the company.
3. To establish branches subsidiary companies or appoint agencies for or in connection with any of the objects of the company, and to enter into any arrangement with such subsidiary company for taking the profits to and bearing the losses of any business or branch so carried on or for financing any such subsidiary company or guaranteeing its liabilities, or to make any other arrangement which may seem desirable with reference to any business or branch so carried on including power at any time

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either temporarily or permanently, to close any such branch or business.

4. To establish and maintain branch offices and local registers and to procure recognition of the company and to carry on business in any part of the world as are possessed by local companies or partnerships or as may be thought desirable.
5. Subject to the provisions of the Act to take part in the technical supervision and control of the business or operations of any company or undertaking having similar objects and to appoint and remunerate any directors, accountants or other experts or agents for such business operations.
6. To purchase, take on lease or in exchange, hire or otherwise acquire any immovable or movable property and any rights or privileges which the company may think necessary or convenient for the purpose of its business, and in particular any land, buildings, machinery, plant and either to retain any property so acquired for the purposes of the Company's business or to turn the same to account as may seem expedient.
7. To construct, improve, maintain, develop, work, manage, carry out or control any buildings, offices, roadways, branches, or siding, bridges, wells, reservoirs, watercourses, wharves, warehouses, electric works, shops, stores chawls and other buildings for housing employees, workers and others, other works and conveniences which may seem calculated directly or indirectly to advance the Company's interests, and contribute to, subsidise or otherwise assist or take part in the construction, improvement, maintenance, development working, management, carrying out or control thereof.
8. To sell, lease, mortgage, grant licenses, easements and other rights over and in any other manner deal with or dispose of the undertaking, property, assets, rights and effects of the Company or any part thereof, for such consideration as the Company may think fit, and in particular for shares, debentures or securities of any other company having objects altogether or in part similar to those of this company.

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9. To acquire and undertake whole or any part of the business, property and liabilities of any person, firm or company carrying on or proposing to carry on any business which the company is authorised to carryon or possessed of property suitable for the purposes of this Company.
10. To amalgamate, enter into any partnership or partially amalgamate with or acquire interest in the business of any other company, person or firm carrying on or engaged in, or about to carry on or engage in any business or transaction included in the objects of the Company, or enter into arrangement of sharing profits or for co-operation or for mutual assistance with any such person, firm or company, to acquire the business of the Company or connected therewith any of the Company's property and to give or accept by way of consideration for any of the acts or things aforesaid or property acquired, any shares, debentures, debenture-stock or securities that may be agreed upon and to hold and retain, or sell, mortgage and deal with any shares, debentures, debenture-stock or securities so received.
11. Subject to Section 391 to 394 of the Act to amalgamate with any other company whose objects are, or include objects similar to those of this Company whether by sale or purchase of fully or partly paid up shares or otherwise of the undertaking subject to the liabilities of this or any such company as aforesaid, with or without winding up or by sale or purchase of fully or partly paid-up shares or otherwise of all or a controlling interest in the shares or stock of this or any other company as aforesaid or in any other manner.
12. To enter into arrangement with any government or authorities, supreme, municipal, local or otherwise, or any other person or company that may seem conducive to Company's objects, or any of them, and obtain from any such government, authority, person or company any rights, privileges, charters, contracts, licenses and concessions which the company may think fit, desirable to obtain and to carry out, exercise and comply therewith.



13. To apply for, promote, and obtain any Act, charter, order, regulation, privilege, concession, license or authorization of any Government, municipality or any authority or any corporation or any public body which may be empowered to grant for enabling the Company to carry any of its objects into effect or for extending any of the powers of the Company or for any other purpose which may seem expedient and to oppose any bills, proceedings or applications which may be seen calculated to prejudice the Company's interests, and to appropriate any of the Company's shares, debentures or other securities and assets to defray to necessary cost, charges and expenses thereof.
14. To apply for, purchase, or otherwise, acquire, and protect and renew in any part of the world and patents, patent rights, brevets, invention, trade-marks, designs, formulae, copyrights, licenses, concessions and the like, conferring any exclusive or non-exclusive or limited rights to their use, or any secret or other information as to any invention which may seem capable of being used for any of the purpose of the company and to use exercise, develop, or grant licenses in respect of or otherwise turn to account the proprietary rights, or information so acquired and to expend money in experimenting upon, testing or improving any such patents, inventions or rights.
15. To sell any patent rights or privileges belonging to the Company or which may be acquired by it or any interest in the same, and to grant licenses for the use and practice of the same or any inventions, patents or privileges in which the Company may be interested, and to do all such acts and things as may be deemed expedient for turning to account any inventions, patents, and privileges in which Company may be interested.
16. To sell or sublet any concession or licenses obtained or contracts entered into and generally to sell the whole or part of the property and business of the Company for cash of for the shares or obligations of any person or persons.



17. To improve, manage, cultivate, develop, exchange, refine, repair, alter, let on account, grant rights and privileges in respect of or otherwise deal with all or part of the properties and rights of the Company.
18. To adopt such means of making known the business of the company as may seem expedient, and in particular by advertising in the press, circulars, by purchase and exhibition of works of art or interest, by publication of books and periodicals and by granting prizes, rewards and donations.
19. Subject to provisions of the Act to make donations to such persons or institutions and in such cases and either by cash or any other assets as may be thought directly or indirectly conducive to any of the Company's objects or otherwise expedient and in particular to remunerate any person or corporations introducing business to this Company and also to subscribe, contribute or otherwise assist or guarantee money for charitable scientific, religious or benevolent, national, public, cultural, educational or other institutions or objects or for any exhibition or for any public, general or other objects.
20. To establish and maintain or procure the establishment and maintenance of any contributory or non-contributory pension or superannuation funds for the benefit of and give or procure the giving of donations, gratuities, pensions, allowances or emoluments to any persons who are or were at any time in the employment or service of the Company or of any company which is subsidiary of the company, or who are or were at any time Directors or officers of the Company or of any such other company, as aforesaid and the wives, widows, families, dependents and connections of any such persons, and to also establish and subsidise and subscribe to any institutions, associations, clubs or funds calculated to be for the benefits of or for advancing the interests and wellbeing of the Company as aforesaid, and make payments, to or towards the insurance of any such person aforesaid and to do any of the matters aforesaid either alone or in conjunction with any such other company as aforesaid.

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21. To refer or agree to refer any claim, demand, dispute, or any other question, by or against the Company, or in which the Company is interested or concerned, and whether between the company and the member or members of his or his or their representatives, or between the Company and third parties, to arbitration in India or at any place outside India, and to observe and perform awards made thereon, and to do all acts, deeds, matters and things necessary or expedient to carryout or enforce the awards.
22. To pay out of the funds of the Company all expenses which the company may lawfully pay with respect to the promotion, formation and registration of the Company.
23. To pay all preliminary expenses of any company promoted by the Company or any company in which the Company is or may contemplate being interested, including in such preliminary expenses all or any part of the costs and expenses of owner of any business property acquired by any such company.
24. To pay for any rights or property acquired by the Company and to remunerate any person or Company for services rendered or to be rendered in placing of or assisting to place or guaranteeing the placing of shares in the company's capital or any debentures, debenture stock, or other securities of the company or in or about the formation or promotion of the company, or the acquisition of property by the company or the conduct of its business or otherwise for any of the purpose of the company, whether by cash payment or by the allotment of shares, debentures, or other securities of the company, credited as paid up in full or in part or otherwise.
25. To open any kind of account in any Bank, and to make, draw, accept, endorse, discount, execute and issue bills of exchange, promissory notes, bills of lading, warrants, debentures and other negotiable or transferable instruments or securities.



26. To vest any movable or immovable property, rights or interest acquired by or belonging to the Company in any person or company on behalf of or for the benefit of the company, and with or without any declared trust in favour of the Company.
27. Subject to the provisions of the Companies Act 1956, to distribute among the members in specie or in kind any property of the Company or any proceeds of sale or disposal of any property of the company in the event of winding up of the Company.
28. To insure the whole or any part of the property and assets of the company either fully or partially to protect and indemnify the Company from liability or loss in any respect either fully or partially, and to also ensure, and to protect and indemnify any part or portion thereof either in mutual principle or otherwise.
29. To carry out in any part of the world all or any of the company's objects as principal, agent, contractor, or otherwise, and by or through agents or otherwise, and either alone or in conjunction with any person, firm, association, corporate body, municipality, province, state, body politic or government or colony or dependency thereof.
30. To subscribe, acquire, take up, and hold shares, stocks, debentures, debenture stock, bonds, obligations, and other securities issued or guaranteed by any company and to invest in debentures, debenture stock, bonds, obligations, and other securities issued or guaranteed by any Government Sovereign Ruler, Commissioner, public body or authority supreme, municipal, local or otherwise, whether in India or in any foreign country.
31. To issue and deposit any securities which the Company has power to issue by way of mortgage to secure any sum less than the nominal amount of such securities and also by way of securities for the performance of any contracts or obligations of the company or of its customers or other persons or corporations having dealings with the Company, or in whose business or undertakings the Company is interested, whether directly or indirectly.



32. To lend and advance money or property with or without security or to give credit to such persons or companies and upon such terms as may seem expedient and in particular to customers and persons having dealings with the Company and to guarantee the performances of any contract or obligation and the payment of money of or by any such persons or companies, generally to provide guarantees and give indemnities and generally to provide credit facilities to customers and others provided that the Company shall not carry only the business of banking as defined by the Banking Regulation Act 1949.
33. To place, to reserve, or to distribute as bonus shares among the members or otherwise to apply as the Company if permitted by law and may deem fit including other money received by way of premium on shares or debentures or debentures issued at a premium by the Company and any money received in respect of dividends accrued on forfeited shares.
34. To undertake and execute any trusts, the undertakings of which may seem to the Company desirable and either gratuitous or otherwise
35. To render or assist in rendering of technical services to any person, firm, company and undertaking in connection with the business of the Company.
36. To exercise all or any of its corporate powers, rights and privileges and to conduct its business in all or any of its branches in the Union of India, and in any or all states, territories, possessions, colonies and dependencies thereof and in any or all foreign countries, and for this purpose to have and maintain and to discontinue, such number of offices and agencies therein as may be convenient.

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[C] OTHER OBJECTS: (NOT INCLUDED IN CLAUSES (A) & (B) ABOVE)

1 To carry on the business of assembling, participating in, establishing, erecting, building, planning, commissioning all types of engineering, mechanical, construction and industrial plants and projects including turnkey projects in India and any other country in the world.

2 To carry on the business of manufacturers, installers, maintainers, repairers of and dealers in electrical and electronic appliances and apparatus of every description, including ratio, magnetic tapes, tape recorders, television and telecommunication requisites, supplies, equipments and stores.

3 To manufacture, make, assemble, build, construct, mould, erect, fabricate, fund and participate in industrial, mechanical, construction and office plants, equipments, machinery, vehicles, buildings and real estate required for manufacturing, processing, transportation and other commercial, manufacturing, trading and service business.

4 To plan, manufacture, design, import, export, purchase, sell, construct, repair install and otherwise deal in or with apparatus, appliances, instruments, machinery, fixtures, devices and contrivances of every kind more particularly those used in the regulation or control of temperature, heat, ventilation, compression, moisture and other conditions of air, steam, electricity, gas, water, oil and in the drying and moistening of materials and in the regulation or control of the said or allied instruments and systems, pertaining in any manner to the act, art, science and/or business of heating, humidification, dehumidification, absorption, purification, and handling of air or other gases.



5 To carry on the trade or business of manufacturers of and dealers, in calculators and tabulators of every kind, description and activation, accounting, book-keeping, calculating, accounting, reckoning, registering, recording, perforating, tabulating, sorting, adding, subtracting, dividing, multiplying, printing, typewriting, copying, reproducing and distributing machinery systems, apparatus appliance and devices of all kinds, and for all purposes and any products and components thereof or materials or articles used in connection therewith, and any and all other machines. Machinery, appliances, apparatus, devices, materials, substances, articles or things of a character similar or analogous to the foregoing or any of them or connected therewith.

6 To provide and undertake consultancy services in the fields of management, finance, administration, personnel including selection and recruitment, marketing, accountancy, business planning, diversification, new products, technology, engineering, contracting, erection, supervision, commissioning, guidance and other works, services and activities including the marking estimates, preparing evaluations and economic studies and furnishing all other works, services and securities required to enable clients to consider the feasibility and execution of all types of works relating to or connected therewith.

7 To undertake, carry out, promote and sponsor rural development including any program for promoting the social and economic welfare of or the uplift of the public in any rural area and to incur any expenditure on any program of rural development and to assist execution and promotion thereof either directly or through an independent agency or in any other manner.

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8 To undertake, carry out, promote sponsor or assist any activity for the promotion and growth of national economy and also any activity likely to promote national welfare or social, economic or moral uplift of the public or any section of the public and in such manner and by such means and without prejudice to the generality of the foregoing, undertake, carry out, promote and sponsor any activity for publication of any books, literature, newspapers or for organizing lectures or seminars likely to advance these objects or for giving merit awards for giving scholarships, loans or any other assistance to deserving students or other scholars or persons to enable them to prosecute their studies or academic pursuits or researches.

IV. The liability of the member(s) is limited and this liability is limited to the amount unpaid, if any, on the shares held by them.

V. The Authorised Share Capital of the Company is Rs. 10,00,000/- (Rupees Ten Lakhs) divided into 100,000/- (One lakh) Equity shares of Rs. 10/- (Rupees Ten) each. The Company has the power, from time to time, to increase or reduce its capital not below the minimum paid-up capital as aforesaid, and to vary, modify or abrogate any such rights, privileges or conditions or restrictions in such manner as may, for the time being be permitted by the Articles of Association of the Company or the legislative provisions for the time being in force that behalf.

We, the several persons, whose names, addresses, descriptions and occupations are hereunder subscribed below, are desirous of being formed into a company in pursuance of this Memorandum of Association and



We respectively agree to take the number of shares in the capital of the Company set opposite to out respective names: -

Sl. No.	Name, address, description and occupation of each subscriber	No. of Equity Shares taken by each subscriber	Signature
1	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPA GOUNDER S/o KOLANDAVELAPPA GOUNDER VELICHANAN KADU V.K VALASU, INGUR PO PERUNDURAI TK 638058 Age: 56 OCCUPATION: BUSINESS	10,000 TEN THOUSAND ONLY	V K Palanisamy
2	PALANISAMY JAGADEESAN S/o PALANISAMY 32 VETTUKATTU VALASU INGUR, PODUR ERODE - 638058, AGE: 34 OCCUPATION: BUSINESS	10,000 TEN THOUSAND ONLY	P. Jagadeesan
3	GNANASUNDARI D/o PALANISAMY 11-32 VETKATTUVALASU ENGUR (P) PERUNDURAI ERODE (D) 638058 Age: 31 occupation: Business	10,000 TEN THOUSAND ONLY	J. GnanaSundari
4	NANJAPPAN BHUVANESWARI D/o NANJAPPAN 230A MURUNGATHOZUVU MURUNGATHOZUVU (P) ERODE 638051 WARD-1 Age: 30 Occupation: Business	10,000 TEN THOUSAND ONLY	N. Bhuvaneswari
	TOTAL	40,000 FORTY THOUSAND	

All have signed before me at Erode

Date: 09.10.2013
Place: Erode
Witness to above signatures:

S. Parkavam
S. SARAVANAN B.Com FCA
Chartered Accountant
M.No. 210614
S/o V. Shanmugam
L375/5-4 First Floor
Periyar Nagar Surampatti
Erode - 638009



View Signatory Details

Company / LLP Name : VKP ENGINEERING IND PRIVATE LIMITED
CIN/LLPIN : U45400TZ2013PTC019956

List of Signatories

DIN/DPIN/PAN	Full Name	Present residential address	Designation	Date of Appointment	Whether DSC Registered	Expiry Date of DSC
06692274	JAGADEESAN PALNISAMY	32 VETTUKATTU VALASU, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	25/10/2013	NO	-
06692275	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER	VELICHANAN KADU, V.K.VALASU, INGUR PO, PERUNDURAI TK, 638058, Tamil Nadu, INDIA	Director	25/10/2013	YES	16/09/2016
06781531	MAHENDRAN	32 VETTUKATTUVALASU INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	15/01/2014	NO	-



COMPANY LIMITED BY SHARES

(THE COMPANIES ACT, 2013)

ARTICLES OF ASSOCIATION OF
VKP ENGINEERING IND PRIVATE LIMITED

TABLE F SHALL APPLY

1. All the regulations of Table 'F' in Schedule I of the Companies Act, 2013 shall be deemed to be incorporated with these Articles and to apply to the Company in so far as they are not inconsistent with provisions of the following Articles.

CONSTITUTION

2. The Company is a Private Company within the meaning of Section 2 (68) of the Act, having a minimum paid-up capital of one lakh rupees or such higher paid-up capital as may be prescribed and which by its articles

(i) restricts the right to transfer its shares;

(ii) limits the number of its members to two hundred:

Provided that where two or more persons hold one or more shares in a company jointly, they shall, for the purposes of this clause, be treated as a single member:

Provided further that—

(A) persons who are in the employment of the company; and

(B) persons who, having been formerly in the employment of the company, were members of the company while in that employment and have continued to be members after the employment ceased,

shall not be included in the number of members; and

(iii) prohibits any invitation to the public to subscribe for any securities of the company;



BUSINESS

3. The Business of the company may comprise of all or any part of the business and objects mentioned or included in the Memorandum of Association.

SHARE CAPITAL

4. The Authorised Share Capital of the Company is Rs. 10,00,000/- (Rupees Ten Lakhs only) divided in to 100,000 (ONE LAKH) Equity Shares of Rs. 10/- (Rupees Ten) each. The Company shall have the power to increase or reduce the capital for the time being of the Company and to divide the shares in the capital into several classes with rights, privileges or conditions as may be determined.
5. The Company may issue preference shares which shall, or at the option of the Company, be liable to be redeemed, subject to the provisions of the Companies Act
6. Subject to the provisions of the Companies Act the shares shall be under the control of the Directors, who may allot or dispose of them on such terms and conditions and at such time as the Directors may think fit.
7. The Board may allot fully paid-up shares to minors represented by their guardians.

CALLS ON SHARES

8. In clause 13 of the Table 'F' the words "provided that no call shall exceed one fourth of the nominal value of the shares or be payable at less than one month from the date for the payment of the last proceeding call" shall be omitted.
9. If any Member fails to pay any call due from him on the day appointed for payment thereof, or any such extensions thereof as aforesaid, he shall be liable to pay interest on the same from the day appointed for the payment thereof to the time of actual payment at such rate as shall from time to time be fixed by the Board not exceeding 12 per cent per annum but nothing in this Articles shall render it obligatory for the Board to demand or recover any interest from any such Member.



SHARE CERTIFICATE

10. Every persons whose name is entered as a member in the register of members shall be entitled to receive within two months after incorporation, in case of subscribers to the memorandum or after allotment or within one month after the application for the registration of transfer or transmission or within such other period as the conditions of issue shall be provided,—
    (a) One certificate for all his shares without payment of any charges; or
    (b) Several certificates, each for one or more of his shares, upon payment of Twenty rupees for each certificate after the first.
11. Every certificate shall be under the seal and shall specify the shares to which it relates and the amount paid-up thereon.
12. In respect of any share or shares held jointly by several persons, the company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all such holders

TRANSFER OF SHARES

13. No share shall be transferred to any other person so long as any member is willing or if no member is willing any other person selected by the Directors as one whom it is desirable in the interest of the Company to admit to membership is willing to purchase the same at the fair value.
14. Except where the transfer is made pursuant to Article 19, thereof, the person proposing to transfer any shares shall give notice in writing to the Company that he desires to transfer the same. Such notice shall constitute the Directors as agents of the transferor for the sale of the shares to any member or to any person selected as aforesaid at the fair value to be agreed upon between the transferor and the purchaser and in default of such agreement at a value to be fixed by the Auditors of the Company. The notice may include several shares and in such case it shall operate as if it were a separate notice in respect of each share. The notice shall not be revocable except with the sanction of the Directors.



15. Every share specified in the notice given pursuant to the preceding Article hereof shall be offered to the members in proportion to the shares of the same class in the capital of the Company held by them, or if there are no other holders of shares of the same class then to the members generally in the proportion to the shares of the Company then held by them. If no member is ready and willing to take such shares the same may be offered to any person selected by the Directors as one whom it is desirable in the interest of the Company of admit to membership.
16. If the Directors shall within the period of 28 days after being served such notice, finds a member or person selected as aforesaid, willing to purchase the shares and gives notice thereof the transferor shall be bound upon payment of the fair value fixed as aforesaid to transfer the share to the purchaser.
17. In case any difference arises between the transferor and the Purchaser as to the fair value of a share the Auditors of the Company shall certify the fair value and the same shall be binding on the transferor and the Purchaser.
18. In any case the transferor after having become bound as aforesaid makes default in transferring the share, the Directors may receive the purchase money and shall thereupon cause the name of the purchaser to be entered in the register as the holder of the share and shall hold the purchase money in trust for the transferor. The receipt of the Directors for the purchase money shall be a good discharge to the purchaser and after his name has been entered in the register in purported exercise of the aforesaid power the validity of the transfer shall not be questioned by any person.
19. If the Directors shall not, within the time prescribed as aforesaid after being served with notice, find a member or person selected as aforesaid willing to purchase the shares or any of them and give notice in the aforesaid manner, the transferor shall at any time within thirty days thereafter be at liberty, subject to Articles herein to sell and transfer the shares to any person at any price.

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20. The instrument of transfer of any share shall be in writing in the form prescribed if any, by law or otherwise and shall be duly stamped and executed by or on behalf of the transferor and the transferee and shall specify the full name, address and occupation, if any, of transferee. Every instrument of transfer shall be attested. The transferor shall be deemed to remain the holder of the share until the name of the transferee is entered in the register of members in respect thereof.
21. Restrictions as to transfer shall not apply to transfer of shares by a member to any major child, son-in-law, father, mother, brother, sister, wife or husband of such members, and any share of a deceased member to whom such deceased member may have specifically bequeathed the same the shares standing in the name of such deceased member or his executors or administrators may be transferred to the trustee of his will and shares standing in the name of the trustee of the will of any deceased member may be transferred upon any change of trustee to the trustees for the time being of such will. A member may by way of gift or otherwise, transfer any shares to any child, father, brother, sister, husband and wife of such members.
22. No transfer shall be made to an insolvent or person of unsound mind.
23. A fee not exceeding Rs. 2/- may be charged for the registration thereof.
24. The executor or administrator of a deceased member (not being one of several joint-holders) shall be the only person recognised by the company as having any title to the share registered in the name of such member and, in case of the death of any one or more of the joint holders of any registered share, the survivor shall be the only person recognised by the Company as having any title to or interest in such share, but nothing herein contained shall be taken to release the estate of a deceased joint-holder from any liability on the share held by him jointly with any other person. Before recognizing any executor or administrator the Board may require him to obtain a Grant of Probate or Letter of Administration or other legal representation, as the case may be; from a competent Court in India, provided nevertheless that in any case where the Board in its absolute discretion thinks fit it shall be lawful for the Board to dispense with the production of Probate or Letters of Administration or such other legal representation upon such terms as to indemnity or otherwise at the Board, in its absolute discretion may consider.

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25. Any Committee or guardian of a lunatic member of any person becoming entitled to or to transfer a share in consequence of the death or bankruptcy or insolvency of any Member upon producing such evidence that he sustains the character in respect of which he proposes to act under this Article or of his title as the Board thinks sufficient, may, with the consent of the Board (which the Board shall not be bound to give), be registered as a member in respect of such share, or may subject to the regulations as to transfer herein contained transfer such share. This article is hereinafter referred to us the "Transmission Article".

    (a) the person so becoming entitled under the Transmission Article shall elect be to registered as holder of the share himself, he shall deliver or send to the Company a notice in writing signed by him stating that he so elect.

    (b) If the person aforesaid shall elect to transfer the share, he shall testify his election by executing an instrument of transfer of the share.

    (c) All the limitations, restrictions and provisions of these Articles relating to the right to transfer and registration of instruments of transfer of a share shall be applicable to any such notice or transfer as aforesaid as if the death, lunacy, bankruptcy or insolvency of the Member had not occurred and the notice of transfer were a transfer signed by that Member.

BUY BACK OF SHARES

26. Subject to and in full compliance of the requirements of Sections 68, 69 and 70 of the Companies Act, 2013 or corresponding provisions of any re-enactment thereof and any Rules and Regulations as may be prescribed by the Central Government, or any other appropriate authority in this regard, either the Company in a General Meeting may, at any time and from time to time, by a Special resolution authorise or the Board of Directors may itself approve and authorise buy-back of any part of the share capital of the company fully paid up on that date.

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GENERAL MEETINGS

27. All general meetings other than annual general meeting shall be called extraordinary general meeting.

28. (i) The Board may, whenever it thinks fit, call an extraordinary general meeting.

(ii) If at any time directors capable of acting who are sufficient in number to form a quorum are not within India, any director or any two members of the company may call an extraordinary general meeting in the same manner, as nearly as possible, as that in which such a meeting may be called by the Board.

PROCEEDINGS AT GENERAL MEETINGS

29. (i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.

(iii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in section 103.

30. The chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.

31. If there is no such Chairperson, or if he is not present within fifteen minutes after the time appointed for holding the meeting, or is unwilling to act as chairperson of the meeting, the directors present shall elect one of their members to be Chairperson of the meeting.

32. If at any meeting no director is willing to act as Chairperson or if no director is present within fifteen minutes after the time appointed for holding the meeting, the members present shall choose one of their members to be Chairperson of the meeting.

33. In case of a One Person Company—

(iv) the resolution required to be passed at the general meetings of the company shall be deemed to have been passed if the resolution is agreed upon by the sole member and communicated to the company and entered in the minutes book maintained under section 118;

(v) such minutes book shall be signed and dated by the member;

(vi) the resolution shall become effective from the date of signing such minutes by the sole member.



ADJOURNMENT OF MEETING

34. (i) The Chairperson may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place.

(ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.

(i) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting.

(ii) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

VOTING RIGHTS

35. Subject to any rights or restrictions for the time being attached to any class or classes of shares,—

(a) on a show of hands, every member present in person shall have one vote;and

(b) on a poll, the voting rights of members shall be in proportion to his share in the paid-up equity share capital of the company.

36. A member may exercise his vote at a meeting by electronic means in

37. Accordance with section 108 and shall vote only once.

38. (i) In the case of joint holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders.

*(iii)*For this purpose, seniority shall be determined by the order in which the names stand in the register of members.

39. A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy, may vote, whether on a show of hands or on a poll, by his committee or other legal guardian, and any such committee or guardian may, on a poll, vote by proxy.

40. Any business other than that upon which a poll has been demanded may be preceded with, pending the taking of the poll.

41. No member shall be entitled to vote at any general meeting unless all calls or other sums presently payable by him in respect of shares in the company have been paid.



42. (i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes.

(ii) Any such objection made in due time shall be referred to the Chairperson of the meeting, whose decision shall be final and conclusive.

PROXY

43. The instrument appointing a proxy and the power-of-attorney or other authority, if any, under which it is signed or a notarized copy of that power or authority, shall be deposited at the registered office of the company not less than 48 hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, or, in the case of a poll, not less than 24 hours before the time appointed forthe taking of the poll; and in default the instrument of proxy shall not be treated as valid.

44. An instrument appointing a proxy shall be in the form as prescribed in the rules made under section 105.

45. A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given:

Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.

DIRECTORS

46. Subject to the provisions of the Companies Act, 2013, the number of Directors of the Company shall not be less than two, and not more than twelve.

47. The first directors of the Company are:

1) VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER
2) PALNISAMY JAGADEESAN

The two Directors mentioned hereinabove in Article 47 shall be permanent Directors and shall remain as Directors for life or until they voluntarily resign their office.

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48. The Board shall have power at any time from time to time to appoint Additional Directors other than a person who fails to get appointed as a director in a general meeting, as an additional director, subject to the maximum mentioned above, who shall hold office until the next annual general Meeting, but however such Additional Directors shall be eligible for re-appointment by the Company as a Director at that Meeting.
49. The Board may appoint as Alternate Director recommended for such appointment by the Director (hereinafter called the 'Original Director') to act for him during his absence for a period of not less than three months from the State in which the Meetings of the Board are ordinarily held. An Alternate Director appointed under this Article shall not hold office as such, for a longer period than that permissible to the Original Director in whose place he has been appointed and shall vacate office if and when the Original Director returns to the said State. If the term of office of the Original Director is determined before he so returns to the said State any provisions in the Act or in these Articles for the automatic reappointment or retiring Director in default of another appointment shall apply to the Original Director and not to the Alternative Director.
50. A Director shall not be required to hold any qualification shares and shall not be liable to retire by rotation.
51. Unless otherwise determined by the Company in General Meeting, each Director shall be entitled to receive out of funds of the Company for his services in attending Meeting of the Board or a committee of the Board of Directors of the Company may from time to time determine not exceeding, however, a sum of Rs. 2,000/- for each such Meeting attended. The Directors shall be entitled to be paid reasonable traveling, hotel and other expenses incurred in connection with attendance at Board and committee Meetings and otherwise in connection with the business of the Company for execution of their duties as Directors of the Company.
52. The remuneration of the Directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day to day.
53. Subject to the provisions of the Act, a Director, who is neither in the whole time employment nor a Managing Director may be paid remuneration by way of commission if the Company so resolves.
54. Subject to Section 174 of the Act, the quorum for a Meeting of the Board shall be one-third of its total strength (excluding Director, if any whose

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place may be vacant at the time and any fraction contained in that one third being rounded off as one), or two Directors, which ever is higher.

55. A resolution in writing signed by all the Directors shall be as effective as a resolution passed at a Meeting of the Directors duly convened and held and may consist of several documents in the like from each duly signed by one or more of the Directors.

56. The Directors may, from time to time, at their discretion raise or borrow for the purpose of the Company's business such sums of money as they think fit. The Directors may secure the repayment of or raise any such sum or sums as aforesaid by mortgage or charge upon the whole or any part of the property and assets of the Company, present and future including the uncalled capital or by the issue, at such price as they may think fit, of bonds or debentures or debenture stock, either charged upon the whole or any part of the property and assets of the Company or not so charged or in such other way as the Directors may think expedient.

57. The Board may exercise, all such powers of the Company and do such acts and things as are not by the Act, or any other Act or by the Memorandum or by the Articles of the Company, required to be exercised by the Company in General Meeting, subject nevertheless to these Articles, the provisions of the Act, or any other Act and to such regulations being not inconsistent with the aforesaid regulations or provisions as may be prescribed by the Company in General Meeting, but no regulation made by the Company in the General Meeting, shall invalidate any prior act of the Board which would have been valid if that regulation had not been made.

58. The Directors may, from time to time, accept deposits from members (either in advance of calls or otherwise), directors and from their relatives and generally raise or borrow any sums of money for the purpose of the Company from the Members or other persons, or the Director may themselves advance money to the company on such interest as may be approved by the Board of Directors.

59. The Directors, may, from time to time, secure the payment of such moneys in such manner and upon such terms and conditions in all respects they deem fit and in particular by the issue of debentures, or bonds of Company or any mortgage, charge hypothecation, pledge, lien or other security of all or any part of portion of the property of the Company and the uncalled capital for the time being.



60. The Director may grant retiring pensions or annuities or other allowance, including allowances on death to any person or to the widow or dependents of any person in respect of services rendered by him to the Company as Managing Director, Manager, or as an Officer or employee of the Company or of any subsidiary Company or if its Holding Company (if any) notwithstanding that he may have been a Director of the Company and may make payments towards insurance or trusts for such purposes in respect of such person and may include rights in respect of such pensions, annuities and allowances in terms of engagement of any such person.

61. (a) Subject to the provisions of the Companies Act, 2013, and notwithstanding anything to the contrary contained in these Articles, so long as any moneys remain owing by the Company to any Financing Company or Body or Financial Corporation or Credit Corporation or Bank or any Insurance Corporation (each such Financing Company or Body or Financial Corporation, Credit Corporation or Bank or any Insurance Corporation is hereinafter referred to as "Financial Institution") out of any loans granted by the Financial Institution to the Company or so long as the Financial Institution continues to hold debentures in the Company by direct subscription or private placement, or so long as the Financial Institution hold shares in the Company as a result of underwriting or direct subscription or so long as any liability of the Company arising out of any guarantee furnished by the Financial Institution on behalf of the Company remains outstanding the Financial Institution shall have a right to appoint from time to time, its nominee/s as a Director or Directors (which Director or Directors is/are hereinafter referred to as Nominee Director/s) on the Board of the Company and to remove from such office the Nominee Director/s so appointed, and at the time of such removal and also in the case of death or resignation of the Nominee Director/s so appointed at any time appoint any other person/persons in his/their place/s and also fill any vacancy which may occur as a result of such director/s ceasing to hold office for any reasons whatsoever; such appointment or removal shall be made in writing on behalf of the Financial Institution appointing such Nominee Director/s and shall be delivered to the Company at its registered office.



(b) The Nominee Director/s shall not be required to hold any qualification shares in the Company to qualify him/them for the office of a Director/s nor shall he/they be liable to retirement by rotation. The Board of Directors of the Company shall have no power to remove from office the Nominee Director/s shall be entitled to the same rights and privileges and be subject to the same obligations as any other Director of the Company.

(c) The Nominee Director/s so appointed shall hold the office only so long as any moneys remain owing by the Company to the Financial Institution or so long as the financial Institution holds Debentures in the Company as result of direct subscriptions or private placement or so long as the Financial Institution holds shares in the Company as a result of underwriting or direct subscription or the liability of the Company arising out of any guarantee, is outstanding and the Nominee Director/s so appointed in exercise of the said power shall ipso facto vacate such office, immediately the moneys owing by the Company to the Financial Institution is paid off or on the Financial Institution ceasing to hold debentures/shares in the Company or on the satisfaction of the liability of the Company arising out of any Guarantee furnished by the Financial Institution.

(d) The nominee Director/s appointed under this Article shall be entitled to receive all notices of and attend al General Meetings, Board Meetings and the Meeting of the Committee of which the Nominee Director/s is/are member/s as also the minutes of such meeting. The Financial Institution shall also be entitled to receive all such notices and minutes.

(e) The Company shall pay to the Nominee Director/s sitting fees and expenses to which the other Directors of the Company are entitled. PROVIDED that if the Nominee Director is an officer of the Industrial Development Bank of India (IDBI) the sitting fees in relation to such Nominee Director shall accrue to IDBI and the same shall accordingly be paid by the Company directly to the IDBI. Any expenses that may be incurred by the Financial or such Nominee Director/s in connection with his/their appointment of Directorship shall be paid by the Company. The IDBI or the Financial Institution shall be entitled to depute observer to attend the meetings of the Board or any other Committee constituted by the Board.



(f) The nominee Director/s shall notwithstanding anything to the contrary contained in these Articles, be at liberty to disclose any information obtained by him/them to the Financial Institution appointing him/them as such Director/s.

MANAGING DIRECTORS – DEPUTY MANAGING DIRECTOR

62. Subject to the provisions of the Act and of these Articles, the Board shall have power to appoint from time to time any one or more of its Directors as Managing Director or Managing Directors of the company and any other of its Directors as the Deputy managing Director or Deputy Managing Directors of the Company for a fixed term not exceeding five years at a time and upon such terms and conditions as the Board thinks fit, and subject to the provisions of Articles 56, the Board may by resolution vest in such Managing Director/s or Deputy managing Director/s such of the powers hereby vested in the Board generally as it thinks fit, as such powers may be made exercisable for such conditions and subject to such restrictions as it may determine. The remuneration of the Managing Director/s and the Deputy Managing Director/s may be by way of monthly payment, fee for each meeting or participating in profits, or by all or any of these modes or any other mode not expressly prohibited by the Act.

63. The Managing Director or the Deputy Director shall not exercise the powers to:

(a) make calls on shareholders in respect of money unpaid on their share in the Company.

(aa) the power to authorize the buyback referred to in the first proviso to clause (b) of sub sec (2) of section 77A,

(b) Issue debentures;

And except to the extent mentioned in the resolution passed at the Board meeting under Section 292 of the Act, the Managing Director/s or the Deputy Managing Director/s shall also not exercise the powers to: -

(c) borrow moneys, otherwise than on debenture;

(d) invest the funds of the Company; and

(e) make loan.



64. The company shall not appoint or employ, or continue the appointment or employment of a person as its Managing, Deputy Managing or whole time Director who: -

(a) is an undischarged insolvent, or has at any time been adjusted as insolvent;

(b) suspends, or has at any time suspended, payment to his creditors, or members, or has at any time made, a composition with them; or

(c) is or has at any time been convicted by a Court of an offense involving moral turpitude.

65. The Managing Director and the Deputy Managing Director shall not while he continues to hold that office be subject to retirement by rotation and if he ceases to hold the office of Director he shall ipso facto and immediately cease to be the Managing director or the Deputy Managing Director, as the case may be.

66. Subject to the provisions of the Act and of these Articles, the Board may from time to time appoint any of its members, as Executive Director or Directors of the Company for a fixed term not exceeding five years at a time and upon such terms and conditions as the Board thinks fit, an Executive director shall not be required to hold any qualification shares, and subject to provisions of Companies Act, the Board may from time to time determine that one or more of such Executive Director or Directors appointed or proposed to be appointed by the Board shall not be liable to retire by rotation so long as he continues to hold that office.

MANAGER OR SECRETARY

67. Subject to the provisions of the Act –

(1) A manager or secretary may be appointed by the Board for such term, at such remuneration and upon such conditions as it may think fit, and any manager or secretary so appointed may be removed by the Board.

(2) A director may be appointed a manager or secretary.



68. A provision of the Act, or these regulations requiring or authorizing a thing to be done by or to a director and the manager or secretary, shall not be satisfied by its being done by or to the same person acting both as director and as, or in place of the manager or secretary.

ACCOUNTS

69. The Company shall comply with the provisions of the Companies Act, 2013 regarding maintenance of books of accounts and other statutory records.

AUDIT

70. Subject to the provisions of Section 139 of the Act –

(i) The Company shall at each Annual General Meeting appoint an Auditor or Auditors to hold office from the conclusion of the meeting until the conclusion of the next Annual General Meeting.

(ii) Rights and Duties of the Auditors shall be regulated in accordance with Sections 139 to 147 of the Act.

(iii) Once at least in every year accounts of the Company shall be audited and correctness of the Final Accounts be ascertained by one or more Auditor or Auditors.

(iv) Every Account of the Company when audited and approved by General Meeting shall be conclusive.

THE SEAL

71. The Company shall have a common seal and the Directors shall provide for the safe custody thereof. The Seal shall not be affixed to any instrument except by the authority of a resolution of the Board of Director or a Committee of the Board except in the presence of at least two Directors or of one Director and the Secretary and such Directors or Secretary shall sign each instrument to which the Seal be affixed in his presence. Such signatures shall be conclusive evidence of the fact that the Seal has been properly affixed.

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INDEMNITY

72. Every officer of the company shall be indemnified out of the assets of the company against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favour or in which he is acquitted or in which relief is granted to him by the court or the Tribunal.

SECRECY

73. Except to the extent allowed by the Companies Act, no member shall be entitled to visit or inspect any works of the company without the permission of the directors or to require discovery of or any information respecting any detail of the Company's trading or any matter which is or may be in the nature of a trade secret, mystery or trade, secret process or any other matter which may relate to the conduct of the business of the Company and which in the opinion of the directors, it would be inexpedient in the interest of the Company to disclose.

DIRECTOR * GEOLOGY AND MINING * TIRUPUR

ALTERATION IN ARTICLES OF ASSOCIATION

74. The Company may from time to time alter, add to amend or delete any of the existing clauses of the Articles of Association of the Company or may add a new clause thereto or adopt a new set of articles in accordance with the provision of the Companies Act, 2013.

Sl. No.	Name, address, description and occupation of each subscriber	Signature
1	VETTUKATTUVALASU PALANISAMY KULANJAVELAPPA GOUNDER S/O KOLANJAVELAPPA GOUNDER VELICHANAN KADU V.K. VALASU, INGUR PO PERUNDURAI TK 638058 Age: 56 OCCUPATION: BUSINESS	V.K. Palanisamy
2	PALANISAMY JAGADEESAN S/O PALANISAMY 32 VETTUKATTU VALASU INGUR INGUR ERODE: 638058 - AGE: 24 OCCUPATION: BUSINESS	P.
3	GNANA SUNDARI. D/O PALANISAMY 11-32 VETKATTUVALASU ENGUR (P) PERUNDURAI ERODE [D] 638058 AGE: 31 OCCUPATION: BUSINESS	J. GnanaSundari
4	NANJAPPAN BHUVANESWARI D/O NANJAPPAN 230A MURUNGATHOZUVU MURUNGATHOZUVU (P) WARD-1 ERODE 638051 AGE: 30 Occupation: Business	N. Bhuvaneswari

All have signed before me at Erode

Date: Erode
Place: 09.10.2013
Witness to above signatures:

S. Saravanan
S SARAVANAN B.Com FCA
Chartered Accountant
M NO 210614
S/o V. Shanmugam
L 375/54 First Floor
Periyar Nagar, Surampatti
Erode - 638009



View Signatory Details

Company / LLP Name : VKP ENGINEERING IND PRIVATE LIMITED
CIN/LLPIN : U45400TZ2013PTC019956

List of Signatories

DIN/DPIN/PAN	Full Name	Present residential address	Designation	Date of Appointment	Whether DSC Registered	Expiry Date of DSC
06692274	JAGADEESAN PALNISAMY	32 VETTUKATTU VALASU, INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	25/10/2013	NO	-
06692275	VETTUKATTUVALASU PALANISAMY KULANDAVELAPPAGOUNDER	VELICHANAN KADU, V.K.VALASU, INGUR PO, PERUNDURAI TK, 638058, Tamil Nadu, INDIA	Director	25/10/2013	YES	16/09/2016
06781531	MAHENDRAN	32 VETTUKATTUVALASU INGUR, INGUR, ERODE, 638058, Tamil Nadu, INDIA	Director	15/01/2014	NO	-

ANNEXURE IX

VKP ENGINEERING IND PRIVATE LIMITED
CIN U45400TZ2013PTC019956
Registered Office: 151/260B, BHAVANI ROAD SOUTH SIDE, PERUNDURAI - 638052

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED IN THE MEETING OF BOARD OF DIRECTORS OF THE COMPANY HELD ON 08th JANUARY 2024 AT 10.00 AM AT THE REGISTERED OFFICE OF THE COMPANY AT 151/260B, BHAVANI ROAD SOUTH SIDE, PERUNDURAI – 638052.

Sub: To authorize **Mr.P.JAGADEESAN, Director** to sign, execute and complete the formalities pertaining to execute the Quarry Lease for rough stone.

RESOLVED THAT Mr.P.JAGADEESAN, Director of the Company who is residing at Door No.11/32, Vettukattuvalasu, Ingur (P.o), Perundurai, Erode – 638 052 (Aadhar No 7091 1371 8745) be and is hereby authorized to sign the mining plan and relevant documents and to submit the same to the DD (Mines), other Govt. Correspondences Tirupur on behalf of the Company for getting approval"

"RESOLVED FURTHER THAT Mr.P.JAGADEESAN, Director of the Company is hereby authorized to sign the application of Environment Clearance and consent of the Tamil Nadu Poilution Control Board, attend the meeting and sign the relevant on behalf of the Company for obtaining the consent of the Tamil Nadu Pollution Control Board"

Place: Perundurai
Date: 08.01.2024

By Order of the Board

On behalf of the Board

V.K.PALANISAMY,
Director

P.JAGADEESAN,
Director

P.MAHENDRAN,
Director

J.GNANASUNDARI,
Director

M.BHUVANESWARI,
Director

Scanned with CamScanner

ANNEXURE X



आधार

இந்திய அரசாங்கம்
Unique Identification Authority of India
Government of India

பதிவேட்டு எண்/ Enrolment No.: 1111/71211/53228

To
ஜெகதீசன் பழனிச்சாமி
Jagadeesan Palanisamy
S/O: Palanisamy
11/32
VETTUKATTUVALASU
Ingur
Ingur
Erode Tamil Nadu - 638052
9842730265

Download Date: 31/07/2019

Generation Date: 02/10/2013

Signature valid

QR Code with Photograph

உங்கள் ஆதார் எண் / Your Aadhaar No. :

7091 1371 8745

VID : 9173 6631 7105 6045

எனது ஆதார், எனது அடையாளம்

இந்திய அரசாங்கம்
Government of India



ஜெகதீசன் பழனிச்சாமி
Jagadeesan Palanisamy
பிறந்த நாள்/DOB: 26/04/1979
ஆண்/ MALE

7091 1371 8745

VID : 9173 6631 7105 6045

எனது ஆதார், எனது அடையாளம்

AADHAAR

தகவல்

- ஆதார் அடையாளத்திற்கான சான்று, குடியுரிமைக்கு அல்ல.
- அடையாள சான்றை ஆன்லைன் அதன்டிகேஷன் மூலமாகப் பெறவும்.
- இது எலக்ட்ரானிக் செயல்முறை மூலம் தயாரிக்கப்பட்ட கடிதமாகும்.

INFORMATION

- Aadhaar is a proof of identity, not of citizenship.
- To establish identity, authenticate online.
- This is electronically generated letter.

- ஆதார் நாடு முழுவதிலும் செல்லுபடியாகும்.
- வருங்காலத்தில் அரசு மற்றும் அரசு சாரா சேவைகளை பயன்படுத்திக் கொள்ள ஆதார் உதவிகரமாக இருக்கும்.
- Aadhaar is valid throughout the country.
- Aadhaar will be helpful in availing Government and Non-Government services in future.

Unique Identification Authority of India

முகவரி:
S/O: பழனிச்சாமி, 11/32, வெட்டுகாட்டுவலசு, ங்கூர், ஈரோடு, தமிழ் நாடு - 638052

Address:
S/O: Palanisamy, 11/32,
VETTUKATTUVALASU, Ingur, Erode,
Tamil Nadu - 638052

QR Code with Photograph

7091 1371 8745

VID : 9173 6631 7105 6045

आयकर विभाग
INCOME TAX DEPARTMENT

भारत सरकार
GOVT. OF INDIA

VKP ENGINEERING IND PRIVATE LIMITED

07/2013

Permanent Account Number

AAECV6374R

Signature

DIRECTOR * GEOLOGY AND MINING

In case this card is lost / found, kindly inform / return to :
Income Tax PAN Services Unit, UTIITSL
Plot No. 3, Sector 11, CBD Belapur,
Navi Mumbai - 400 614.

इस कार्ड के खोने/पाने पर कृपया सूचित करें/लौटाएं :
आयकर पैन सेवा यूनिट, UTIITSL
प्लाट नं. 3, सेक्टर 11, सीबीडी बेलापुर,
नवी मुंबई- 400 614.

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ANNEXURE XI

DIRECTOR * GEOLOGY AND MINING * TAMILNADU

21210/0

சென்னைப் பல்கலைக் கழகம்

University of Madras

அறிவியல் புலம்

FACULTY OF SCIENCE

சென்னைப் பல்கலைக் கழகப் பரவை 1994 ஆம் ஆண்டு ஏப்ரல் மாதம் நடந்த கணிமவியல் தேர்வில் பெ. தங்கராஜு என்பவர் முதல் வகுப்பில் தேர்ச்சி பெற்றார் என்று தக்க தேர்வாளர்கள் சான்றளித்தபடி அறிவியல் நிறைஞர் என்னும் பட்டத்தை அவருக்குப் பல்கலைக் கழக இலச்சினையின் வழங்குகிறது.

The Senate of the UNIVERSITY OF MADRAS *hereby makes known that* P. Thangaraju *has been admitted to the Degree of Master of Science, he/she having been certified by duly appointed Examiners to be qualified to receive the same in* Geology *and was placed in the* First *Class, at the Examination held in* April 1994.

Given under the seal of the University

DOCTRINA VIM PROMOVET ATQUE SERVAT

சேப்பாக்கம், Chepauk,
சென்னை, Madras
நாள். Dated 25-01-1999

பதிவாளர்
Registrar

P.T. [illegible]
துணை வேந்தர்
Vice-Chancellor

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ANNEXURE XI-A

GOVERNMENT OF INDIA
MINISTRY OF LABOUR AND REHABILITATION
OFFICE OF THE DIRECTOR GENERAL OF MINES SAFETY

Certificate of Practical experience granted by the Manager to a candidate for a Manager's / Surveyor's / Foremen's / Over man's / Sirdar's / Mate's / Short firer's/ Blaster's Certificate of competency (Restricted) examination under the Metalliferous Mines Regulations 1961.

I **T.VENKATARAJAGOPALAN** being the Mines Agent of **M/S.LIMENAPH CHEMICALS, RAJAPALAYAM OF LIMESTONE PRODUCTS (Thenmali Limestone Mine)** do hereby certify that Thiru. **P.THANGARAJU**, son of S.PERIASAMY (whose signature is appended) worked as a Geologist in the above mine from 02.05.1994 to 30.12.1999. During his term of work aforesaid, he has obtained practical experience as detailed overleaf. The duties connected with his work have involved continuous attendance at the mine and have been efficiently performed by him.

I believe him to be of good character and a fit and proper candidate to be examined for Certificate of Competency.

THENMALAI LIME STONE MINES
10/6/06
Agent (Mines)

(Signature with date and official Seal)
[T.VENKATARAJAGOPALAN]

Mines Agent:

P.O. : **ARUKANGULAM**

District : **TIRUNELVELI**

State : **TAMIL NADU**

(Signature of Candidate)

(State name of Mineral) : LIMESTONE

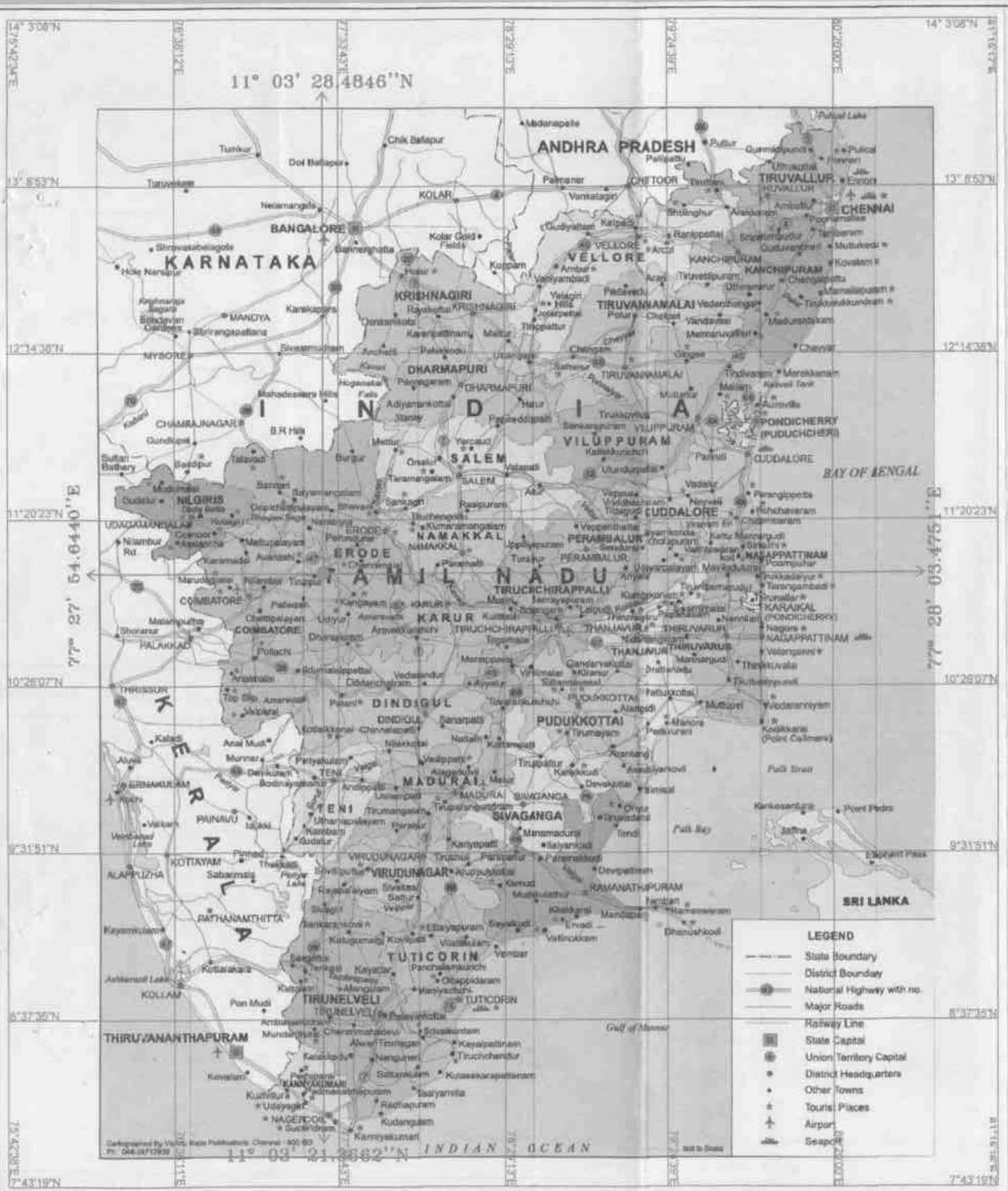


PLATE NO:I

DATE OF SURVEY : 26.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING INDIA PRIVATE LIMITED,
DIRECTOR. THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,
TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536.
EXTENT : 4.51.00 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

Q. L.A. AREA :

TOPO SHEET NO. : 58 E/08

LATITUDE : 11° 03' 21.3662"N TO 11° 03' 28.4846"N

LONGITUDE : 77° 27' 54.6440"E TO 77° 28' 03.4751"E

LOCATION PLAN

SCALE 1:24,00,000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT.

D.P.NAGARAJAN M.Sc., PH.D.,
QUALIFIED PERSON
As Per Rule 15(1)(a)&(b)of MCR,2016

459 A

PLATE NO:I-A

DATE OF SURVEY : 26.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING INDIA PRIVATE LIMITED,
DIRECTOR. THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,
TAMILNADU - 638 052.

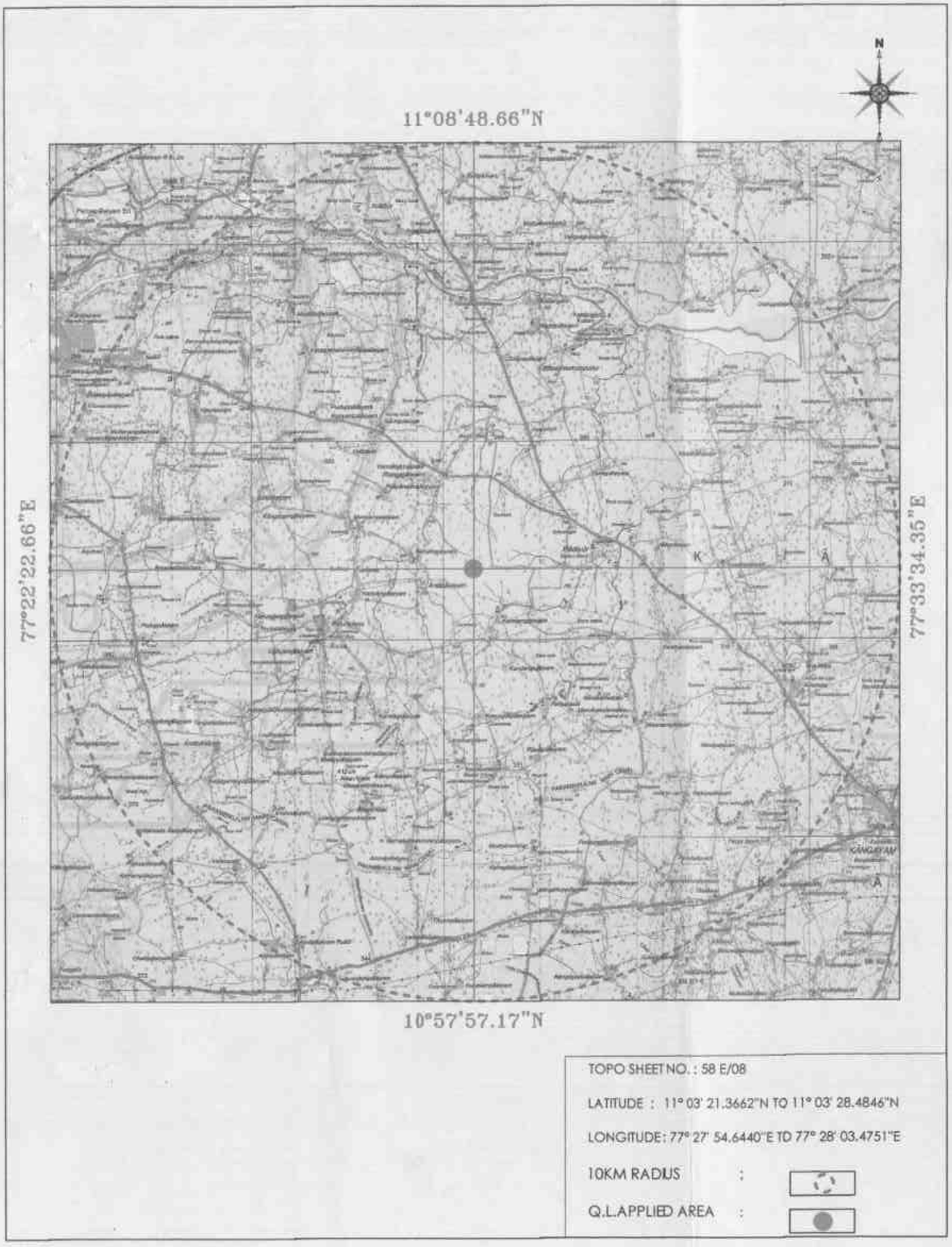
LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536.
EXTENT : 4.51.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPPUR

INDEX





TOPO SKETCH OF QUARRY LEASE APPLIED AREA FOR 10Km RADIUS

SCALE– 1:100000

TOPO SHEET NO. : 58 E/08

LATITUDE : 11° 03' 21.3662"N TO 11° 03' 28.4846"N

LONGITUDE: 77° 27' 54.6440"E TO 77° 28' 03.4751"E

10KM RADIUS :

Q.L.APPLIED AREA :

PREPARED BY :

THIS IS TO CERTIFY, THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT.

Dr.P.THANGARAJU, M.Sc., Ph.D.
QUALIFIED PERSON
As Per Rule 15(1)(a)and(5)of M.C.R.2016

460 A



PLATE NO:I-C

DATE OF SURVEY 26.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING INDIA PRIVATE LIMITED,
DIRECTOR. THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,
TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536.
EXTENT : 4.51.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

Q.L.APPLIED AREA	
VILLAGE ROAD	
MAJOR DISTRICT ROAD	611
SH ROAD	
APPROACH ROAD	

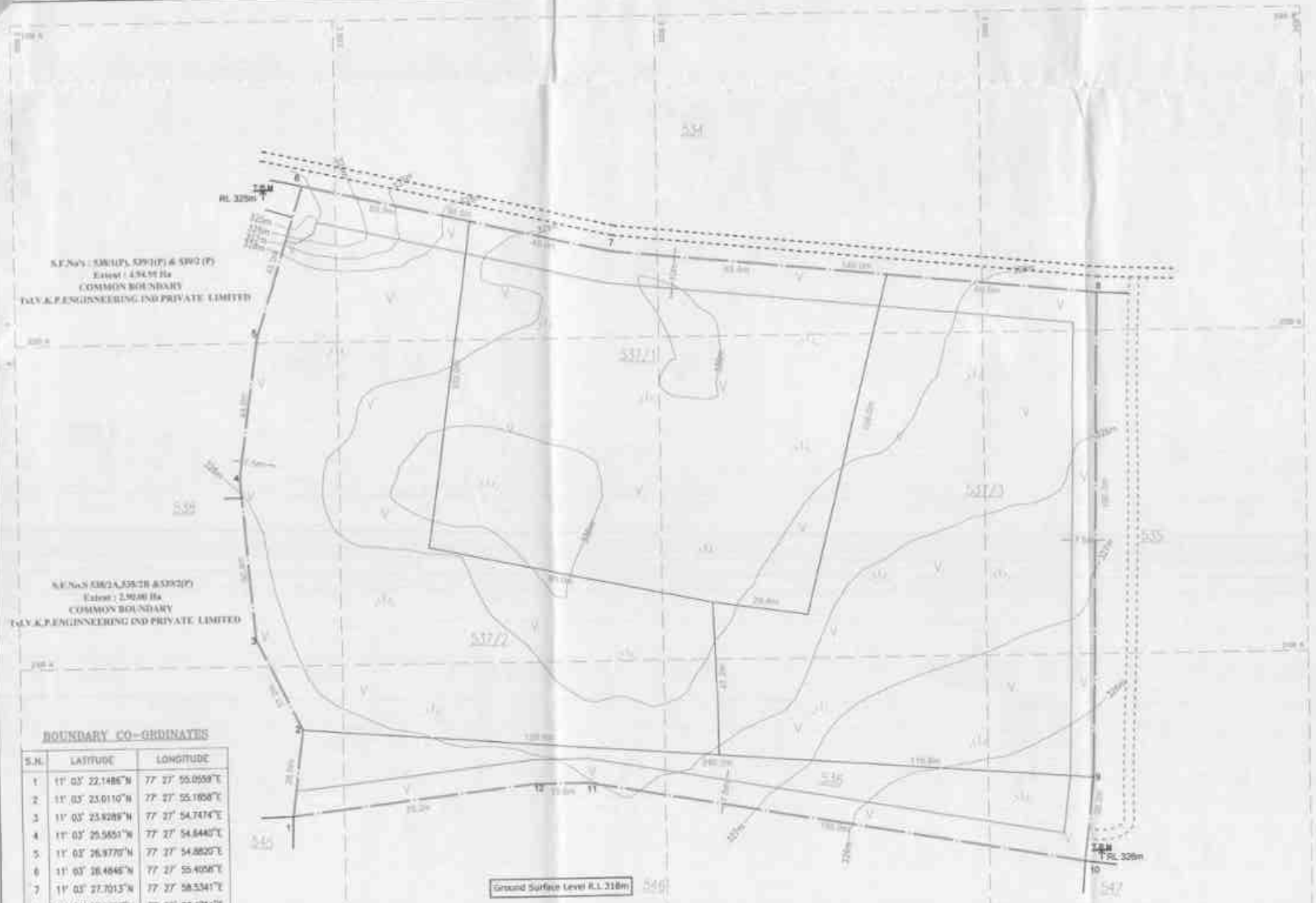
ROUTE MAP

Not To Scale

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

Dr.P.RANGARAJU, M.Sc.,Ph.D.,
QUALIFIED PERSON
As Per Rule 15(1)(c) of MCR,2016



BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 55.0559"E
2	11° 03' 23.0110"N	77° 27' 55.1658"E
3	11° 03' 23.9289"N	77° 27' 54.7474"E
4	11° 03' 25.5651"N	77° 27' 54.8440"E
5	11° 03' 26.9770"N	77° 27' 54.8820"E
6	11° 03' 28.4846"N	77° 27' 55.4058"E
7	11° 03' 27.7013"N	77° 27' 58.5341"E
8	11° 03' 27.0828"N	77° 28' 03.4751"E
9	11° 03' 22.2084"N	77° 28' 03.2525"E
10	11° 03' 21.3662"N	77° 28' 03.1205"E
11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5218"E

DATUM : UTM - WGS84, ZONE 43N

PLATE NO.: II

DATE OF SURVEY : 26.07.2024

APPLICANT :

M/s.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR. THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536.
EXTENT : 4.51.00 Ha.
VILLAGE : PERUNTHOLUVU.
TALUK : TIRUPPUR SOUTH.
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPPUR

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m ,10m SAFETY DISTANCE
- TEMPORARY BENCH MARK (T.B.M)
- APPROACH RADD
- GRAVEL
- CART TRACK
- SCRUB

QUARRY LEASE AND SURFACE PLAN

SCALE 1 : 1000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

M.Sc.,(Ph.D.,
PERSON
As per Rule 34(1)(ii) of MCR,2015.

462 A

LANDUSE PATTERN

DESCRIPTION	PERCENTAGE
ROADS\CRUSHER	(15%)
HABITATION	(10%)
TREES\INFRASTRUCTURE	(15%)
AGRICULTURAL LAND	(50%)
QUARRY PIT/SHED	(10%)

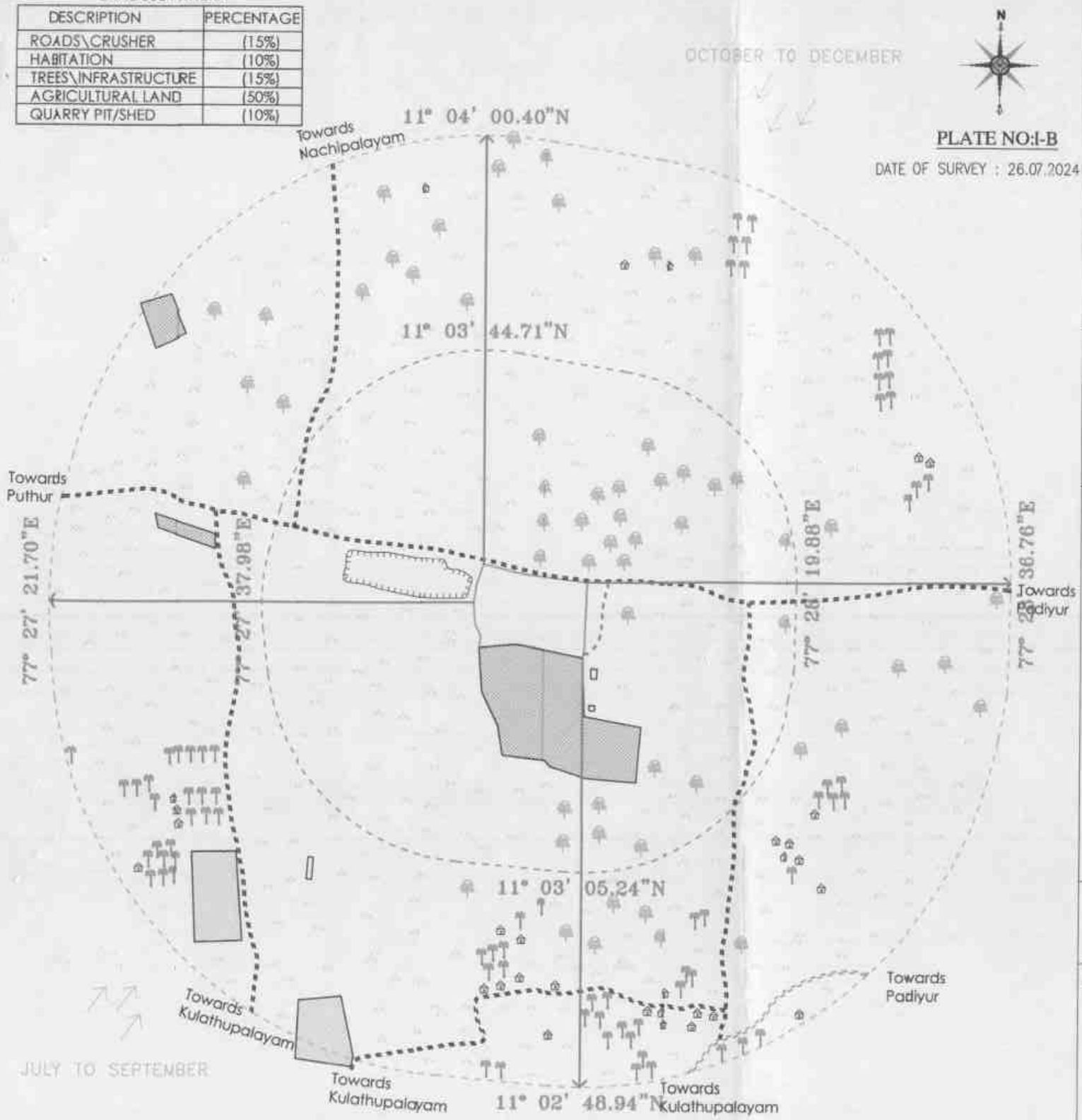


PLATE NO:I-B

DATE OF SURVEY : 26.07.2024

1Km Radius :

500m Radius :

Q.L.Applied Area :

TOPO SHEET NO. : 58 E/08

LATITUDE : 11° 03' 21.3662"N TO 11° 03' 28.4846"N

LONGITUDE : 77° 27' 54.6440"E TO 77° 28' 03.4751"E

APPLICANT :

Tvl.V.K.P.ENGINNEERING INDIA PRIVATE LIMITED,
DIRECTOR. THIRU.P.JEGATHEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,
TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha,
VILLAGE: PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

ASSISTANT DIRECTOR * GEOLOGY AND MINING * TIRUPUR

INDEX

- APPROACH ROAD
- CART TRACK
- HABITATION
- TREES
- AGRICULTURAL LAND
- QUARRY PIT/SHED
- WIND DIRECTION
- CRUSHER PLANT
- VILLAGE ROAD
- INFRASTRUCTURE

ENVIRONMENTAL AND LANDUSE PLAN FOR 1Km RADIUS

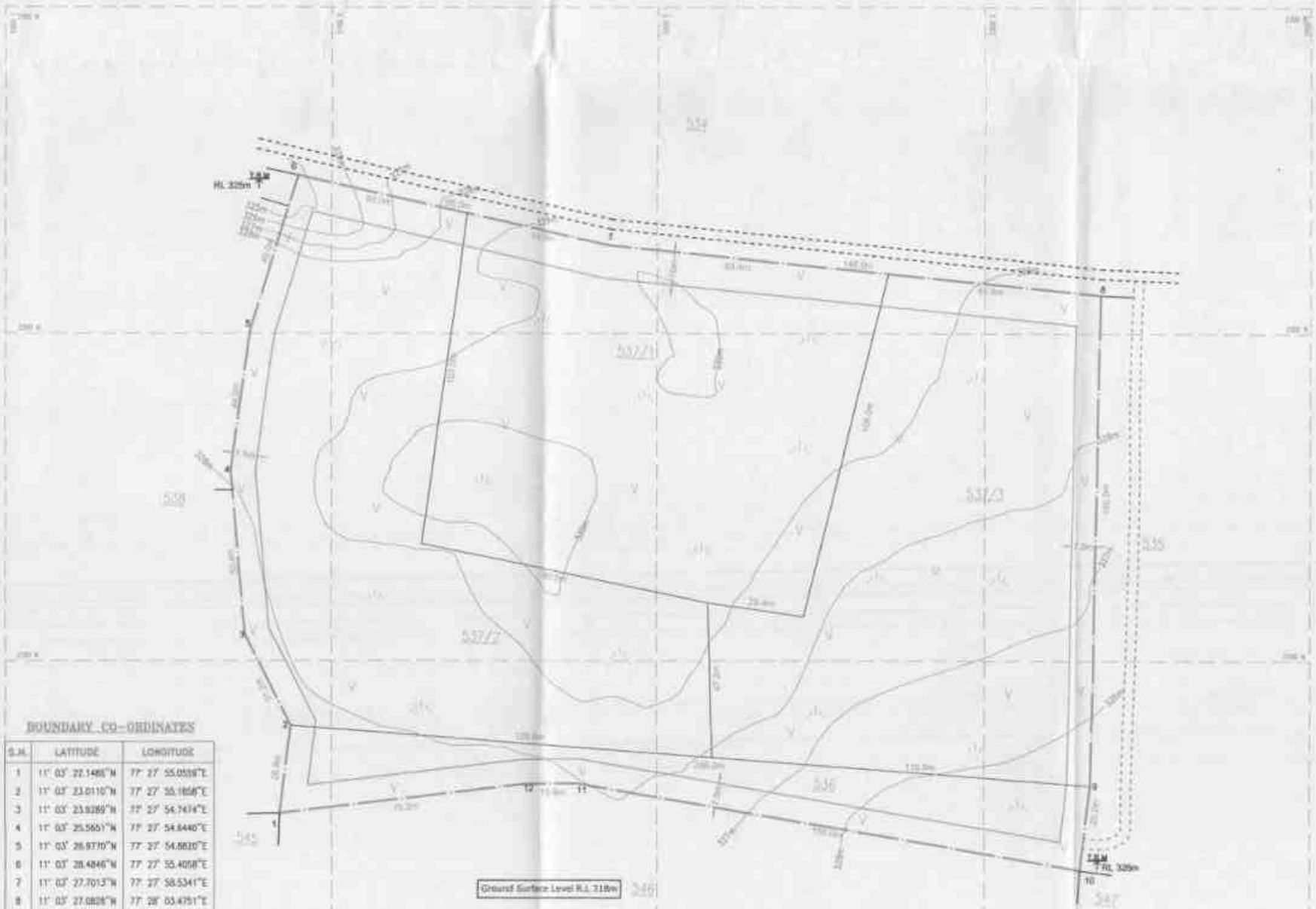
SCALE– 1:10,000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT.

DR.T.THANGARAJU, M.Sc.,Ph.D.,
QUALIFIED PERSON
As Per Rule 15(1)(a)and(b)of MCR,2016

463 A



BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 55.0559"E
2	11° 03' 23.0110"N	77° 27' 55.1658"E
3	11° 03' 23.9289"N	77° 27' 54.7474"E
4	11° 03' 25.5651"N	77° 27' 54.6440"E
5	11° 03' 26.9770"N	77° 27' 54.8820"E
6	11° 03' 28.4846"N	77° 27' 55.4058"E
7	11° 03' 27.7013"N	77° 27' 58.5341"E
8	11° 03' 27.0828"N	77° 28' 03.4751"E
9	11° 03' 22.3084"N	77° 28' 03.3525"E
10	11° 03' 21.3662"N	77° 28' 03.1205"E
11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5218"E

DATUM : UTM — WGS84, ZONE 43N

PLATE NO. : II-A

DATE OF SURVEY : 26.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR. THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m ,10m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH RAOD
- GRAVEL
- CART TRACK
- SCRUB

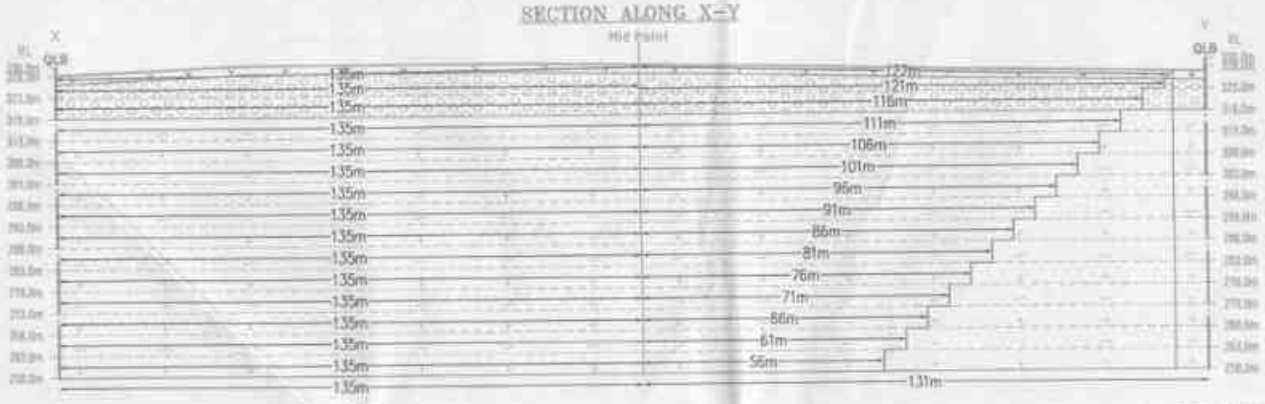
QUARRY LEASE AND SURFACE PLAN
SCALE 1 : 1000

PREPARED BY :

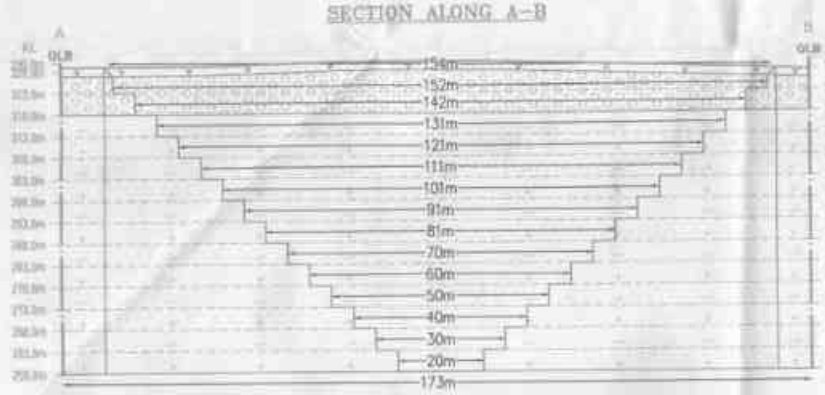
THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY SOAS GOVERNMENT

464 A

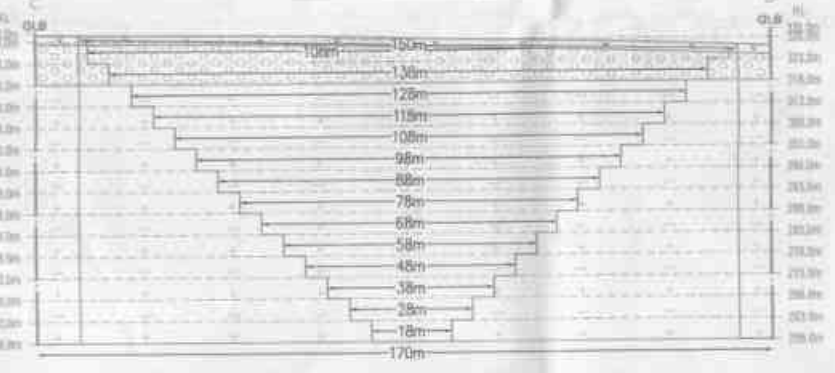
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1488"N	77° 27' 55.0559"E
2	11° 03' 23.0110"N	77° 27' 55.1858"E
3	11° 03' 23.9289"N	77° 27' 54.7474"E
4	11° 03' 25.5851"N	77° 27' 54.6440"E
5	11° 03' 26.9770"N	77° 27' 54.8820"E
6	11° 03' 28.4946"N	77° 27' 55.4058"E
7	11° 03' 27.7013"N	77° 27' 58.5341"E
8	11° 03' 27.0928"N	77° 28' 03.4751"E
9	11° 03' 22.2084"N	77° 28' 03.2525"E
10	11° 03' 21.3683"N	77° 28' 03.1205"E
11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5216"E

DATUM : UTM - WGS84, ZONE 43N

ASSISTANT DIRECTOR
GEOLOGY AND MINING



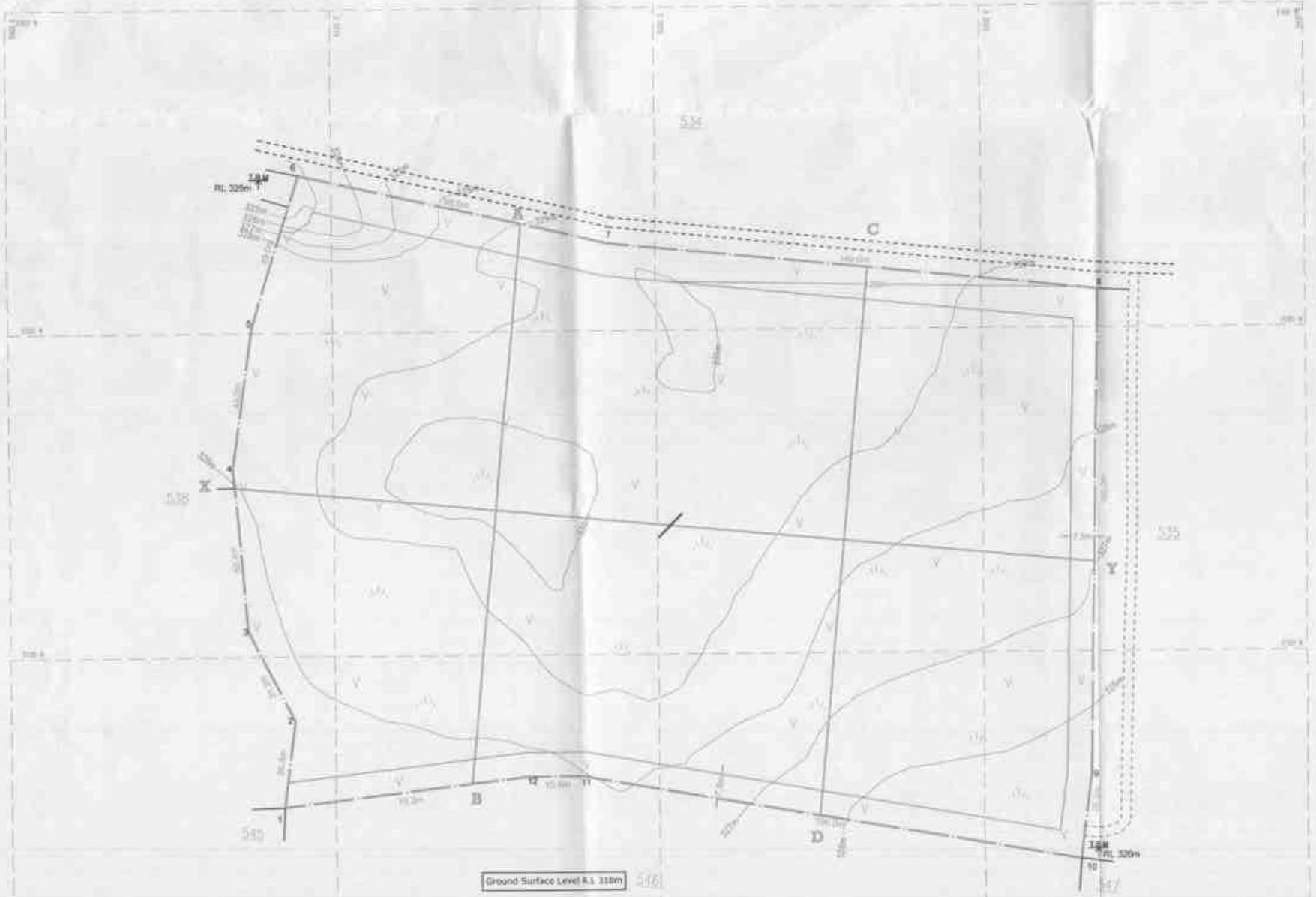


PLATE NO. : III

DATE OF SURVEY : 26.07.2024

APPLICANT :

TM.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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- Q.L.APPLIED AREA BOUNDARY
- 7.5m ,10m SAFETY DISTANCE
- TEMPORARY BENCH MARK (TBM)
- APPROACH RAOD
- GRAVEL
- CART TRACK
- SCRUB
- CONTOUR
- ROUGH STONE
- STRIKE & DIP

TOPOGRAPHY, GEOLOGICAL PLAN AND SECTIONS

SCALE 1 : 1000

PREPARED BY :

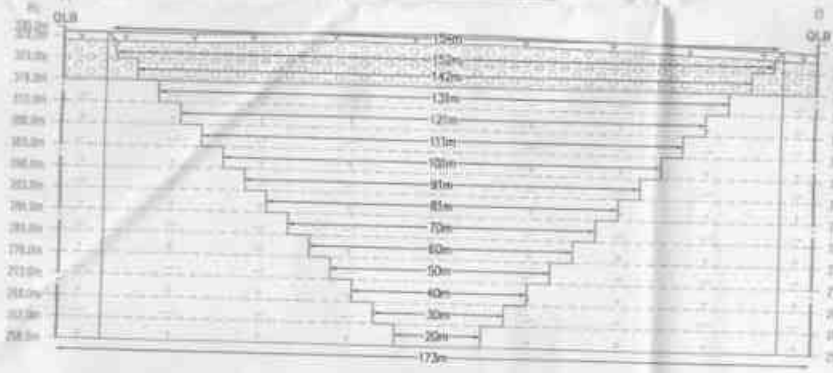
THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT.

M.Sc.,M.S.,
PERSON

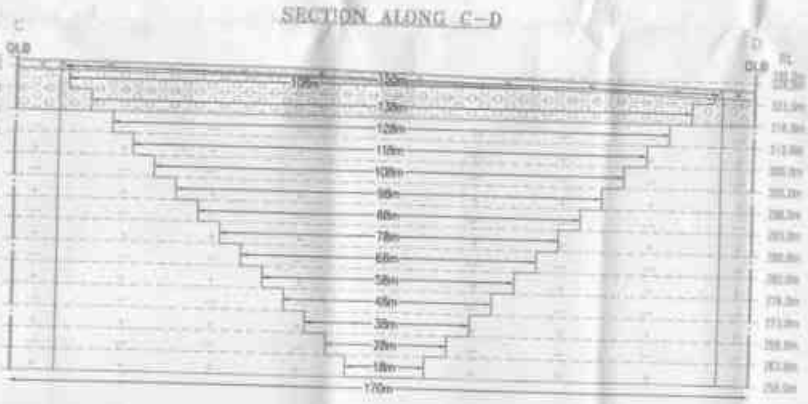
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 55.0559"E
2	11° 03' 23.0110"N	77° 27' 55.1858"E
3	11° 03' 23.9289"N	77° 27' 54.7474"E
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11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5218"E

DATUM : UTM - WGS84, ZONE 43N



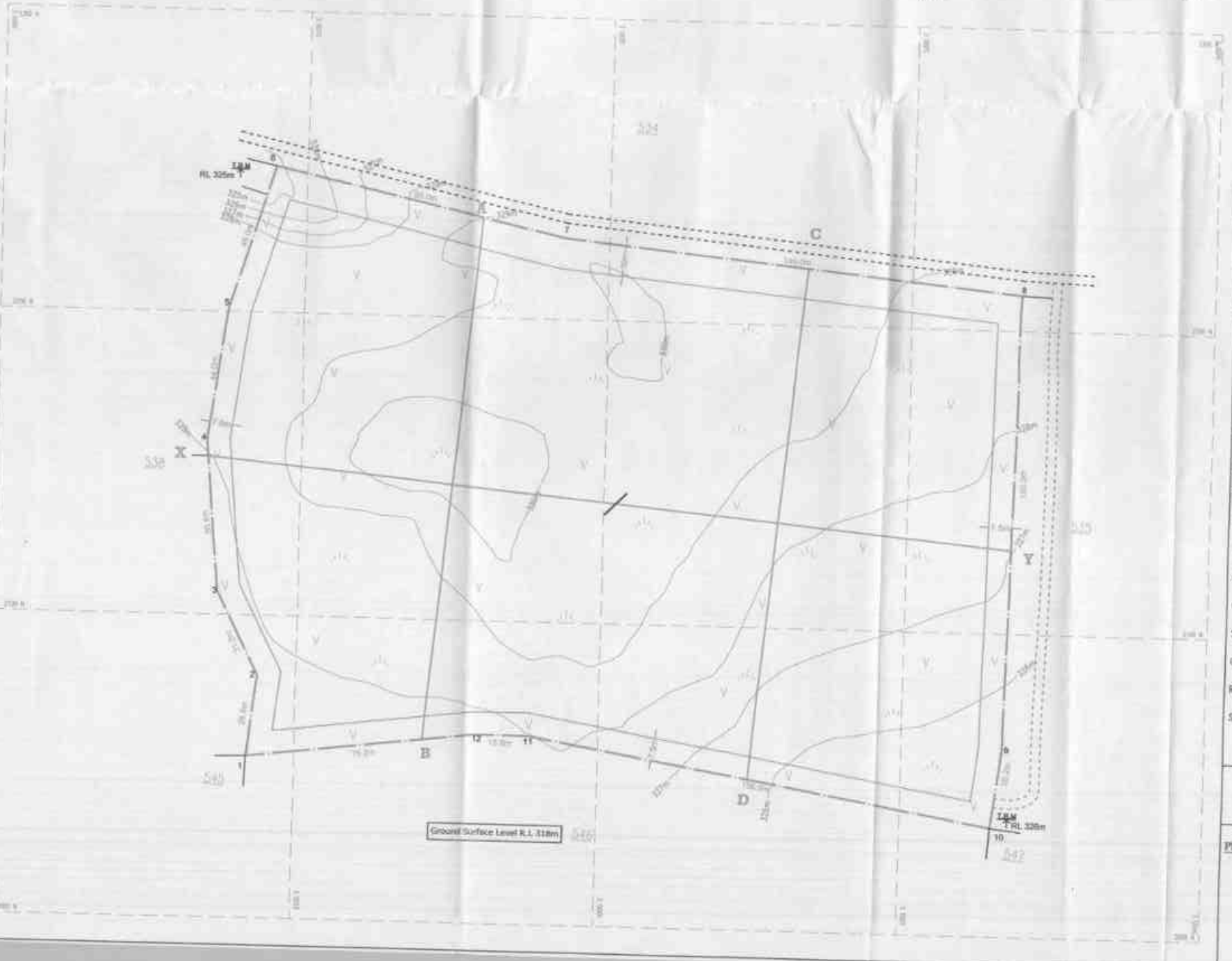


PLATE NO. : III-A

DATE OF SURVEY : 26.07.2024

APPLICANT :

TVI.V.K.F.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR: THIRU.P.JAGADEESAN.
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536.
EXTENT : 4.51.00 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m ,10m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH RADD
- GRAVEL
- CART TRACK
- SCRUB
- CONTOUR
- ROUGH STONE
- STRIKE & DIP

TOPOGRAPHY, GEOLOGICAL PLAN AND SECTIONS

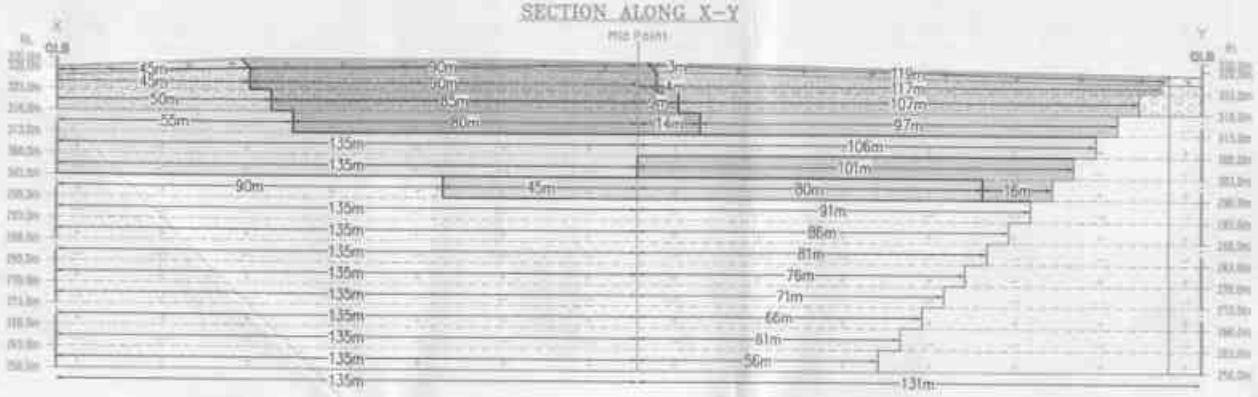
SCALE 1 : 1000

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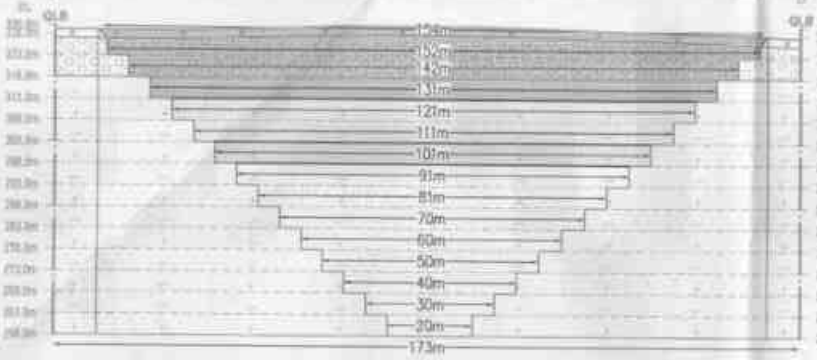
THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

M.Sc.,Ph.D.,
QUALIFIED PERSON
As per Rule 22(1)(a) of GSR 0316

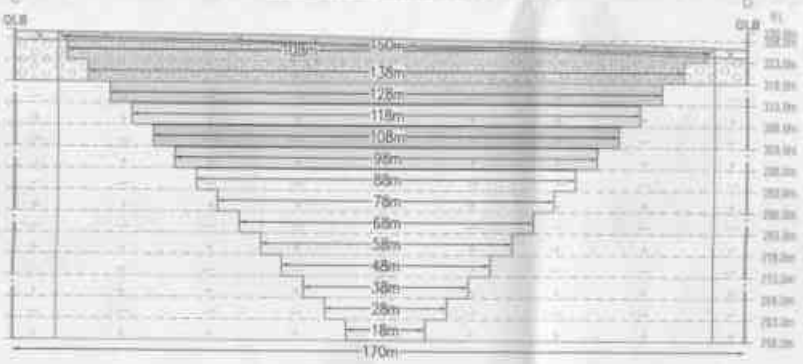
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



1st yr Proposed area to be Quarried
2nd yr Proposed area to be Quarried
3rd yr Proposed area to be Quarried
4th yr Proposed area to be Quarried
5th yr Proposed area to be Quarried

BOUNDARY CO-ORDINATES

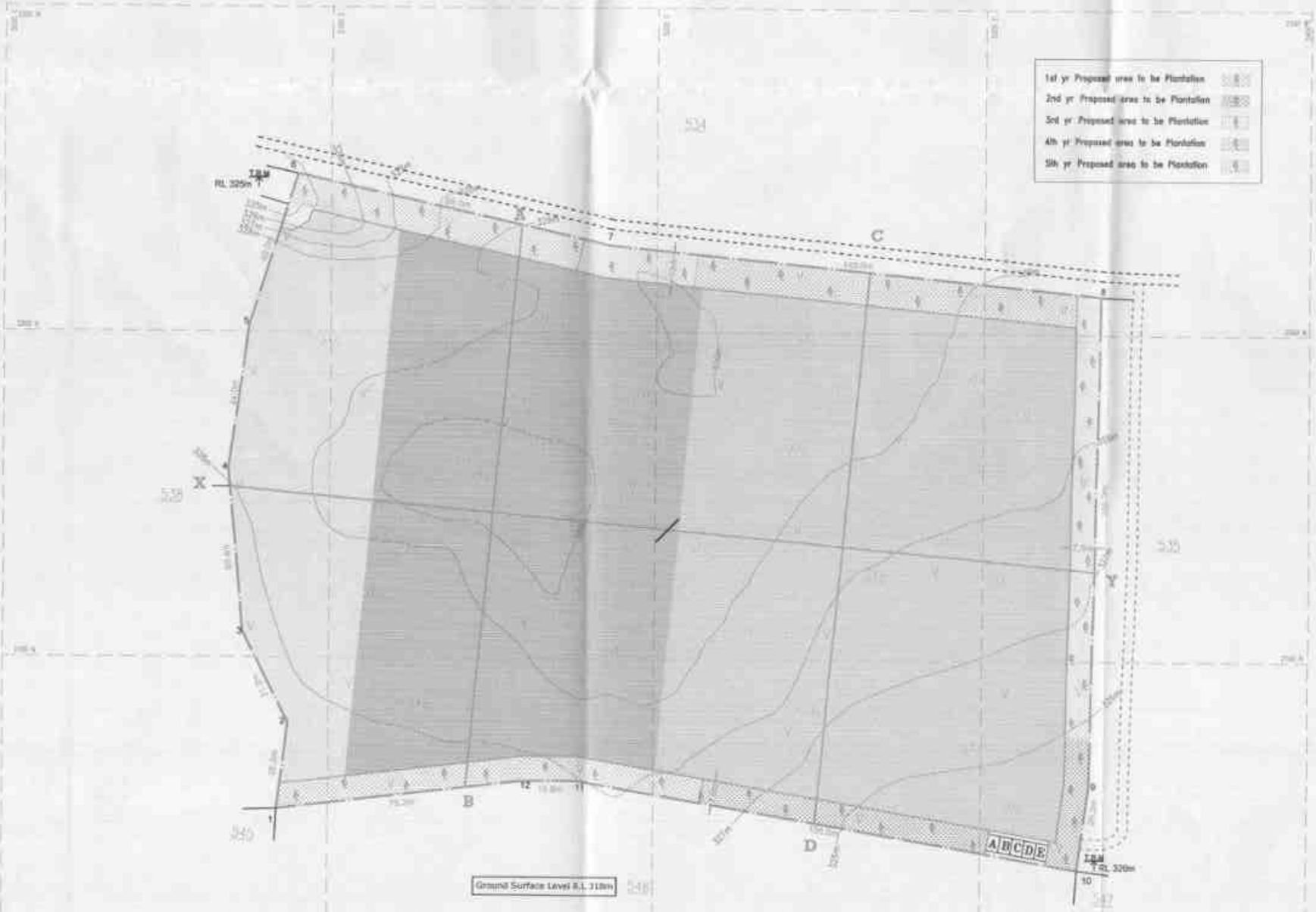
B.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 53.0059"E
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11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5218"E

DATUM : UTM → WGS84, ZONE 43N

SITE SERVICES
(Proposed)

A – OFFICE
B – STORE ROOM
C – FIRST AID ROOM
D – REST SHELTER
E – TOILET

N



1st yr Proposed area to be Plantation
2nd yr Proposed area to be Plantation
3rd yr Proposed area to be Plantation
4th yr Proposed area to be Plantation
5th yr Proposed area to be Plantation

PLATE NO. : IV
DATE OF SURVEY : 26.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED.
DIRECTOR, THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m ,10m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH RAOD
- GRAVEL
- CART TRACK
- SCRUB
- CONTOUR
- ROUGH STONE
- STRIKE & DIP

YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS FIRST "V" YEARS

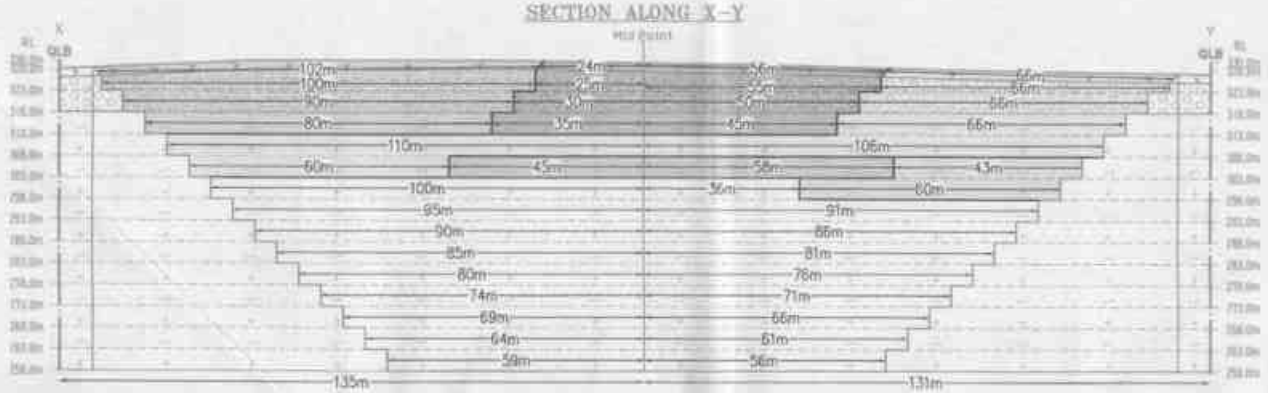
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PREPARED BY :

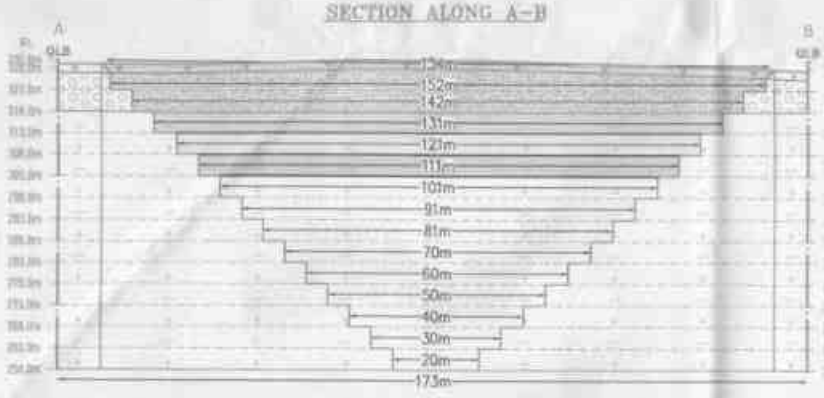
THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLAN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

D.T.P. MOORTHY, M.Sc.,Ph.D.,
CHAIRPERSON
Approved Mining Plan Vide Lr.No.

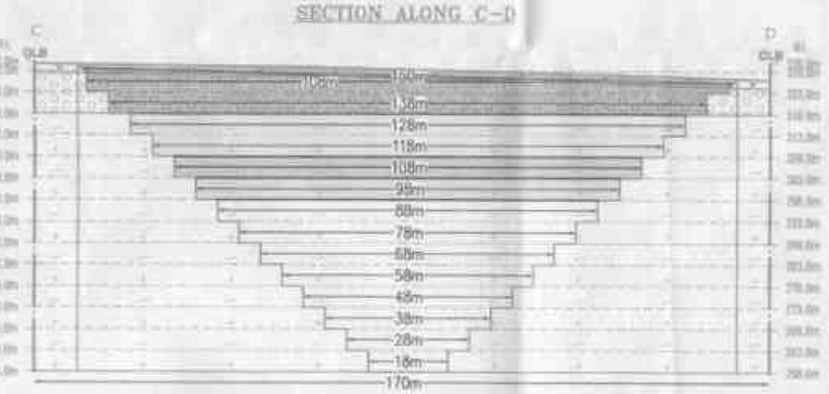
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



BOUNDARY CO-ORDINATES

S.No.	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 55.0558"E
2	11° 03' 23.0110"N	77° 27' 55.1858"E
3	11° 03' 23.9289"N	77° 27' 54.7474"E
4	11° 03' 25.5851"N	77° 27' 54.6440"E
5	11° 03' 26.8770"N	77° 27' 54.8820"E
6	11° 03' 28.4846"N	77° 27' 55.4058"E
7	11° 03' 27.7013"N	77° 27' 58.5341"E
8	11° 03' 27.0828"N	77° 28' 03.4751"E
9	11° 03' 22.2084"N	77° 28' 03.2525"E
10	11° 03' 21.3662"N	77° 28' 03.1205"E
11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5218"E

DATUM : UTM - WGS84, ZONE 43N

1st yr Proposed area to be Quarried
2nd yr Proposed area to be Quarried
3rd yr Proposed area to be Quarried
4th yr Proposed area to be Quarried
5th yr Proposed area to be Quarried

SITE SERVICES
(Proposed)
A - OFFICE
B - STORE ROOM
C - FIRST AID ROOM
D - REST SHELTER
E - TOILET

N

1st yr Proposed area to be Plantation
2nd yr Proposed area to be Plantation
3rd yr Proposed area to be Plantation
4th yr Proposed area to be Plantation
5th yr Proposed area to be Plantation

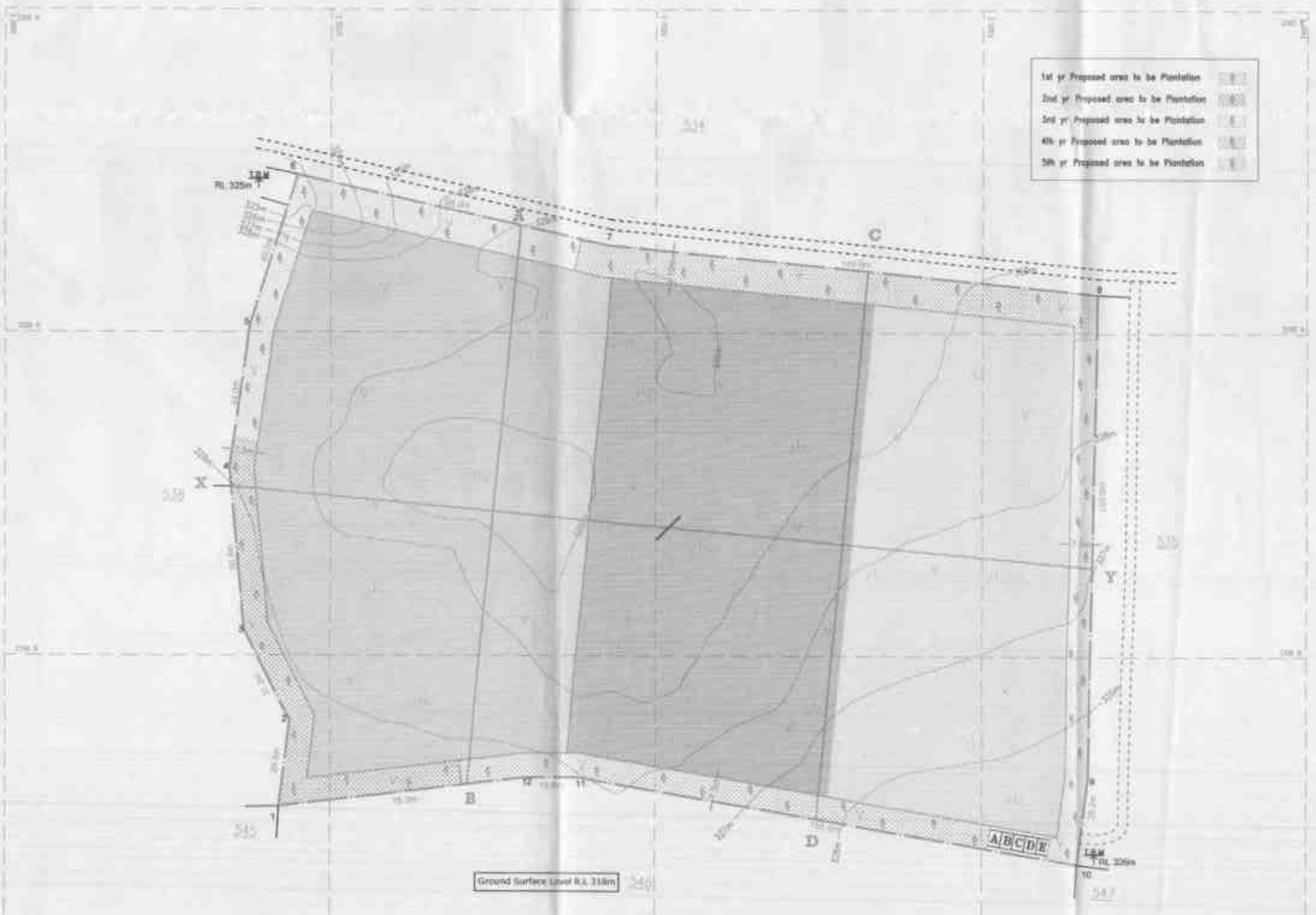


PLATE NO.: IV-A
DATE OF SURVEY : 26.07.2024

APPLICANT :

TVL.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A. AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Hq,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m ,10m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH RAOD
- GRAVEL
- CART TRACK
- SCRUB
- CONTOUR
- ROUGH STONE
- STRIKE & DIP

YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS FIRST "V" YEARS

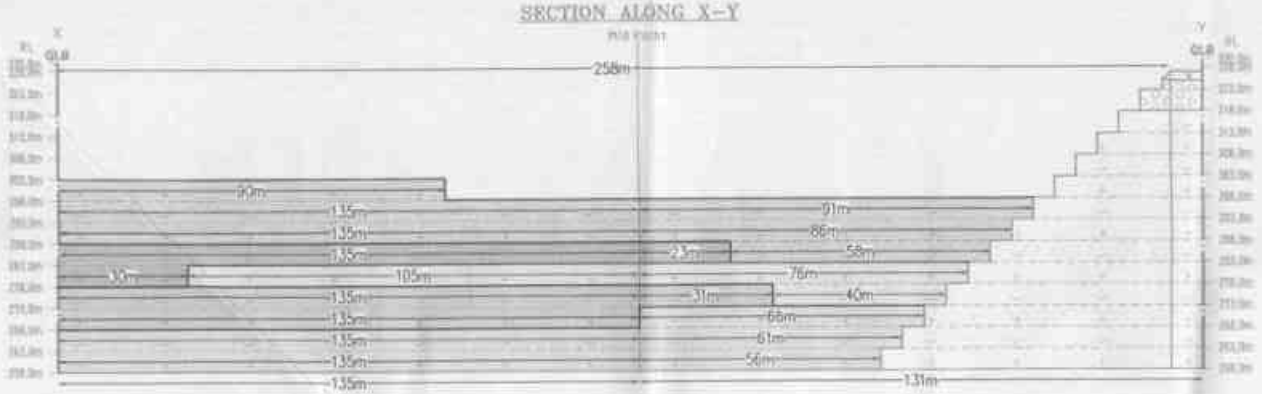
SCALE 1 : 1000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT.

M.Sc.,M.Sc.,Ph.D.,
RECOGNISED PERSON
Rule 10(1)(a)(ii)of MCR,2015

SECTION ALONG X-Y



6th yr Proposed area to be Quarried	
7th yr Proposed area to be Quarried	
8th yr Proposed area to be Quarried	
9th yr Proposed area to be Quarried	
10th yr Proposed area to be Quarried	

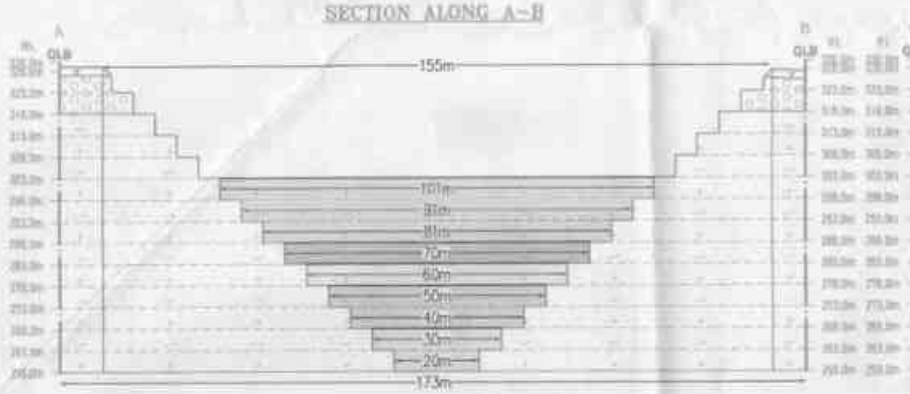
1st V Yr ROPOSED PIT (Max)
258m x 155m x 31m(d)
(Adj. 31m = Bdl. 20m)

BOUNDARY CO-ORDINATES

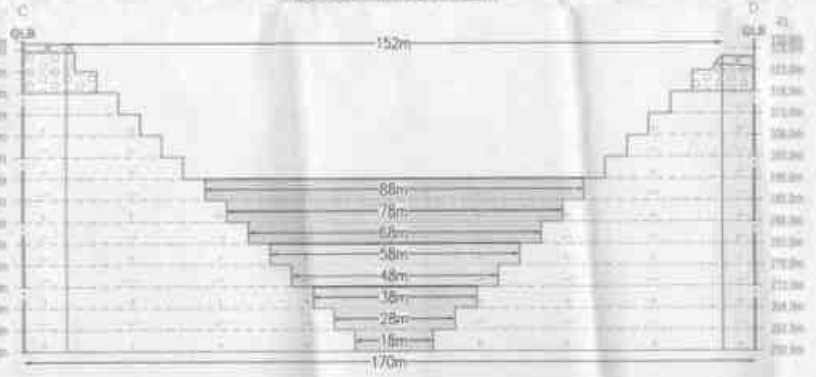
S.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 58.6559"E
2	11° 03' 23.0110"N	77° 27' 59.1605"E
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4	11° 03' 25.5651"N	77° 27' 54.6440"E
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9	11° 03' 22.2084"N	77° 28' 03.2525"E
10	11° 03' 21.3882"N	77° 28' 03.1205"E
11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5218"E

DATUM : UTM - WGS84, ZONE 43N

SECTION ALONG A-B

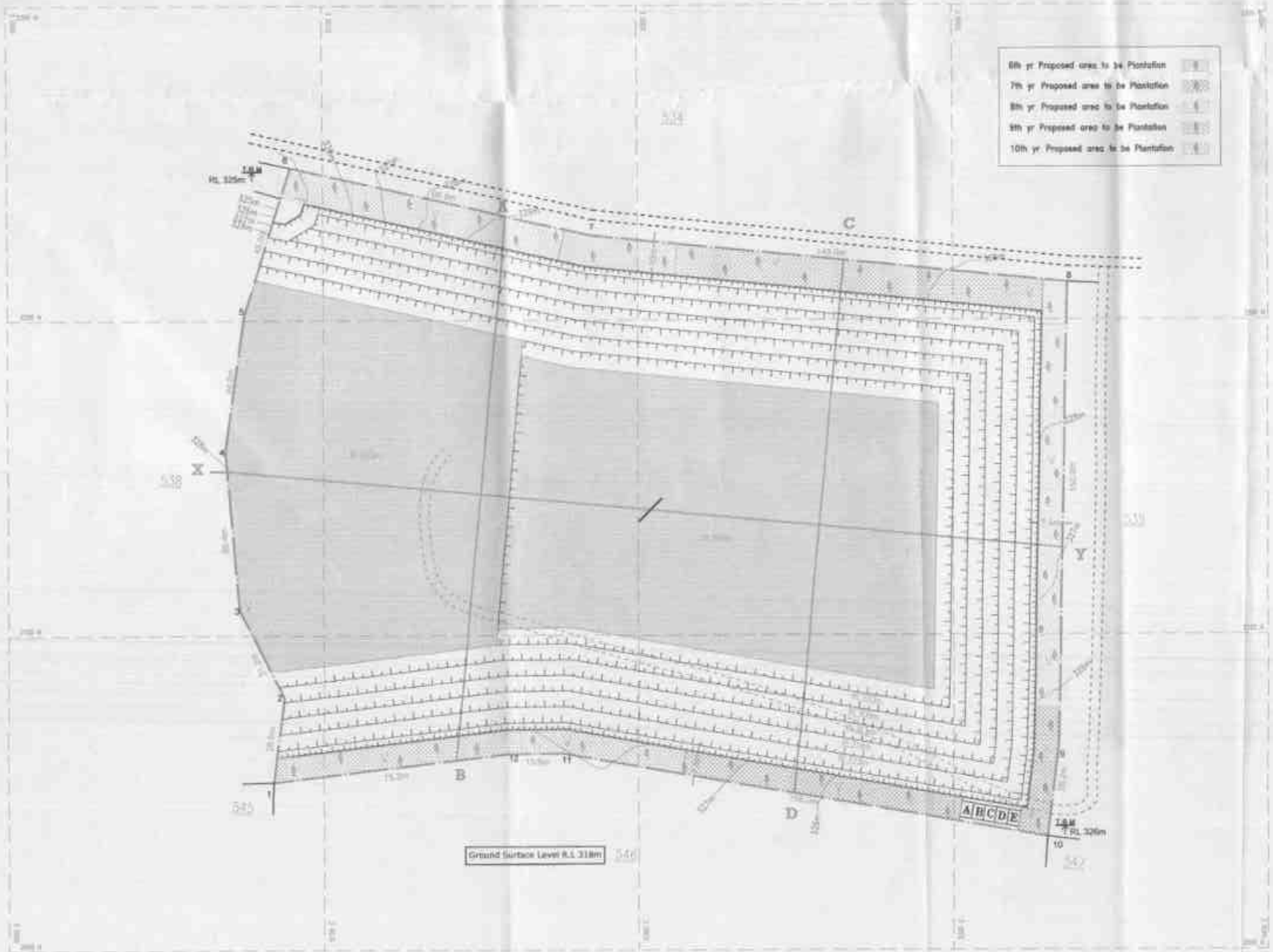


SECTION ALONG C-D

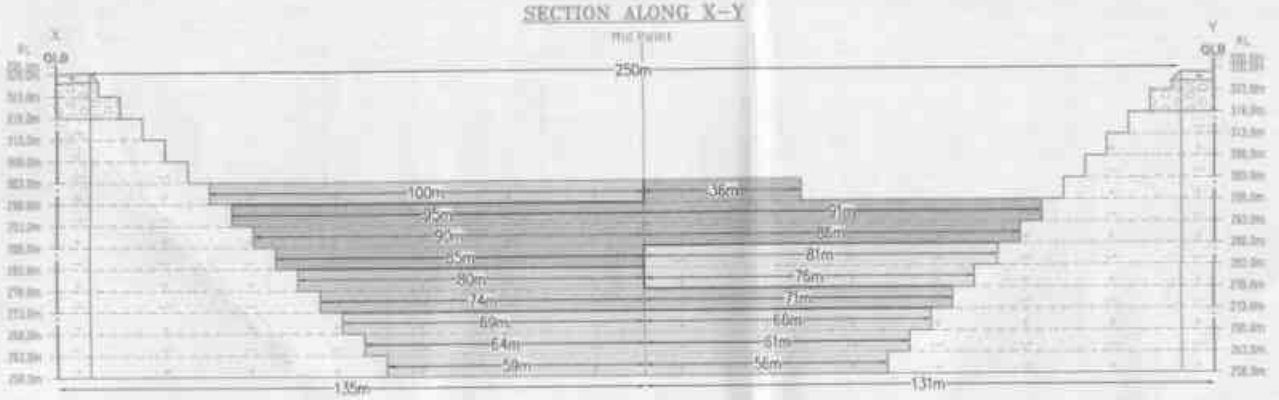


SITE SERVICES
(Proposed)
A – OFFICE
B – STORE ROOM
C – FIRST AID ROOM
D – REST SHELTER
E – TOILET

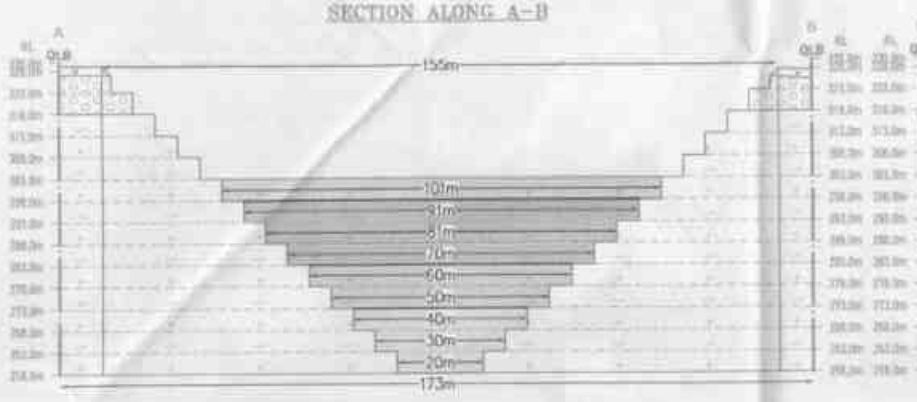




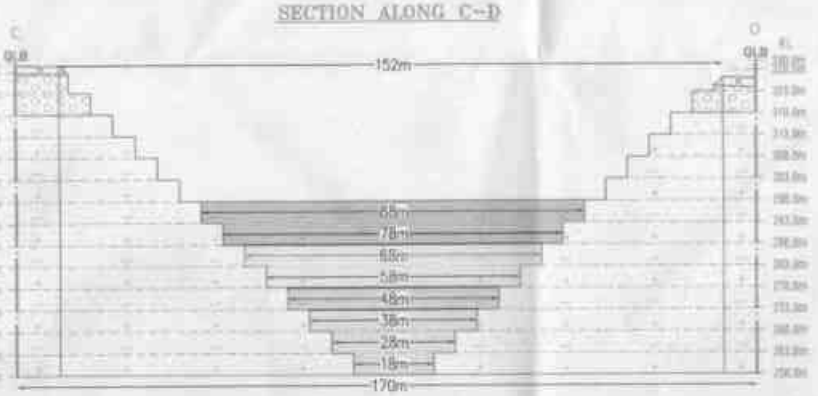
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



6th yr Proposed area to be Quarried	
7th yr Proposed area to be Quarried	
8th yr Proposed area to be Quarried	
9th yr Proposed area to be Quarried	
10th yr Proposed area to be Quarried	

1st V Yr ROPOSED PIT (Max)
250m x 155m x 81m(d)
(AGL 15m + BGL 20m)

BOUNDARY CO-ORDINATES

	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 55.0559"E
2	11° 03' 23.0110"N	77° 27' 55.1858"E
3	11° 03' 23.9289"N	77° 27' 54.7474"E
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6	11° 03' 28.4844"N	77° 27' 55.4058"E
7	11° 03' 27.7013"N	77° 27' 56.5341"E
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DATUM : UTM - WGS84, ZONE 43N

SITE SERVICES
(Proposed)

A – OFFICE
B – STORE ROOM
C – FIRST AID ROOM
D – REST SHELTER
E – TOILET

N

6th yr Proposed area to be Plantation	
7th yr Proposed area to be Plantation	
8th yr Proposed area to be Plantation	
9th yr Proposed area to be Plantation	
10th yr Proposed area to be Plantation	

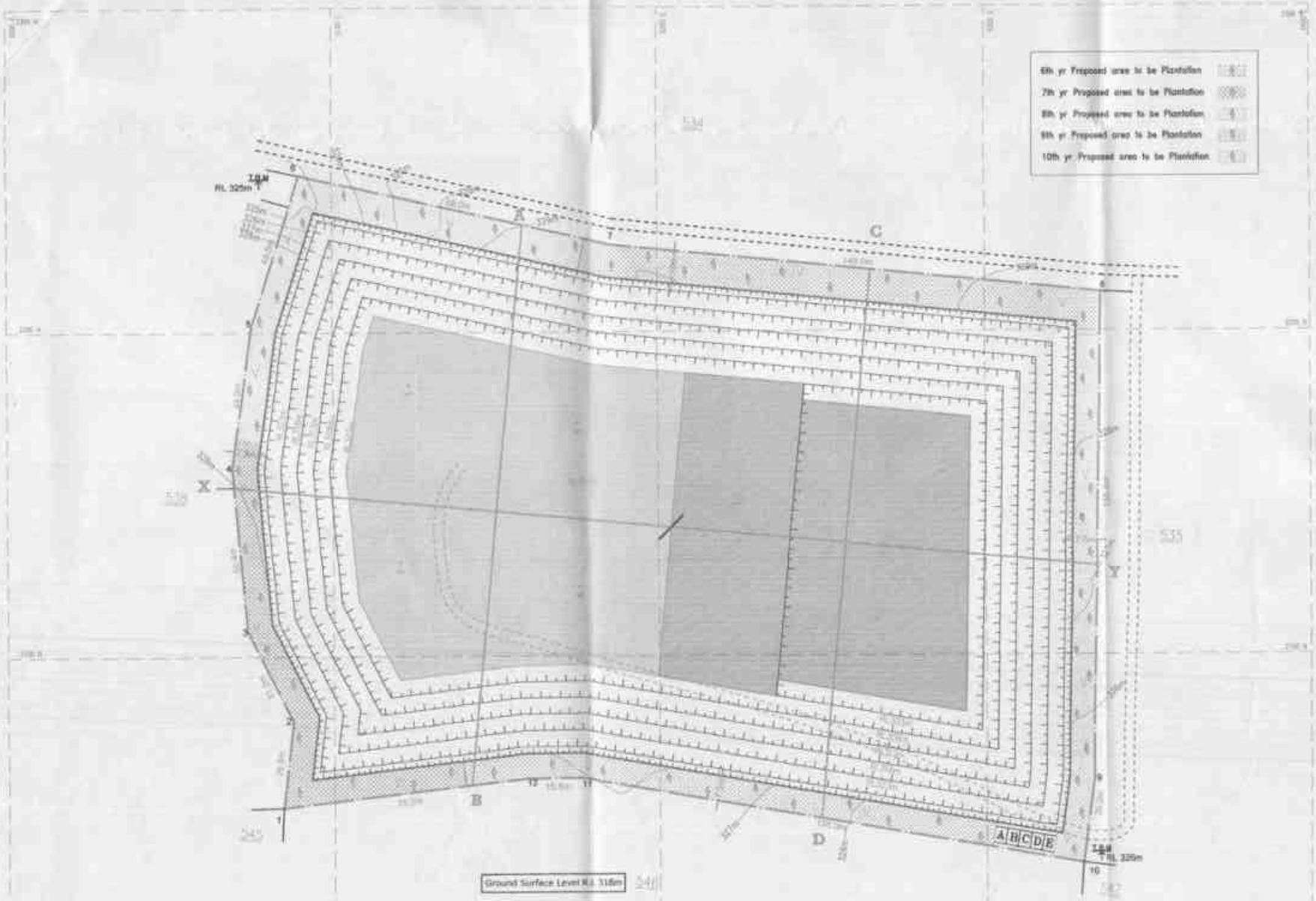


PLATE NO.: V-A
DATE OF SURVEY : 26.07.2024

APPLICANT :

M.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

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- GRAVEL
- CART TRACK
- SCRUB
- CONTOUR
- ROUGH STONE
- STRIKE & DIP
- QUARRY ROAD

YEARWISE DEVELOPMENT & PRODUCTION PLAN & SECTIONS SECOND "V" YEARS

SCALE 1 : 1000

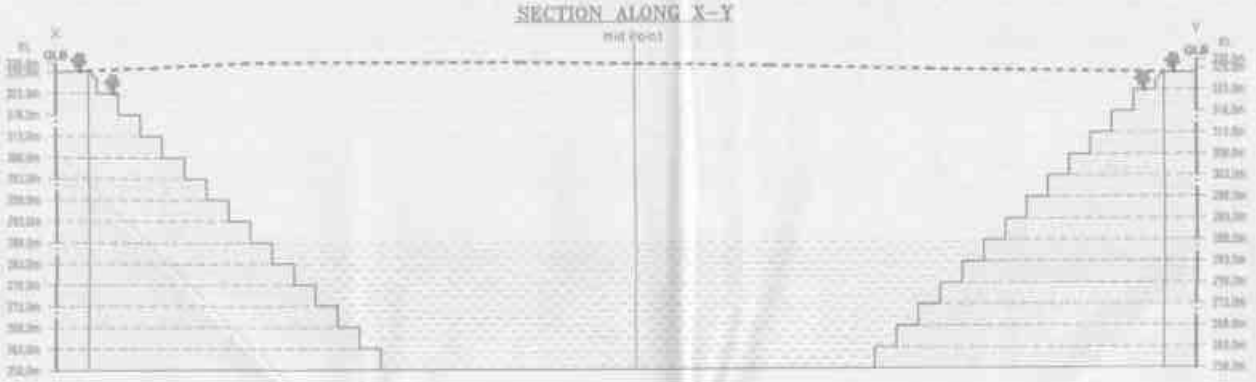
PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

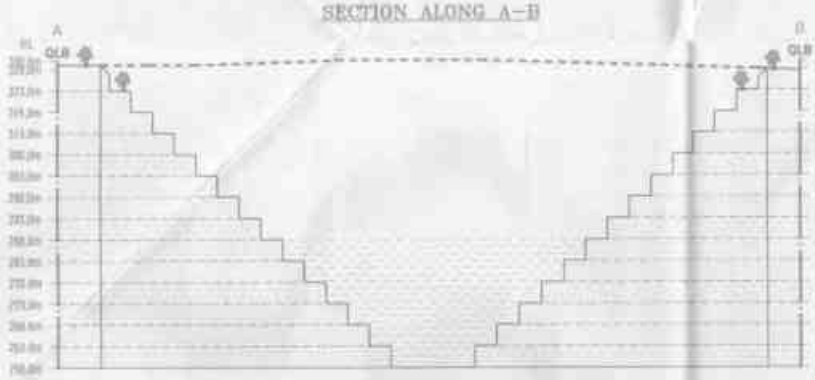
M.Sc.,M.Sc.,Ph.D.,
CHENNAI - 600 032.
As Per Rule 15(1)(a)(ii)(a) of MCR,2016

470 A

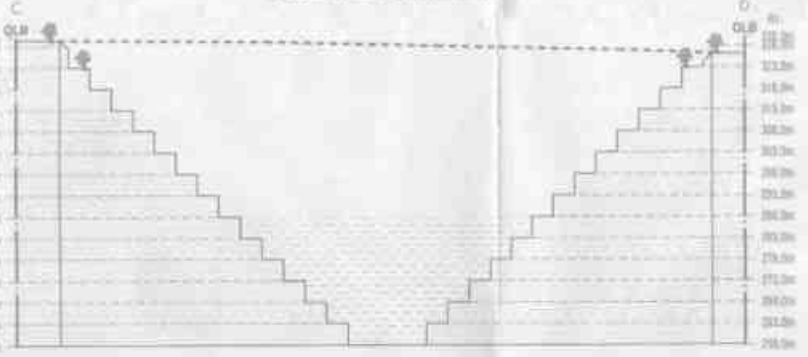
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



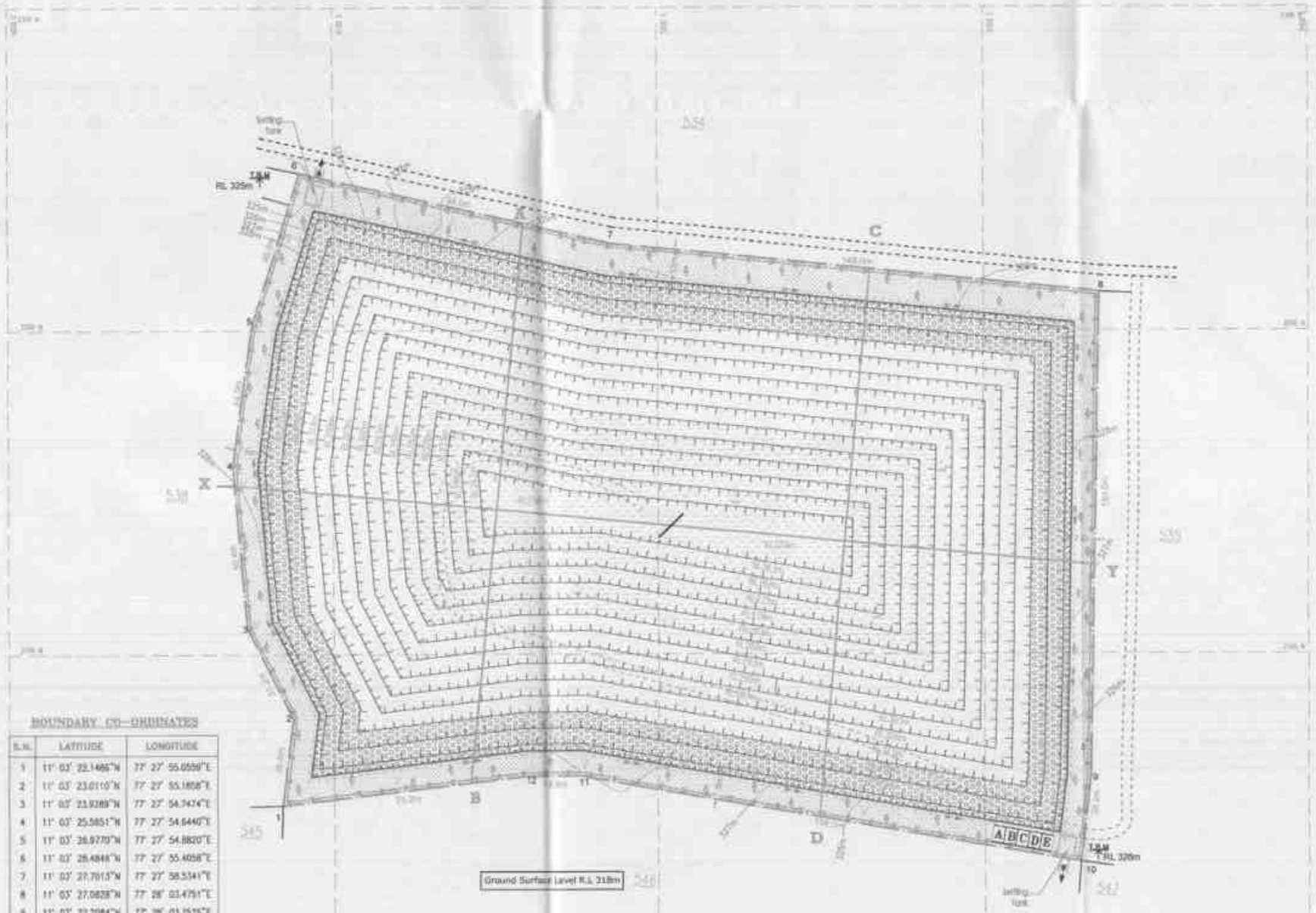
PROPOSED PIT (Max)

250m x 155m x 72m(d)
(AGL 12m + BGL 60m)

SITE SERVICES
(Proposed)

A – OFFICE
B – STORE ROOM
C – FIRST AID ROOM
D – REST SHELTER
E – TOILET

N



BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1466"N	77° 27' 55.0559"E
2	11° 03' 23.0110"N	77° 27' 55.1858"E
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7	11° 03' 27.7013"N	77° 27' 58.5341"E
8	11° 03' 27.0828"N	77° 28' 03.4751"E
9	11° 03' 22.2084"N	77° 28' 03.2525"E
10	11° 03' 21.3682"N	77° 28' 03.1205"E
11	11° 03' 22.3832"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5218"E

DATUM : UTM – WGS84, ZONE 43N

PLATE NO.: VI-A

DATE OF SURVEY : 26.07.2024

APPLICANT :

TVI.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

INDEX

- Q.L.APPLIED AREA BOUNDARY
- 7.5m ,10m SAFETY DISTANCE
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- GRAVEL
- CART TRACK
- SCRUB
- CONTOUR
- ROUGH STONE
- STRIKE & DIP
- PIT
- QUARRY ROAD
- FENCING
- SOIL LAYER
- RAIN WATER STORAGE
- FINISHED SURFACE LEVEL
- OLD SURFACE LEVEL
- EXISTING LAND FORM
- REHABILITATED LAND FORM
- PROPOSED GARLAND DRAIN

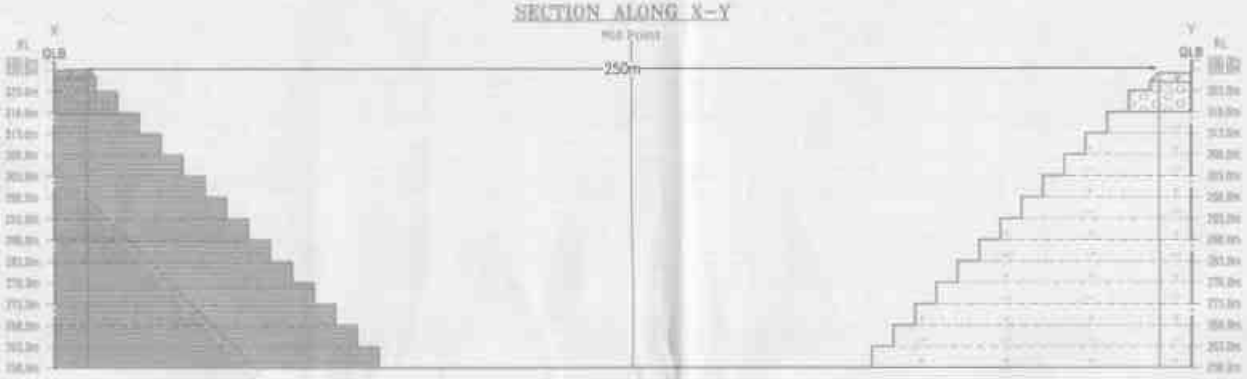
PROGRESSIVE QUARRY CLOSUR PLAN & SECTIONS

SCALE 1 : 1000

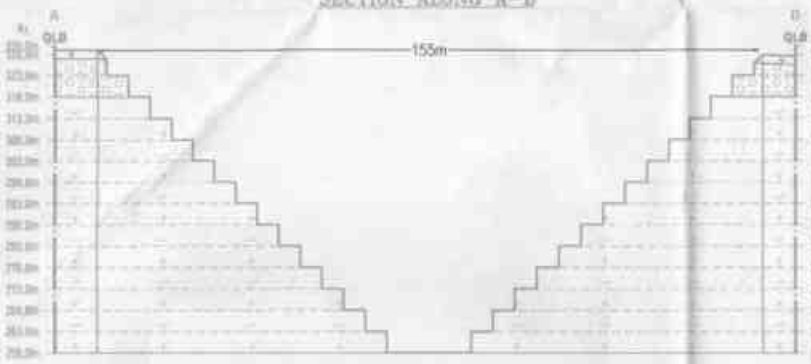
PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

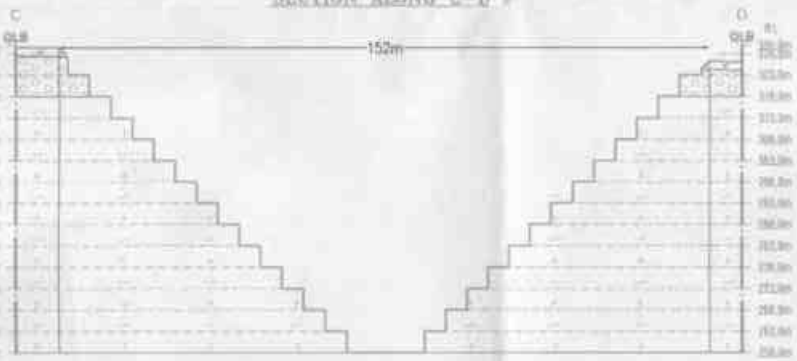
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



PRESENT & POST LAND USE PATTERN

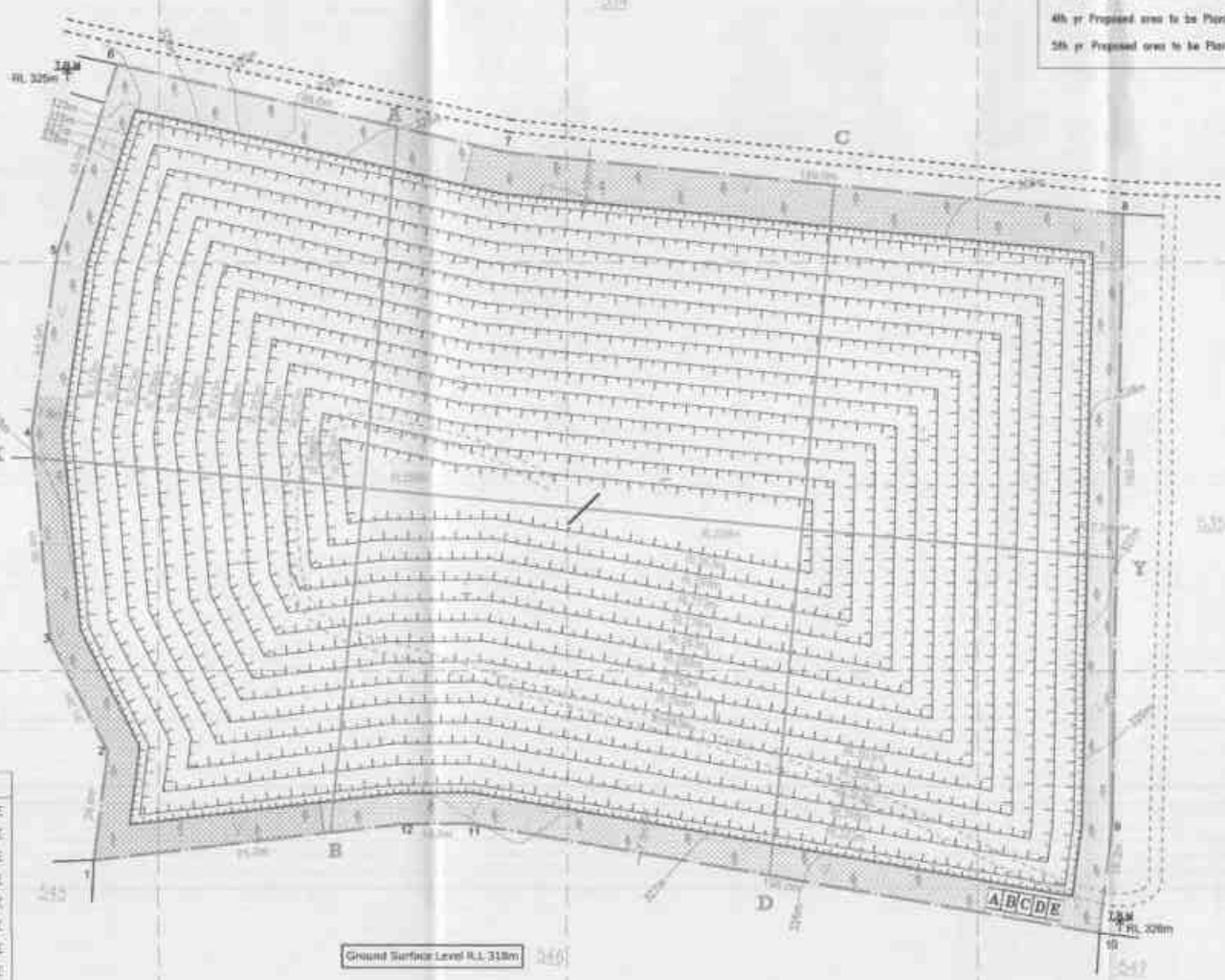
DESCRIPTION	PRESENT AREA (Ha)	AREA REQUIRED DURING THE 1ST V Yr OF THE LEASE PERIOD (Ha)	AREA AT THE END OF LEASE PERIOD (Ha)
AREA UNDER QUARRYING	Nil	3.85.0	3.85.0
INFRASTRUCTURE	Nil	0.01.0	0.01.0
ROAD	Nil	0.02.0	0.02.0
GREEN BELT	Nil	0.68.0	0.68.0
UN-UTILIZED AREA	4.51.0	Nil	Nil
GRAND TOTAL	**4.51.0**	**4.51.0**	**4.51.0**

Mineable Reserve Without Bench after Obtain Permission of Common Boundary From DGMS

ULTIMATE PIT (Max)
250m x 155m x 72m(dl)
(AGL 12m + BGL 60m)

N

SITE SERVICES
(Proposed)
A – OFFICE
B – STORE ROOM
C – FIRST AID ROOM
D – REST SHELTER
E – TOILET



1st yr Proposed area to be Plantation	0
2nd yr Proposed area to be Plantation	0
3rd yr Proposed area to be Plantation	0
4th yr Proposed area to be Plantation	0
5th yr Proposed area to be Plantation	0

BOUNDARY CO-ORDINATES

S.No.	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 55.0559"E
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11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.5733"N	77° 27' 57.5218"E

DATUM : UTM – WGS84, ZONE 43N

PLATE NO.: VII-A
DATE OF SURVEY : 26.07.2024

APPLICANT :
Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED.
DIRECTOR, THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A AREA:
S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha,
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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- CONTOUR
- ROUGH STONE
- STRIKE & DIP
- PIT
- QUARRY ROAD

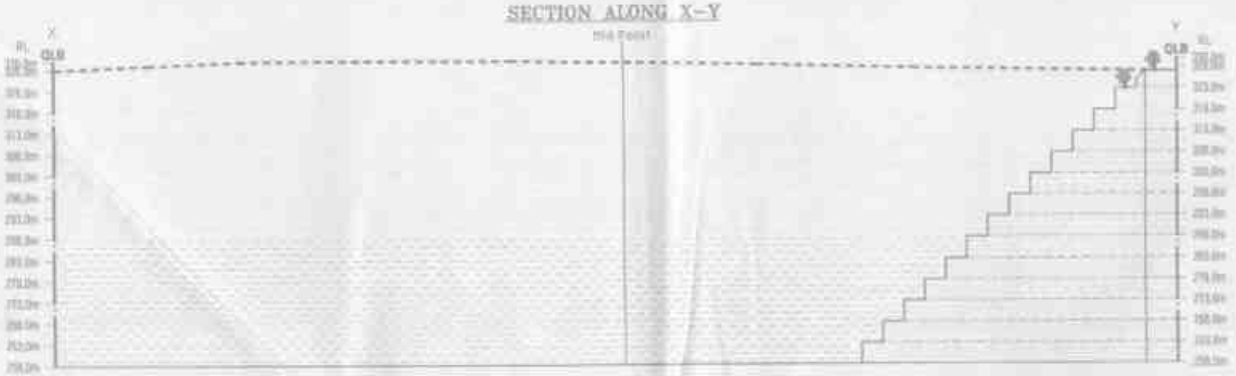
CONCEPTUAL PLAN & SECTIONS
SCALE 1 : 1000

PREPARED BY :
THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT

M.Sc.,(Ph.D.,)
QUALIFIED PERSON
As per MMR, 2015 and MMDR 2016

472 A

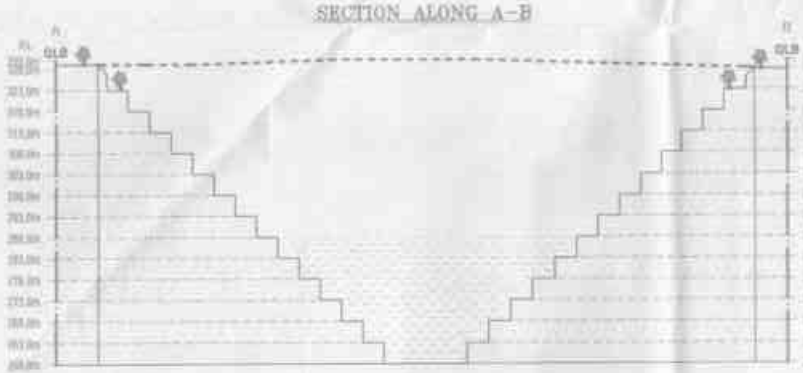
SECTION ALONG X-Y



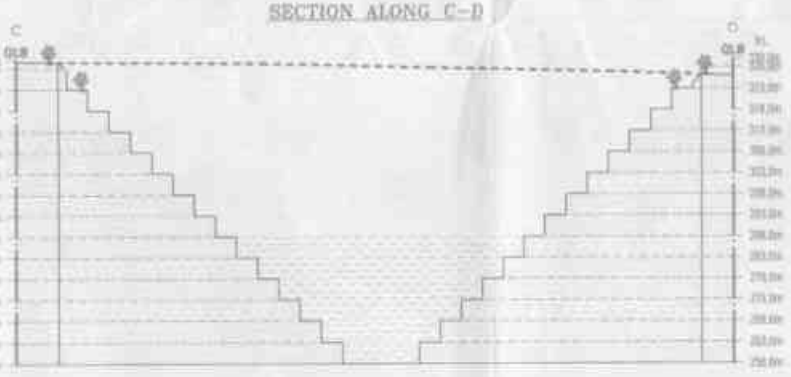
ULTIMATE PIT (Max)
258m x 155m x 72m(d)
[AGL 12m + BGL 60m]

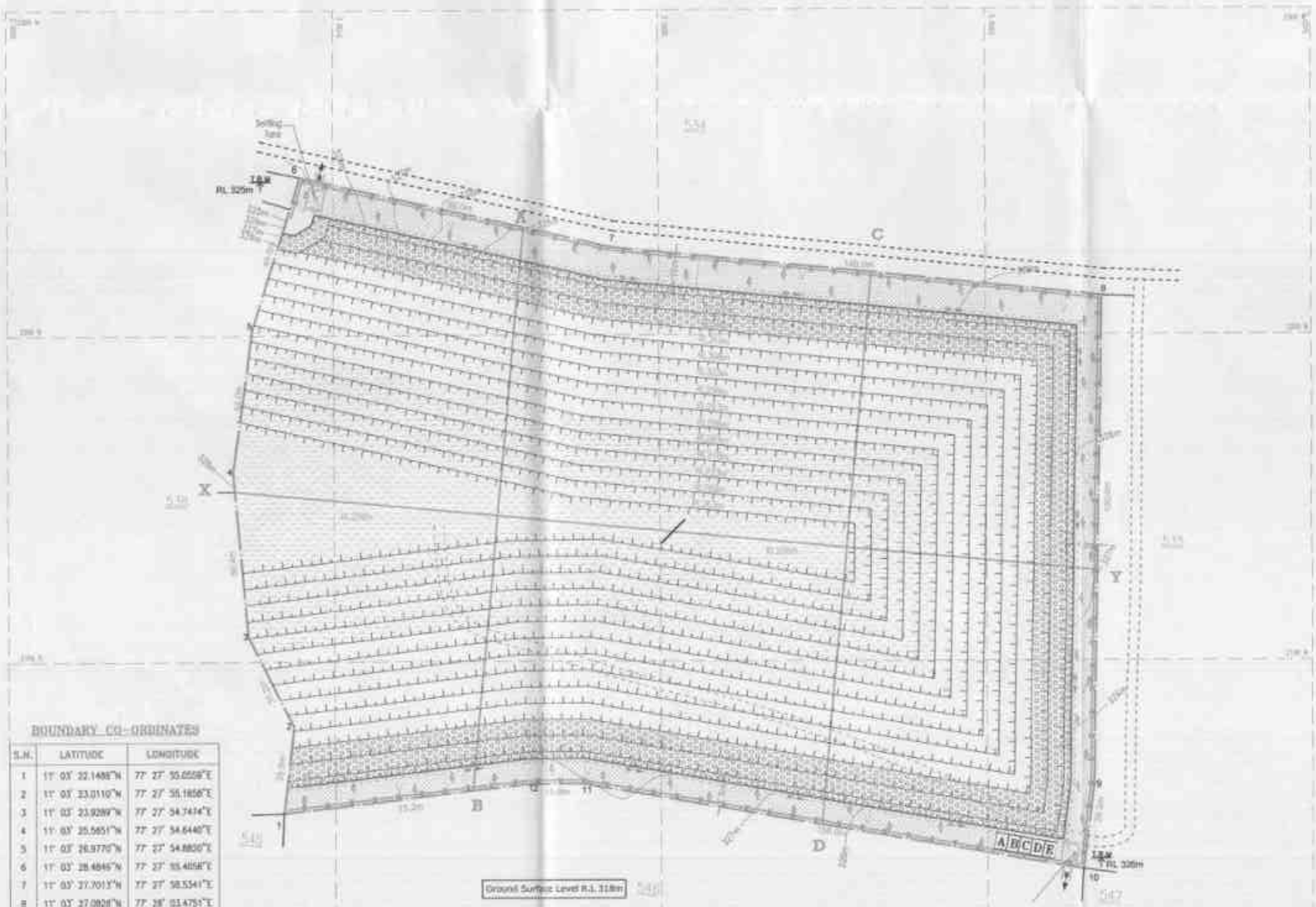
SITE SERVICES
(Proposed)
A – OFFICE
B – STORE ROOM
C – FIRST AID ROOM
D – REST SHELTER
E – TOILET

SECTION ALONG A-B



SECTION ALONG C-D





BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1488"N	77° 27' 55.0558"E
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4	11° 03' 25.5651"N	77° 27' 54.6440"E
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6	11° 03' 28.4846"N	77° 27' 55.4056"E
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10	11° 03' 21.3882"N	77° 28' 03.1209"E
11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5318"E

DATUM : UTM – WGS84, ZONE 43N

PLATE NO.: V1
DATE OF SURVEY : 26.07.2024

APPLICANT :

M/s.V.K.P.ENGINNEERING IND PRIVATE LIMITED.
DIRECTOR, THIRU.P.JAGADEESAN.
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE,TAMILNADU - 638 052.

LOCATION OF Q.L.A. AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR,
STATE : TAMIL NADU.

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- CONTOUR
- ROUGH STONE
- STRIKE & DIP
- PIT
- QUARRY ROAD
- FENCING
- SOIL LAYER
- RAIN WATER STORAGE
- FINISHED SURFACE LEVEL
- OLD SURFACE LEVEL
- EXISTING LAND FORM
- REHABILITATED LAND FORM
- PROPOSED GARLAND DRAIN

PROGRESSIVE QUARRY CLOSUR PLAN & SECTIONS

SCALE 1 : 1000

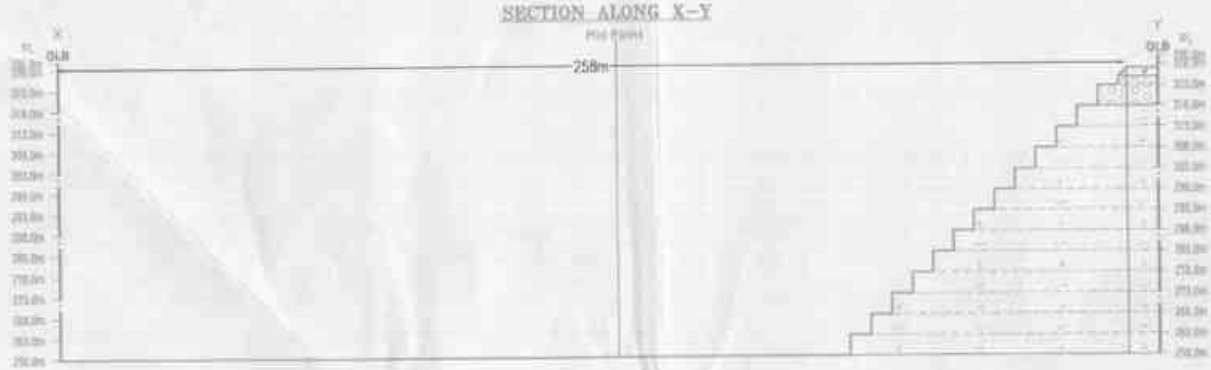
PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP AUTHENTICATED BY STATE GOVERNMENT.

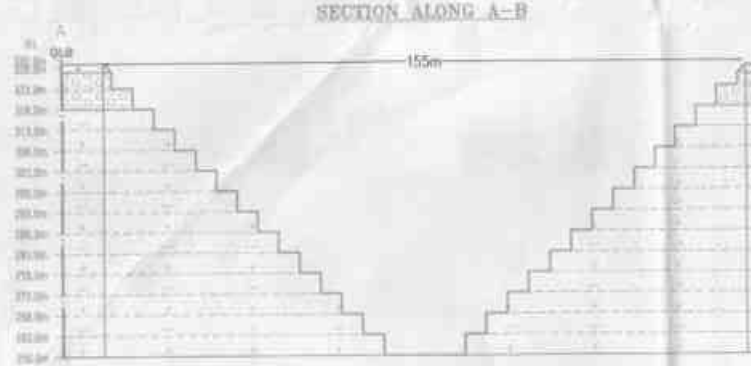
QUALIFIED PERSON

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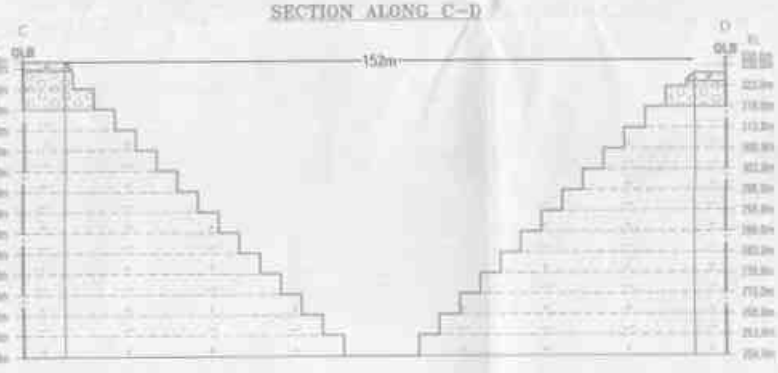
SECTION ALONG X–Y



SECTION ALONG A–B



SECTION ALONG C–D



PRESENT & POST LAND USE PATTERN

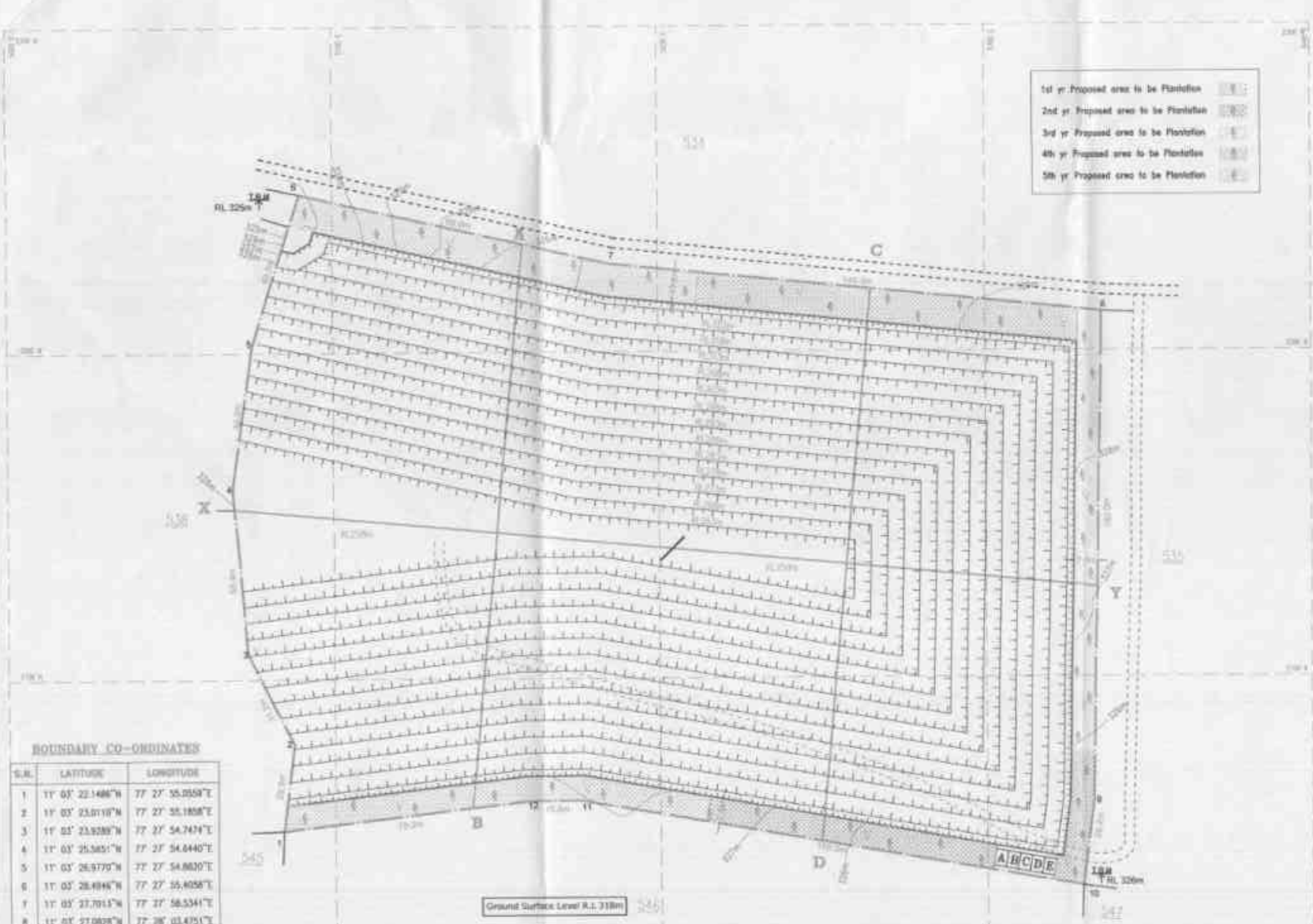
DESCRIPTION	PRESENT AREA (Ha)	AREA REQUIRED DURING THE 1ST V Yr OF THE LEASE PERIOD (Ha)	AREA AT THE END OF LEASE PERIOD (Ha)
AREA UNDER QUARRYING	Nil	3.93.0	3.93.0
INFRASTRUCTURE	Nil	0.01.0	0.01.0
ROAD	Nil	0.02.0	0.02.0
GREEN BELT	Nil	0.55.0	0.55.0
UN-UTILIZED AREA	4.51.0	Nil	Nil
GRAND TOTAL	4.51.0	4.51.0	4.51.0

ULTIMATE PIT (Max)
250m x 155m x 72m(d)
(AGL 12m + BGL 60m)

SITE SERVICES
(Proposed)
A – OFFICE
B – STORE ROOM
C – FIRST AID ROOM
D – REST SHELTER
E – TOILET

N

1st yr Proposed area to be Plantation	0.5
2nd yr Proposed area to be Plantation	0.5
3rd yr Proposed area to be Plantation	0.5
4th yr Proposed area to be Plantation	0.5
5th yr Proposed area to be Plantation	0.5



BOUNDARY CO-ORDINATES

S.N.	LATITUDE	LONGITUDE
1	11° 03' 22.1486"N	77° 27' 55.0559"E
2	11° 03' 23.0118"N	77° 27' 55.1858"E
3	11° 03' 23.9289"N	77° 27' 54.7474"E
4	11° 03' 25.5851"N	77° 27' 54.6440"E
5	11° 03' 26.9770"N	77° 27' 54.8820"E
6	11° 03' 28.4846"N	77° 27' 55.4058"E
7	11° 03' 27.7013"N	77° 27' 56.5341"E
8	11° 03' 27.0828"N	77° 28' 03.4751"E
9	11° 03' 22.2084"N	77° 28' 03.2525"E
10	11° 03' 21.3662"N	77° 28' 03.1200"E
11	11° 03' 22.3632"N	77° 27' 58.0835"E
12	11° 03' 22.3733"N	77° 27' 57.5218"E

DATUM : UTM – WGS84, ZONE 43N

PLATE NO.:VII
DATE OF SURVEY : 26.07.2024

APPLICANT :

Tvl.V.K.P.ENGINNEERING IND PRIVATE LIMITED,
DIRECTOR, THIRU.P.JAGADEESAN,
11/32,VETTUKATTUVALASU,
INGUR,PERUNDURAI,
ERODE.TAMILNADU - 638 052.

LOCATION OF Q.L.A. AREA:

S.F.No : 537/1,2,3,536,
EXTENT : 4.51.00 Ha.
VILLAGE : PERUNTHOLUVU,
TALUK : TIRUPPUR SOUTH,
DISTRICT : TIRUPPUR.
STATE : TAMIL NADU.

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- SCRUB
- CONTOUR
- ROUGH STONE
- STRIKE & DIP
- PIT
- QUARRY ROAD

CONCEPTUAL PLAN & SECTIONS

SCALE 1 : 1000

PREPARED BY :

THIS IS TO CERTIFY THAT THE INFORMATION IN THIS PLATE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE BASED UPON THE LEASE MAP SURVEYED BY STATE GOVERNMENT.

(P.K.THANDAVAL, M.Sc.,Ph.D.,)
GEOLOGIST (FIELD)
As Per Rule 34(1)(b)(iii)(a) of MCR,2018

ASSISTANT DIRECTOR GEOLOGY AND MINING

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HYDRO - GEOLOGICAL STUDIES AT M/S. VKP ENGINEERING IND PVT., LTD., ROUGH STONE AND GRAVEL QUARRY PERUNTHOLUVU VILLAGE, TIRUPPUR SOUTH TALUK, TIRUPPUR DISTRICT, TAMILNADU.

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HYDRO - GEOLOGICAL STUDIES AT M/S. VKP ENGINEERING IND PVT., LTD., ROUGH STONE AND GRAVEL QUARRY PERUNTHOLUVU VILLAGE, TIRUPPUR SOUTH TALUK, TIRUPPUR DISTRICT, TAMILNADU.

1. INTRODUCTION

Proprietor of **M/s. VKP Engineering Ind Pvt., Ltd.,** in Rough Stone and Gravel Quarry Over an extent of 4.51.0 hectares of patta land in S.F. No's. 536,537/1,537/2 and 537/3 of Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu State on the hydrological regime of the area, the above area has been studied & investigated for finding out Ground water level and aquifer thickness and water quality in and around mine lease area. The electrical resistivity method, TEM study in rough stone and gravel quarry and genesis rock with determine the shallow and deeper freshwater aquifer in the proposed mining area in M/S. VKP Engineering Ind Pvt., Ltd., Peruntholuvu Village.

1.1. Scope of Study

In the present study, the main aim of the shallow and deeper aquifer investigation through electrical resistivity VES, Method is used to measure the apparent resistivity of the Study area. The present study is estimating the ground water level in Peruntholuvu village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu village proposed leasehold area and their surrounding area. The study area is mostly covered by Water level, type of sand, type of rock and their basement rock characters. The main aim of the study is to determine the water table and flow movement of this Lease and surrounding area **(Fig.1).**

1.2. Profiles in the Study Area.

Name of the Lessee	: **M/s. VKP Engineering Ind Pvt., Ltd.,**
Survey No	: 536,537/1,537/2 and 537/3.
Extent	: 4.51.0 hectares.
Village	: Peruntholuvu,
Taluk	: Tiruppur South,
District	: Tiruppur,
State	: Tamil Nadu

2. STUDY AREA DESCRIPTION

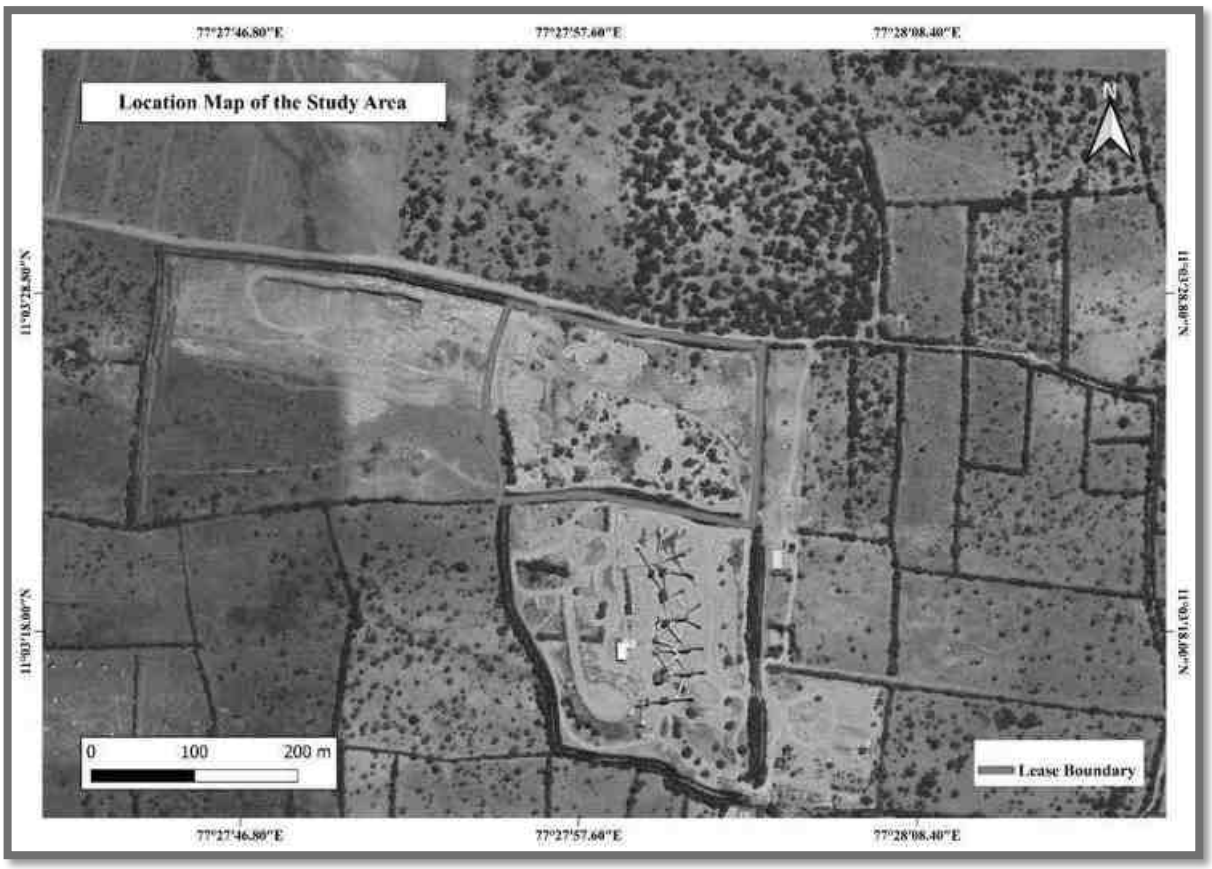


Figure.1. Shows proposed mine lease area

The lease applied area is located about 14.7km Southeastern side of Tiruppur, 11.6km Northwestern side of Kangayam and 3.8km Northeastern side of Peruntholuvu village. The lease applied area falls in the Toposheet No: **58 E/08** Latitude between: **11°03'21.3662"N** to **11°03'28.4846"N**

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and Longitude between: **77°27'54.6440"E** to **77°28'03.4751"E** on WGS datum – 1984.

	26.5km		14.7km		3.8km	
Tiruppur	→	Kangayam	→	Peruntholuvu	→	Lease applied area
	Southeast		Northwest		Northeast	

2.1 Topography of the Lease Area and Its Surrounding Environments:

The lease applied area is exhibits undulated topography. The area has gentle sloping towards Eastern side and altitude of the area varies from 325m to 330m above from Mean Sea Level. The area is covered by 2m thickness of Gravel, 10m Weathered Rock and followed by Massive Charnockite which is clearly inferred from the adjacent existing quarry pit. **(Fig.2).**

The Water level in the surrounding area is 93m - 96m below from general ground profile which is observed from the nearby bore wells. The Normal rainfall is about 607mm.



Figure 2. Topography in the lease area

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3. REGIONAL GEOLOGY OF TIRUPPUR DISTRICT.

The oldest lithology found in the district are amphibolite of Satyamangalam Group and meta-ultramafite of Sargur Group which is Archaean in age. The lithologies of Sittampundi-Mettupalaiyam Complex like pyroxenite, Gabbro, Anorthisitic gabbro which are from Archean in age are found at NE of Tiruppur, west of Padiyar and at south of Perumanalhin. The Archaean granite gneiss are present in and around Sevur, Kunnattur and at the north of Tiruppur which is the part of Peninsular Gneissic complex I Group. Hornblende biotite gneiss is the major lithology occurs in the district, which is of Migmatite Group and covers most part of the district except northern part. The Charnockite Group contains charnockite, pyroxene granulite, amphibolite and banded magnetite quartzite. The charnockite are occurs as throughout the district areas in the form of patches while pyroxene granulite occurs at east of Tayampalaiyam.

The banded magnetite quartzite is occurring in a patches at north of Avanashipalyaiyam. The Migmatite Group contains hornblende biotite gneiss, pink migmatite and pink granite gneiss. The pink migmatite occurs at south of Perumanalhin and in and around Karattohivu in the form of patches, while pink granite gneiss is occurs as patches at north of Perumanalhin, south of Manupparm and Kolinjivadi. The Neoproterozoic, Chalk Hill Formation contains pyroxenite which is famous for magnesite deposit occurs in the district at east of Tayampalaiyam. The Neoproterozoic, Alkali Complex Group contain Sivamalai Syenite which contains different types of syenites bodies occurs at south of Padiyur.

The Neoproterozoic Acid intrusives contains major lithologies like quartz veins & reefs, pegmatites and granite, which forms at the end phase of magmatism. The large granitic bodies are intruded into granite gneiss of PGC-I at north of Sevur, west of Tiruppur and in the hornblende-biotite gneiss of Charnockite Group at south of Padiyur, east of Avanshipalaiyam, and at north of Kolinjivadi. The Cenozoic calcrete occurs as small patches in Gudimangalam to Kolinjivadi sector. The gypseous clay of Coimbatore - Palladam Formation of Late Holocene in age are occurs at west and south of Gudimangalem north of Karattohivu and west of Tayampalaiyam and contains gypsum deposits.

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3.1 Geology of the Lease Area

Peninsular gneiss forms the oldest rock formation, in which the massive formation of Charnockite lies over with accumulation of recent quaternary formation. On regional scale of the Charnockite body is N40º E – S40º W with dipping towards SE60º.

The general geology sequence of the rocks in this area are given below:

AGE		FORMATION
Recent	-	Quaternary Formation (Gravel)
----------Unconformity----------		
Archaean	-	Charnockite
		Peninsular Gneissic Complex

4. HYDROGEOLOGY

Geohydrologically major rock type covered large part of the district are migmatitic gneiss along with charnockite and fluvial alluvium are present as patches with it. The shallow water table viz., 0-2 m. bgl (below ground level) is occurred in the northern and at southern parts of the district and it occurs in the patches. The medium water table 2-5 m. bgl is occurs at central and northern part of the district. The deep water table 5 m to 20 m. bgl are occurs in the large part of the district area particularly near the Tiruppur town. The depth to water table is upto 5 m is occurs due to the fluvial alluvium present in the southern part of the district. The fluoride and uranium concentration are occurring >1.5 and 40 (mg/l) respectively in the central part of the district.

5. METHODOLOGY OF STUDY

1. Open well and bore well water level measurement, depth of water level diameter of open well, agriculture land survey.
2. Geophysical survey for deep aquifer in nearby site Rock and soil geology also collected for the aquifer characteristic study.
3. Aquifer thickness and quality measurement study in nearby proposed mine site areas of the study area.

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6.1 Geophysical Investigation

6.1.1 Vertical Electrical resistivity sounding for aquifer study.

The electrical resistivity study is used to determine aquifer and occurred rock in the proposed site. The DDR 3 equipment was used for data collection **(Fig.3)**

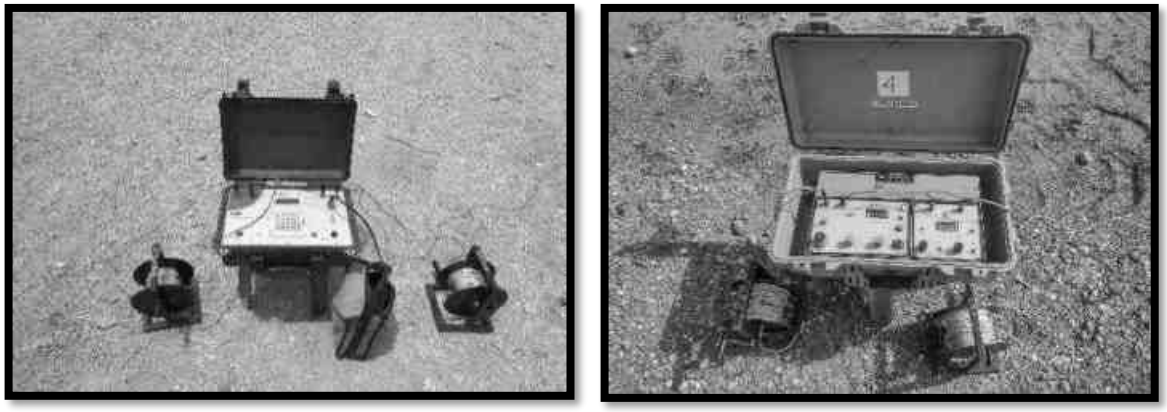


Figure 3. Electrical resistivity survey in the mine lease area.

6.1.2 Basic Principles

The electrical properties of rocks in the upper part of the earth's crust are dependent upon the lithology, porosity, and the degree of pore space saturation and the salinity of the pore water. Saturated rocks have lower resistivity than unsaturated and dry rocks. The higher the porosity of the saturated rock, or the higher the salinity of the saturating fluids, the lower is the resistivity. The presence of clays and conductive minerals also reduces the resistivity of the rock.

The resistivity of earth materials can be studied by measuring the electrical potential distribution produced at the earth's surface by an electric current that is passed through the earth. Current is moved through the subsurface from one current electrode to the other and the potential difference is recorded as the current passes. From this information, resistivity values of various layers are acquired and layer thickness can be identified.

The apparent resistivity values determined are plotted as a log function versus the log of the spacing between the electrodes. These plotted curves identify thickness of layers. If there are multiple layers (more than 2), the acquired data is compared to a master curve to determine layer thickness.

This method is least influenced by lateral in-homogeneities and capable of providing higher

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depth of investigation.

The resistance R of a certain material is directly proportional to its length L and cross-sectional area A, expressed as:

$$R = Rs * L/A \text{ (in Ohm)}$$

Where Rs is known as the specific resistivity (characteristic of the material and independent of its shape or size)

With Ohm's Law,

$$R = dV/I \text{ (Ohm)}$$

Where dV is the potential difference across the resistor and I is the electric current through the resistor. The specific resistivity may be determined by:

$$Rs = (A/L) * (dV/I) \text{ (in Ohm m)}$$

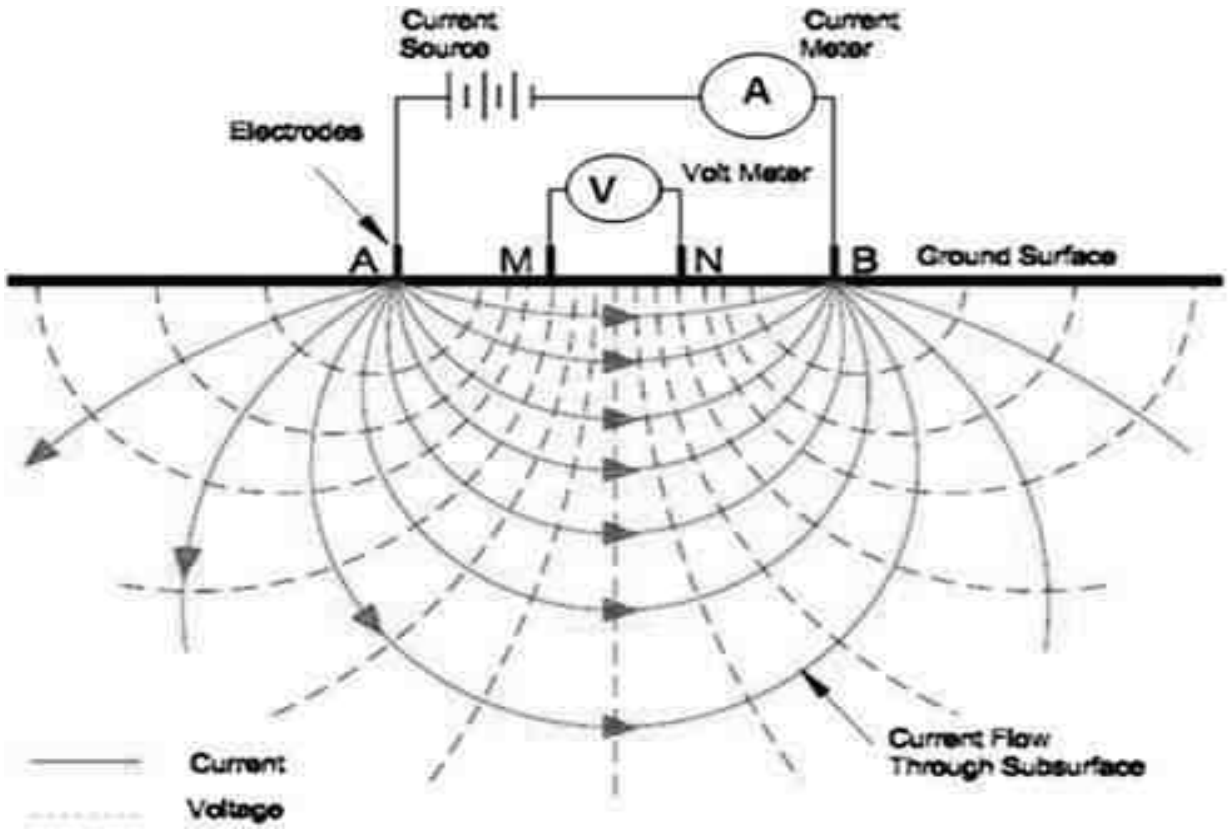


Figure 4. Schematic Diagram of Electrical resistivity principle

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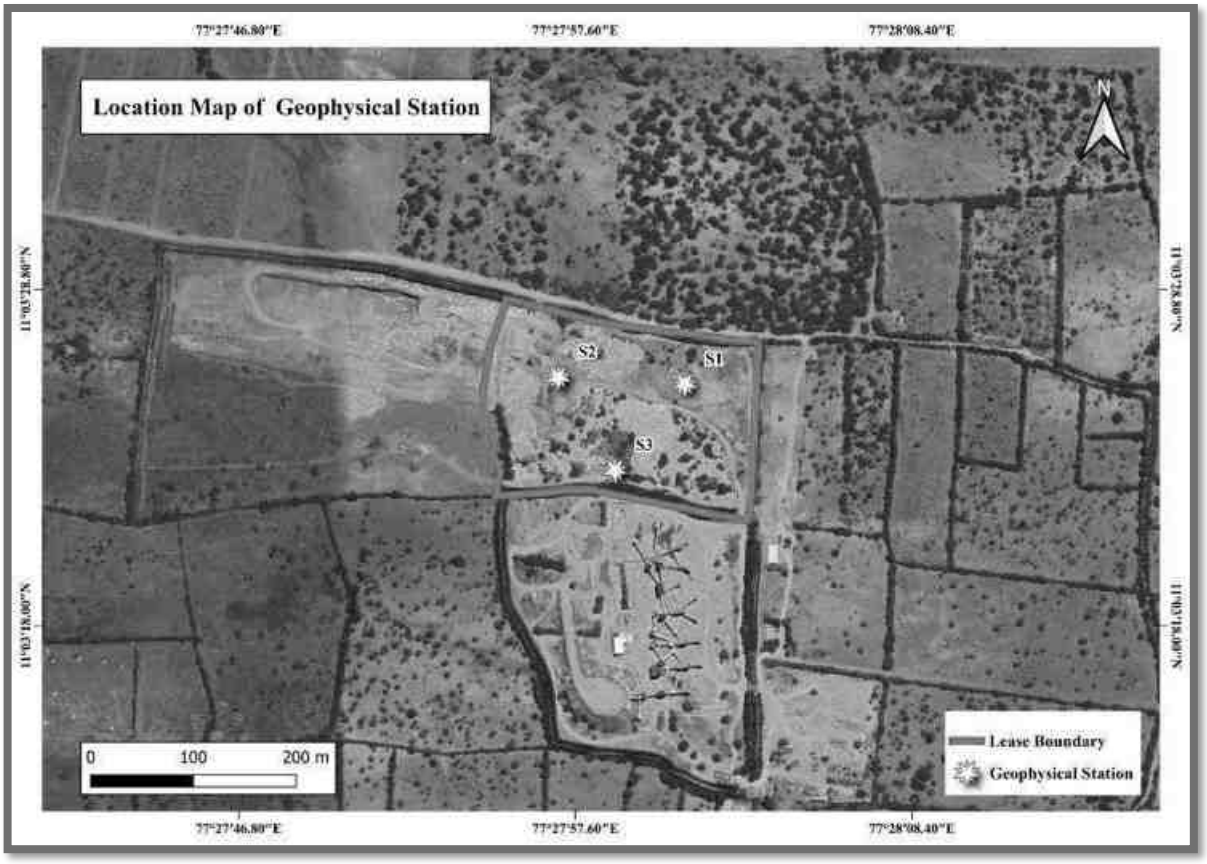


Figure 5. Geophysical survey location in the lease area

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6. GEOPHYSICAL DATA INTERPRETATION & GRAPH

Table 1 Geophysical data of Station 1

STATION-1				
AB/2 (m)	MN/2 (m)	Geometric Factor (K)	Resistance (R) Ohm	Apparent Resistivity Rho Ohm-meter
2	1	4.7	8.31	39.16
5	1	37.7	2.1	79.17
10	1	155.5	0.774	120.36
10	5	23.6	3.87	91.18
15	5	62.8	2.56	160.85
20	5	117.8	2.07	243.87
30	5	274.9	1.69	464.56
40	5	494.8	1.35	667.98
50	5	777.5	1.12	870.85
60	5	1123.1	0.95	1066.97
70	5	1531.5	0.68	1041.44
80	5	2002.8	0.61	1221.69
90	5	2536.8	0.58	1471.37
100	5	3133.7	0.5	1566.87

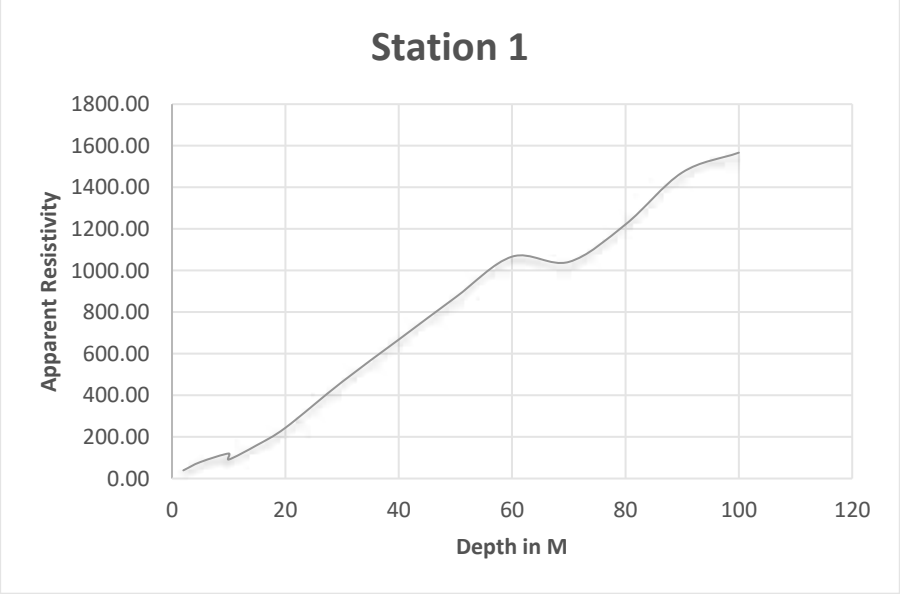


Figure 6 Graphical Representation of Geophysical data Station 1

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Table 2 Geophysical data of Station 2

STATION-2				
AB/2 (m)	MN/2 (m)	Geometric Factor (K)	Resistance (R) Ohm	Apparent Resistivity Rho Ohm-meter
2	1	4.7	4.38	20.64
5	1	37.7	2.88	108.57
10	1	155.5	1.45	225.49
10	5	23.6	6.24	147.03
15	5	62.8	3.79	238.13
20	5	117.8	2.54	299.24
30	5	274.9	2.18	599.26
40	5	494.8	1.86	920.33
50	5	777.5	1.4	1088.56
60	5	1123.1	1.09	1224.20
70	5	1531.5	0.95	1454.95
80	5	2002.8	0.81	1622.24
90	5	2536.8	0.74	1877.26
100	5	3133.7	0.7	2193.62

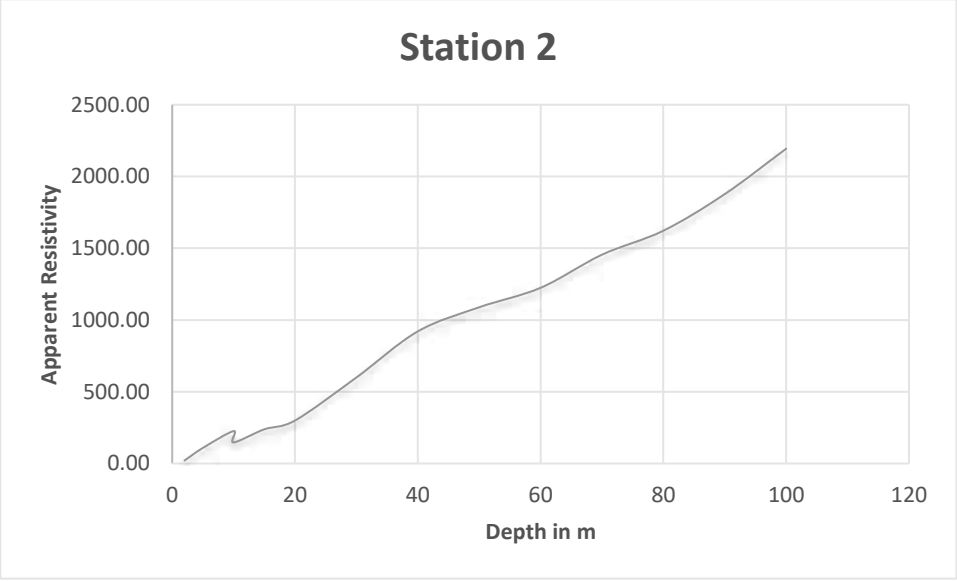


Figure 7 Graphical Representation of Geophysical data Station 2

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Table 3 Geophysical data of Station 3

STATION-3				
AB/2 (m)	MN/2 (m)	Geometric Factor (K)	Resistance (R) Ohm	Apparent Resistivity Rho Ohm-meter
2	1	4.7	3.97	18.71
5	1	37.7	1.78	67.10
10	1	155.5	0.96	149.29
10	5	23.6	2.64	62.20
15	5	62.8	2.17	136.35
20	5	117.8	1.9	223.84
30	5	274.9	1.77	486.56
40	5	494.8	1.63	806.53
50	5	777.5	1.5	1166.32
60	5	1123.1	1.12	1257.90
70	5	1531.5	0.96	1470.27
80	5	2002.8	0.85	1702.35
90	5	2536.8	0.75	1902.63
100	5	3133.7	0.59	1848.91

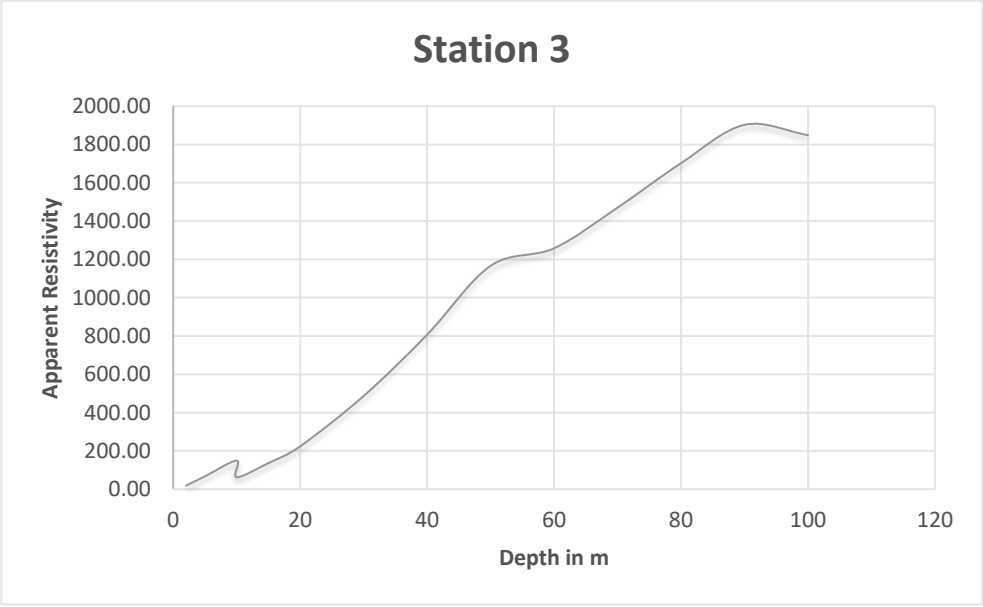


Figure 8 Graphical Representation of Geophysical data Station 3

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7. CONCLUSION

- The lease applied area is exhibits undulated topography. The area has gentle sloping towards Eastern side and altitude of the area is 325m to 330m above from Mean Sea Level.
- The geological study of the given area covered by gravel and rough stone in the area. The discharge of the groundwater controlled by the massive charnockite rock
- The study area exhibit 60°SE dipping and massive charnockite formation. So, it acts as a barrier and restrict the groundwater flow movement.
- Based on the geophysical investigation, Vertical Electrical Sounding (VES) were conducted to determine the subsurface water table and rock types up to depth of 100 m.
- The subsurface formation up to this depth can be categorized as follows,
    - **0m to 2m (Average) – Gravel.**
    - **2m to 10m (Average) – Weathered Rock.**
    - **10m to 72m (Average) – Hardrock Formation.**
- Water level from open and bore in nearby proposed site –open well having recharge water in the Shallow perched aquifer well built by the rainwater.
- In this mine lease area, groundwater occurs at deeper depths, depending on the intensity of weathering and its development is much less compared to gneissic formation. The mine area such no major intersections of water table are expected up to 50m.
- The aquifer is found within the weathered / fractured metamorphic terrain. Currently the aquifers are located at **93 to 96** meters below ground level (BGL). However, considering the approved mining plan depth, which is **72 meters**. It will not impact the groundwater table.
- To obviate the impact due to catchment of rainwater as surface runoff management, effective

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measures like construction of peripheral garland drain, settling pond and ensuring water flow to the nearby downstream users are devised and will be implemented during the course of mining.

- From the above study it can be concluded there will be no adverse effect on the hydrological regime, water drainage, environment, and livelihood. Agricultural activity in the region.

Dr. P. Thangaraju, M.Sc., Ph.D.,

Govt. Approved Hydro Geologist

M/s. Geo Exploration and Mining Solutions,

Regd. Office: No. 17, Advaitha Ashram Road,

Alagapuram, Salem – 636 004, Tamil Nadu

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Ph: 04294 - 251991
Cell : 99425 54963

SRI SELVANAYAGI EXPLOSIVES

Ad. Office :
4/152, Pudupalayam East,
Karaikuthukadu,
Murungatholuvu (Post),
CHENNIMALAI - 638 051.

Magazine :
No.422/B1, Keeranur Village,
Keeranur.

Form - 22 EX.L.No.E/SC/TN/22/432(E-23992)

To

VKP Engineering Ind (P) Ltd.,
No.151/260, Bhavani Road,
Perundurai Taluk,
Erode District,
Tamil Nadu- 638052.

Date :.....

Ref: Your Letter dated

Sub: Regarding blasting work using explosives in your proposed quarry.

Sir,

We are having explosives licence in Form 22 holding No:E/SC/TN/22/432 (E 23992) situated in Survey No.422/B1, Keeranur Village, Keeranur, Tirupur District. Our office functions at Address - M/S. Sri Selvanayagi Explosives, 4/152, Pudhupalayam East, Karaikuthukadu, Murungatholuvu-Post, Chennimalai, Erode District, Pin Code-638051.

We are enacting 2 explosives vans for transporting detonators and class 2 separately for our Magazine to our work site and well experienced and licenced blasters and shot firer for safe Blasting work since 15 years without untoward incident.

We are willing to undertake work on contract basis at your SF.No.536, 537/1, 537/2, 537/3 in Peruntholuvu Village, Tirupur South Taluk, Tirupur District.

Thanking You,

For Sri Selvanayagi Explosives

(Proprietor)

Enclosure:- 1. Licence Copy

2. Short Firer Licence Copy

अनुज्ञप्ति प्ररुप एल. ई.-3 | LICENCE FORM LE-3

(विस्फोटक नियम, 2008 की अनुसूची 4 के भाग 1 के अनुच्छेद 3(क) से (घ) देखिए।)

(See article 3(a) to (d) of Part 1 of Schedule IV of Explosives Rules, 2008)

(ग) उपयोग के लिए एक समय पर वर्ग 1,2,3,4,5 या वर्ग 7 के विस्फोटक या किसी मैगजीन में वर्ग 6 के विस्फोटक रखने के लिए अनुज्ञप्ति

Licence to possess : (c) for use,explosives of class 1, 2,3,4,5,6 or 7 in a magazine

अनुज्ञप्ति सं. (Licence No.) : E/SC/TN/22/432(E23992)

वार्षिक फीस रुपए (Annual Fee Rs): 3600/-

1. Licence is hereby granted to

Sri Selvanayagi Explosives (अधिभोगी / Occupier : Sri D.selvaraju.), 4/152 Pudupalayam East, Karaikuthukadu, Murungatholuvu Post,Chennimalai, Town/Village - Keeranur (Post), District-ERODE, State-Tamil Nadu, Pincode - 638051



को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : **Individual**

3. अनुज्ञप्ति निम्नलिखित प्रयोजनों के लिए विधिमान्य है।
Licence is valid only for the following purpose. : possess for use of **Nitrate Mixture, Safety Fuse, Detonating Fuse, Electric and/or Ordinary Detonators,** - के उपयोग के लिए

4. अनुज्ञप्ति विस्फोटकों के निम्नलिखित किस्मों, प्रकार और मात्रा के लिए विधिमान्य है।
Licence is valid for the following kinds and quantity of explosives: -- (क) (a)

क्र Sr. No.	नाम और विवरण Name and Description	वर्ग और प्रभाग Class & Division	उप-प्रभाग Sub-division	मात्रा किसी एक समय में Quantity at any one time
1.	Nitrate Mixture	2 ,0	0	1000 Kg.
2.	Safety Fuse	6 ,1	0	10000 Mtrs
3.	Detonating Fuse	6 ,2	0	5000 Mtrs
4.	Electric and/or Ordinary Detonators	6 ,3	0	20000 Nos.

(ख) किसी एक कलैंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञप्ति के लिए]
(b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)] : : **15 times as above.**

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्त परिसर की पुष्टि होती है।
The licensed premises shall conform to the following drawing(s): . : रेखाचित्र क्र. (Drawing No.) E/SC/TN/22/432(E23992)
दिनांक (Dated) 06/01/2006

6. अनुज्ञप्ति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:
Survey No(s). 422/B1 , ग्राम (Town/Village) : Keeranur

जिला (District) **ERODE** **पुलिस थाना (Police Station) : KANGAYAM**
दूरभाष (Phone) राज्य (State) **Tamil Nadu** पिनकोड (Pincode)
ई. मेल (E-Mail) फैक्स (Fax)

7. अनुज्ञप्ति परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।
The licensed premises consist of following facilities. : **MAIN MAGAZINE, DETONATOR MAGAZINE AND A LOBBY**

8. अनुज्ञप्ति समय – समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधो, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाब
अधीन रहते हुए अनुदत्त की जाती है।
The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the condi.. additional conditions and the following Annexures.
1. उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, सन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुए)।
Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
2. अनुज्ञप्ति प्राधिकारी व्दारा हस्ता.क्षरित इस अनुज्ञप्ति की शर्तें और अतिरिक्ति शर्तें।
Conditions and Additional Conditions of this licence signed by the licensing authority.
3. दूरी प्ररूप DE-2 | Distance Form DE-2.

9. यह अनुज्ञप्ति तारीख **31 मार्च 2007** तक विधिमान्य रहेगी। This licence shall remain valid till **31st day of March 2007.**
यह अनुज्ञप्ति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट सेट-VII के अधीन तथा उपवर्णित इस अनुज्ञप्ति की शर्तों का अधिक्रमण करने या यदि अनुज्ञप्त परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंहृत की जा सकती है, जहां वह लागू हो।
This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attach.. hereto.

तारीख | The Date - 06/01/2006

S
संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
South Circle, Che..

Amendments :
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 27/09/2011
- Change in Postal Address dated : 04/04/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 23/02/2022

नवीनीकरण के पृष्ठांकन के लिए स्थान
Space for Endorsement of Renewal

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
06/02/2024	31/03/2029	Jt. Chief Controller of Explosives, South Circle, Chennai

<u>कानूनी चेतावनी</u> : विस्फोटकों को गलत ढंग से चलाने या उनका दुरूपयोग विधि के अधीन गंभीर दांडिक अपराध होगा।
<u>Statutory Warning</u> : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Note :- This is system generated document does not require physical signature. Applicant may take printout f.. their records.

Digitally signed by Dr T L THANULINGAM
Reason: Licence No. : E/SC/TN/22/432
Location:Chennai [E23992]

भारत सरकार | Government of India
वाणिज्य और उद्योग मंत्रालय | Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो) | Petroleum & Explosives Safety Organisation (PESO)
पूर्व नाम- विस्फोटक विभाग | Formerly- Department of Explosives
A और D - विंग, ब्लॉक I-8, दूसरा तल, शास्त्री भवन| A & D - Wing, Block I-8, IInd Floor, Shastri Bhavan
26 हडूज रोड, नुंगमबक्कम चेन्नै| 26 Haddous Road, Nungambakkam Chennai 600006
फोन (Phone):- 28281023 | फैक्स (Fax):- 28284848
ई-मेल | Email: jtccochennai@explosives.gov.in

संख्या | No : E/SC/TN/30/2559(E150223)

सेवा में | To,
S.THANGAVEL S/O SUBRAMANI,
NO.27/21, PALAKATTUPUDUR, SOUTH RAMALINGAPURAM, ELLAIGRMAAL, CHENNIMALAI, PERUNDURAI
Distt. ERODE, State. Tamil Nadu, Pincode-638051

दिनांक | Date: 04/09/2023

विषय | Subject: श्री: S.THANGAVEL S/O SUBRAMANI, NO.27/21, PALAKATTUPUDUR, SOUTH RAMALINGAPURAM, ELLAIGRMAM, CHENNIMALAI, PERUNDURAI को विस्फोटक नियम, 2008 LE-10 में जारी शॉट फायर कर्ता प्रमाण-पत्र संख्या. E/SC/TN/30/2559(E150223) - प्रमाण-पत्र जारी करने के संबंध में |
Shotfirer's Certificate No. E/SC/TN/30/2559(E150223) issued to S.THANGAVEL S/O SUBRAMANI, NO.27/21, PALAKATTUPUDUR, SOUTH RAMALINGAPURAM, ELLAIGRMAM, CHENNIMALAI, PERUNDURAI granted in Form LE-10 of Explosives Rules, 2008 - Issue of Certificate regarding.

महोदय | Sir,
कृपया आपके पत्र संख्या. 97097 दिनांक 31/08/2023 तथा दिनांक 04/09/2023 को आयोजित अनुवर्ती परीक्षण का संदर्भ ग्रहण करें | विस्फोटक नियम 2008 के नियम 107 के प्रावधानों के अनुसार वर्ग:(ख), श्रेणी: सामान्य जमीन के ऊपर, जमीन के ऊपर ब्लास्टिंग आपरेशन के प्रयोजन के लिए शॉट फायर कर्ता प्रमाण-पत्र संख्या. E/SC/TN/30/2559(E150223) इस पत्र के साथ संलग्न किया जा रहा है जो दिनांक 04/09/2028 तक वैध है |
Please refer to your letter No. 97097 dated 31/08/2023 and the subsequent examination held on 04/09/2023. Please find enclosed herewith Shotfirer's Certificate No.E/SC/TN/30/2559(E150223) valid upto 04/09/2028 for the Class : (B), Category : General aboveground, All phases of aboveground blasting operation as per the provisions of Rule 107 of Explosives Rules, 2008.

कृपया नोट करें कि उपरोक्त प्रमाण-पत्र के बल पर कोई भी विस्फोटक ना खरीदा जाए | यह सुझाव दिया जाता है कि ब्लास्टिंग आपरेशन करते समय, विस्फोटक नियम, 2008 के नियम 89 से 98 का सख्ती से पालन किया जाए | It may please be noted that no explosives should be purchased on the strength of the above certificate. You are advised to strictly follow Rules 89 to 98 of Explosives Rules 2008 while undertaking blasting operations.

- प्रमाण-पत्र की वैधता बढाने के मामले में, निम्नलिखित दस्तावेजों के साथ आवेदन प्रस्तुत किया जाए :
- In case of validity of the certificate to be extended , application with following documents shall be submitted :

1. फॉर्म एई-10 में आवेदन | Application in Form AE-10.
2. फॉर्म एलई-10 में मूल शॉट फायर कर्ता प्रमाण-पत्र | Original Shot firer's Certificate in Form LE-10.
3. विस्फोटक नियम, 2008 के तहत ऑनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान सुविधा के माध्यम से पुनर्वैधीकरण का संवीक्षा शुल्क रू. 400/-, ऑनलाइन जमा किया जाना है|
Scrutiny fee of revalidation Rs. 400/-. To be submitted online through e-payment facility available on online application portal under the Explosives Rules, 2008.
4. 'सामने' 'काले रंग अमिट स्याही' से विधिवत हस्ताक्षरित, धारक के कलर पासपोर्ट साईज फोटो की पांच प्रतियां. | Five copies of holder's colour passport size photographs duly singed 'in front' by 'black color indelible ink'.
5. पंजीकृत चिकित्सक द्वारा जारी शारीरिक स्वस्थता प्रमाण पत्र. | A physical fitness certificate from Registered medical practitioner.
6. फॉर्म एलई-3 में अनुरुपि धारक वर्तमान नियोक्ता से सहमति पत्र जो प्रमाण पत्र धारक से सेवा लेने का इच्छुक है. | A consent letter from the present employer holding Licence in Form LE-3 and intending to hire the service of the holder.
7. शॉट फायर कर्ता प्रमाण पत्र धारक को पुनरीक्षण/पुनर्वैधीकरण प्राधिकारी के समक्ष स्वयं को प्रत्यक्ष रूप से प्रस्तुत करना होगा. | The shot firer certificate holder has to present himself physically before reviewing/revalidating authority.
8. ब्लास्टिंग आपरेशन के दौरान विस्फोटक नियम, 2008 के प्रावधानों का उल्लंघन करने के परिणामस्वरूप मानवीय जीवन के नुकसान होने से. इस प्रमाण पत्र को वापस ले लिया/रद्द किया जा सकता है .
This certificate is liable to be cancelled/withdrawn on contravention of provisions of Explosive Rules, 2008 committed during blasting operations, resulting in loss of human life.

भवदीय / Yours faithfully,
(डा.टी.एल.थनुलिंगम | Dr. T. L. THANULINGAM)
संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

प्रतिलिपि प्रेषित | Copy Forwarded to:
1. Superintendent of Police, CHENNIMALAI, ERODE, Tamil Nadu with reference to his Noc No: S6062360291176 Dated: 12/08/2023

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट https://peso.gov.in देखें |
For more information regarding status, fees and other details, please visit our web site https://peso.gov.in|

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANULINGAM
Reason: Licence No. : E/SC/TN/30/2559
Location: Chennai [E150223]
Date: 04-09-2023 13:40:27 PM

अनुज्ञप्ति प्ररूप एल.ई. -10 | Form LE-10

शॉट फायर कर्ता प्रमाण-पत्र | Shot Firer's Certificate

(अनुसूची IV के भाग I का अनुच्छेद 10 देखें | See article 10 of Part I of Schedule IV)

[विस्फोटक नियम, 2008 का नियम 107(5) देखें | see rule 107(5) of Explosives Rules, 2008]

(खान अधिनियम,1952 के अधीन न आने वाले क्षेत्र में विस्फोट करने के लिए सक्षमता प्रमाणपत्र)

(Certificate of competency to carry out blasting of explosives in area not coming under the Mines Act, 1952)

संख्या | No.: E/SC/TN/30/2559(E150223)



प्रमाणित किया जाता है कि श्री S.THANGAVEL S/O SUBRAMANI, जिनका जन्म 14/12/2001 को हुआ था, जो NO.27/21, PALAKATTUPUDUR, SOUTH RAMALINGAPURAM, ELLAIGRMAM, CHENNIMALAI, PERUNDURAI, ERODE, Tamil Nadu - 638051 के निवासी है ने संयुक्त मुख्य विस्फोटक नियंत्रक,चेन्नै द्वारा तारीख 04/09/2023 को आयोजित शॉट फायर की परीक्षा तारीख को 04/09/2023 उत्तीर्ण कर ली है और वह विस्फोटक अधिनियम, और उसके अधीन विरचित नियमों के उपबंधों के अधीन रहते हुए खान अधिनियम, 1952की परिधि के अधीन आनेवाले खानों से अन्यथा क्षेत्र में नीचे यथा उल्लिखित विस्फोटकों का उपयोग करते हुए विस्फोट प्रचालन करने के लिए प्राधिकृत है।

This is to certify that Shri S.THANGAVEL S/O SUBRAMANI, born on 14/12/2001 ,resident of NO.27/21, PALAKATTUPUDUR, SOUTH RAMALINGAPURAM, ELLAIGRMAM, CHENNIMALAI, PERUNDURAI, ERODE, Tamil Nadu - 638051 passed the shot fir... examination held on 04/09/2023 conducted by Joint Chief Controller of Explosives, Chennai and is authorised to conduct blasting operations as mentioned below using explosives in areas other than m... under the purview of the Mines Act 1952, subject to the provisions of the Explosives Act, 1884 and the rules framed thereunder.

विस्फोट करने के प्राधिकृत वर्ग, प्रवर्ग और प्रकार :

वर्ग:(ख), श्रेणी: सामान्य जमीन के ऊपर, जमीन के ऊपर ब्लास्टिंग आपरेशन

Authorised class, category and type of blasting :

Class : (B), Category : General aboveground, All phases of aboveground blasting operation

[नियम 107 का उप-नियम (5) का स्पष्टीकरण देखें | See explanation of sub-rule (5) of rule 107]

यह प्रमाणपत्र 04/09/2028 (जारी करने की तारीख से पांच वर्ष) तक विधिमान्य होगा।

This certificate shall remain valid till 04/09/2028 (five years from the date of issue)

यह प्रमाण-पत्र, अधिनियम या उसके अधीन विरचित नियमों अथवा इस प्रमाण-पत्र की शर्तों का कोई अधिक्रमण करने पर या यदि आवेदक द्वारा आवेदन प्ररूप में दी गई सूचना में कोई फर्क या विचलन होता है तो निलम्बित या अभिखंडित कर दिया जाएगा।

This certificate is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this certificate or if there is any discrepancy or deviation in the information or suppression of facts furnished by the applicant in his application form.

स्थान | Place : चेन्नै | Chennai

दिनांक | Date: 04/09/2023

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives

दक्षिणांचल, चेन्नै | South Circle, Chennai

पुनर्विधिमान्यनकरण के लिए पृष्ठांकन | Endorsement for revalidation

पुनर्विधिमान्यनकरण की तारीख Date of Revalidation	समाप्ति की तिथि Date of Expiry	अनुज्ञप्ति प्राधिकारी के हस्ताक्षर Signature of licensing authority

कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरूपयोग विधि के अधीन गंभीर दांडिक अपराध होगा।

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANJILINGAM
Reason: Licence No. : E/SC/TN/30/2559
Location:Chennai [E150223]
Date:04-09-2023 13:39:55 PM

(सेटConditions | Conditions)

शॉर्ट फायर कर्ता प्रमाण-पत्र के लिए प्ररूप एल.ई.-10 में विस्फोटक नियंत्रक द्वारा प्रदान किए जानेवाले प्रमाण-पत्र संख्या E/SC/TN/30/2559(E150223) की निम्नलिखित हैं।

The following are the conditions of licence number E/SC/TN/30/2559(E150223) to Shot Firer's Certificate in Form LE-10 granted by Controller o Explosives.

1. यह परमिट,परमिट धारक को ब्लास्टिंग करने के लिए तब तक अधिकृत करता है जब तक कि वह विस्फोटक नियम, 2008 के अंतर्गत फॉर्म एलई-3 में वैध अनुज्ञप्ति धारक (अनुज्ञप्ति संख्या E/SC/TN/22/432(E23992)). Sri Selvanayagi Explosives के नौकरी/अनुबंध के अधिन काम कर रहा है।
   This permit authorizes the permit holder to conduct blasting so long as he is working under the employment/contract of Sri Selvanayagi Explosives holding valid licence (Licens E/SC/TN/22/432(E23992)) in Form LE-3 of Explosives Rules, 2008.
2. विस्फोटक सामग्री प्राप्त करने, उसके स्वामित्व परिवहन भंडारण, उठाई धराई और उपयोग करने के लिए सभी स्थानीय विधियों और विनियमों का अनुसरण किया जाएगा।
   All local laws and regulations applicable for obtaining, owning, transporting, storing, handling and using explosive materials shall be followed.
3. विस्फोटक सामग्री को अप्राधिकृत कब्जे से संरक्षित किया जाएगा तथा उसे परित्यक्ता नहीं किया जाएगा।
   Explosive materials shall be protected form unauthorised possession and shall not be abandoned.
4. विस्फोटक सामग्री का उपयोग केवल ऐसे अनुभवी व्यक्तियों द्वारा किया जाएगा जो उसमें अंतर्ग्रस्त परिसंकट को जानते हों और जिनके पास अपेक्षित अनुज्ञापत्र हो।
   Explosive materials shall be used only by experienced persons who are familiar with the hazards involved and who hold all required permits.
5. लदाई और फायरिंग या उसका पर्यवेक्षण केवल ऐसे व्यक्ति द्वारा किया जाएगा जिसके पास समुचित शाट फायरकरता प्रमाणपत्र और विस्फोट के लिए अनुज्ञापत्र हो।
   Loading and firing shall be performed or supervised only by a person possessing an appropriate shot firer certificate and permit to blast.
6. प्रशिक्षार्थी सहायक और अन्य व्यक्ति, जिनके पास अपेक्षित शाट फायरकर्ता प्रमाणपत्र या अनुज्ञापत्र नहीं है, केवल ऐसे अनुज्ञापत्र धारण करने वाले व्यक्तियों के पर्यवेक्षण के अधीन काम करेंगे।
   Trainees helpers and other persons who do not hold the required shot firer certificate or permits shall work only under the supervision of persons holding such permits.
7. ऐसे स्थान पर कोई विस्फोटक सामग्री अवस्थित या भंडारित नहीं की जाएगी जहां अत्यधिक गर्मी या उसके प्रभाव से उनका विस्फोट हो सकता है।
   No explosive materials shall be located or stored where they may be exposed to flame excessive heat sparks or impact.
8. ऐसे स्थापन के 15 मीटर के भीतर धूम्रपान करने की अनुमति नहीं दी जाएगी जहां विस्फोटकों को जमा किया गया है या उनका उपयोग किया गया है।
   No smoking shall be permitted within 15 metre of any location where explosive are being handled or used.
9. कोई व्यक्ति ऐसे स्थान के 15 मीटर के भीतर कोई माचिस, बिजली या अन्य प्रकार की अग्नि या ज्वाला नहीं जलाएगा, जहां विस्फोटकों को जमा किए गए है या उनका उपयोग किया जा रहा है। तथापि इस अपेक्षा से सुरक्षित फ्यूज जलाने के लिए उपयुक्त युक्तियों को छूट प्राप्त होगी।
   No person with in 15 metres of any location where explosive are being handled or used shall carry any matches open light or other fire or flame. However, suitable devices for lighting safety fuse are exempted form this requirement.
10. मादक, शराब, स्वापक या अन्य खतरनाक औषधियों से प्रभावित किसी व्यक्ति को विस्फोटक सामग्री के उपयोग की अनुज्ञा नहीं होगी।
    No person under the influence of intoxicating liquors narcotics or other dangerous drugs shall be allowed to handle explosive materials.
11. भंडारण मैगजीन और विस्फोट स्थान के बीच परिवहन के दौरान विस्फोटक सामग्री बंद अनुमोदित पात्र या पैकेज में रखे जाएंगे।
    Explosive materials shall be kept in close approved containers or packages while being transported between the storage magazine and the blasting site.
12. विस्फोट करने का शाट फायरकर्ता प्रमाणपत्र और अनुज्ञापत्रधारक द्वारा प्राप्त की गई और फायर की गई या इससे निबटाई गई सभी विस्फोटक सामग्री का दैनिक अभिलेख रखेगा। ऐसा अभिलेख पांच वर्ष तक प्रतिधारित किया जाएगा।
    A holder of a shot firer certificate and Permit to Blast shall keep a daily record of all explosive materials received and fired or otherwise disposed of by the permit holder. Such records shall be retained for five years.
13. शॉर्ट फायरकर्ता और कर्मचारी आपातकाल के दौरान बरती जानेवाली प्रक्रिया से अवगत होंगे।
    The shot firer and the employee shall be conversant with procedure to be taken during the emergency.
14. शॉर्ट फायरकर्ता प्रमाण-पत्र का धारक जो सुरक्षा के हित में नियंत्रक द्वारा समय-समय पर दिए गए उन सभी या किन्हीं निदेशों का पालन करेगा।
    The holder of the shot firer certificate shall comply with all or any of the directions as may be given by the Controller from time to time in the interest of safety.
15. अग्नि या विस्फोटक के कारण होने वाली दुर्घटना और विस्फोटकों की हानि,कमी या चोरी के बारे में निकटतम पुलिस स्टेशन और अनुज्ञापन प्राधिकारी तथा अनुज्ञापन प्राधिकारी के स्थानीय कार्यालय में तुरंत रिपोर्ट जाएगी।
    Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the Controller of Explosives having jurisdiction over the are

कृते संयुक्त मुख्य विस्फोटक नियंत्रक
For Joint Chief Controller of Explosives
दक्षिणांचल, चेन्नै | South Circle, Chennai

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Dr T L THANULINGAM
Reason: Licence No. : E/SC/TN/30/2559
Location:Chennai [E150223]
Date:04-09-2023 13:39:35 PM

TOPOGRAPHICAL VIEW OF PERUNTHOLAVU ROUGH STONE AND GRAVEL QUARRY LEASE APPLIED AREA



Name of the Applicant	:	**Tvl. VKP Engineering Ind Pvt., Ltd.,**
		Thiru. P. Jagadeesan. Director
Address	:	No.11/32, Vettukattu Valasu,
		Ingur, Perundurai,
		Erode District,
		Tamil Nadu State– 638 052.

Location:

S.F.Nos.	:	536, 537/1, 537/2 and 537/3
Extent	:	4.51.0 Ha
Village	:	Peruntholuvu
Taluk	:	Tiruppur South
District	:	Tiruppur

Signature of the Applicant

Tvl. VKP Engineering Ind Pvt., Ltd.,

P. Jagadeesan

(Director)

J. [illegible] 3/3/2025

கிராம நிர்வாக அலுவலர்

(Village Administrative Officer)

17 பெருந்தொழுவு கிராமம்

திருப்பூர் வட்டம்

Attestation

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அறிக்கை

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம் 10, பெருந்தொழுவு கிராமம் க.ச. எண்கள் 536, 537/1, 537/2, 537/3 (மொத்தம் 4.51.00 ஹெக்டர்) ஆகிய காளைக்கு 500 மீட்டர் சுற்றளவில் வழிபாட்டுத்தளங்களோ, புராதானச் சின்னங்களோ, அரசு கட்டிடங்களோ, பள்ளிக்கூடங்களோ ஏதுமில்லை பின்னும் 1.0 கி.மீ சுற்றளவில் காப்புக்காடுகள் ஏதுமில்லை என்பதை இதன் மூலம் தெரிவித்துக் கொள்கிறேன்.

// அலுவலக உபயோகம் மட்டும் //

(கனிம வளத்துறை மட்டும்)

ஜ. 3/3/2025

கிராம நிர்வாக அலுவலர்
பிறப்பு இறப்பு பதிவாளர்
17 பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

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Dr. JAYANTHI. M, I.F.S
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY – TAMIL NADU
3rd Floor, Panagal Maaligai,
No.1 Jeenis Road, Saidapet,
Chennai-15.
Phone No.044-24359973
Fax No. 044-24359975

ENVIRONMENTAL CLEARANCE

Lr. No.SEIAA-TN/F.No.7405/1(a)/EC.No: 4178/2020 dated: 13.05.2020

To

M/s.V.K.P. Engineering Ind (P) Ltd
No.151/260, Bhavani Road
Perunthurai Taluk
Erode District- 638 052

Sir/Madam,

Sub: SEIAA-TN – Proposed for the Rough stone & Gravel Quarry over an Extent of 4.94.95Ha at S.F.No.538/1(P), 539/1(P) & 539/2(P) in Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu by M/s. V.K.P. Engineering Ind (P) Ltd - issue of Environmental Clearance – Reg.

Ref: 1. Your Application for Environmental Clearance dated: 04.02.2020
2. Minutes of the 146th SEAC meeting held on 28.02.2020
3. Minutes of the 374th SEIAA meeting held on 13.05.2020

- - - - -

Details of Minor Mineral Activity:-

This has reference to your application first cited. The proposal is for obtaining environmental clearance for mining/quarrying of minor minerals based on the particulars furnished in your application as shown below.

1	**Name of Project Proponent and address**	M/s.V.K.P. Engineering Ind (P) Ltd

MEMBER SECRETARY
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		No.151/260, Bhavani Road Perunthurai Taluk Erode District- 638 052
2	**Location of the Proposed Activity**	
	Survey Number	538/1(P), 539/1(P) & 539/2(P)
	Latitude and Longitude	11°03' 23.17" N to 11°03'29.91" N 77° 27' 43.21" E to 77° 27'54.85"E
	Village	Peruntholuvu
	Taluk	Tiruppur South
	District	Tiruppur
3	**Proposed Activity**	
	i. Minor mineral	Rough stone & Gravel
	ii. Mining Lease Area	4.94.95 Ha
	iii. Approved quantity	959700m^3 of Rough Stone, 79776 m^3 Gravel
	iv. Depth of Mining	42m
	v. Type of mining	Opencast mechanized Mining
	vi. Category(B1/B2)	B2
	vii. Precise area communication approved by the District Collector with date	Rc.No.738/Kanimam/2019, dated:25.12.2019
	viii. Mining plan approval by Assistant Directorof Geology and Mining, Tiruppur	Rc.No.738/Mines/2019, dated:20.01.2020
	ix. Scheme of Mining period	5 Years
4	**Whether Project area attracts any General conditions specified in the EIA notification, 2006 as amended:-**	Not attracted. Affidavit furnished.

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SEIAA-TN

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5	**Man Power requirement per day:**	46 Employees
6	**Utilities**	
	i. Source of Water :	Water Vendors & Existing Borehole
	ii. Quantity of Water Requirement in KLD:	4.10 KLD
	a. Domestic & Drinking purpose **b.** Green Belt & Dust Suppression	1.60 KLD 2.5 KLD
	iii. Power Requirement: **a.** Domestic Purpose **b.** Industrial Purpose	 TNEB 781060 Liters of HSD
7	**Cost** i. Project Cost **ii.** EMP Cost	 Rs. 180.07 lakhs Rs. 3.80 lakhs
8	**Date of Appraisal by SEAC:-** **Agenda No:**	28.02.2020 146
9	**Date of Review/Discussion by SEIAA and the Remarks:-** The proposal was placed before the SEIAA in its 374th Meeting held on 13.05.2020 and the Authority after careful consideration, decided to grant environmental clearance to the said project Mining of Rough Stone and Gravel quarry subject to terms and conditions stipulated under the provisions of Environment Impact Assessment Notification, 2006 as amended.	
10	**Validity:** **This Environmental Clearance is granted for the production 959700m^3 of Rough Stone, 79776 m^3 Gravel for the period of 5 Year from the date of execution of the mining lease.**	

The Proponent has furnished affidavit in Hundred Rupees stamp paper attested by the Notary stating that

I, M/s.V.K.P. Engineering Ind (P) Ltd, No.151/260, Bhavani Road, Perunthurai Taluk, Erode District- 638 052, Tamil Nadu state solemnly declare and sincerely affirm that:

MEMBER SECRETARY
SEIAA-TN

I have applied for getting Environmental Clearance to SEIAA, Tamil Nadu for mining lease for mining of Rough stone & Gravel Quarry over an Extent of 4.94.95 Ha in S.F.No.538/1(P), 539/1(P) & 539/2(P) in Peruntholuvu Village, Tiruppur South Taluk, Tiruppur District, Tamil Nadu.

1. I swear to state and confirm that within 10km area of the mine site, I have applied for Environmental Clearance, none of the following in situated.
   a. Protected areas notified under the Wild Life (Protection) Act, 1972.
   b. Critically polluted areas as notified by the Central Pollution Control Board constituted under Water (Prevention and Control of Pollution) Act, 1974.
   c. Eco – Sensitive areas as notified.
   d. Interstate boundaries within 10km radius from the boundary of the proposed site.
2. I will complete the following Corporate Environment responsibility (CER) activities before commencement of the quarrying activities.

CER Activity	Project Cost (Rs. In Lakhs)	CER Cost 2.0% of project cost (Rs. In Lakhs)
Developing the Garden Maintenance in Rangapalayam School. If we are instructed by PWD/ competent bodies to desilt the water bodies nearby. We assure to spend out CER cost for desilting/ strengthening the bunds of the nearby water bodies.	183.87	3.67
Total cost Allocation	**183.87**	**3.67**

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3. The total area of following quarries located within 500m radius from the periphery of our quarry site details as shown below.

Proposed quarries

Sl.No	Name and address of the applicant	Village & Taluk	S.F.No	Extent(in Hects)	Classification of land
1.	M/s.V.K.P. Engineering Ind (P) Ltd	Peruntholuvu Village, Tiruppur South Taluk	538/1(P), 539/1(P) & 539/2(P)	4.94.95	Patta lands

Existing quarry

Sl.No	Name and address of the applicant	Village & Taluk	S.F.No	Extent	District Proc. Letter/ Date	Lease Period
Nil						

Abandoned quarry

Sl.No	Name and address of the applicant	Village & Taluk	S.F.No	Extent	District Proc. Letter/ Date	Lease Period
Nil						

Expired quarry

Sl.No	Name and address of the applicant	Village & Taluk	S.F.No	Extent	District Proc. Letter/ Date	Lease Period
Nil						

4. There will not be hindrance or disturbance to the people living during quarrying activities and transportation of the material.
5. There is no approved habitation within 300m radius from the periphery of my quarry.
6. I swear that afforestation will be carried out during the course of quarrying operation and maintained.

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7. The required insurance will be taken in the name of the labourers working in our quarry site.
8. Approach road belongs to local Panchayat only and no other private patta road encountered.
9. I will not engage any child labour in our quarry site 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 labourers working in our quarry.
11. No permanent structures, temples, etc., are located within 300m radius from the periphery of our quarry.

I ensure to do all the social and Environment commitment as mentioned in the Mining Plan to the best of my knowledge.

Further, the Project Proponent has submitted a copy of the letter obtained from the Assistant Director, Dept of Geology and Mining, Tiruppur District in his letter Rc.No.738/Mines/2019 dated: 20.01.2020 has stated that the details of other quarries (Proposed / Existing / Abandoned Quarries) within a radius 500m from the boundary of the proposed quarry site as follows:

Existing quarries

Sl.No	Name of the Owner	Village & S.F.No	Extent in Hect	Distance from this proposed quarry
Nil				

Abandoned quarries

Sl.No	Name of the Owner	Village & S.F.No	Extent in Hect	Distance from this proposed quarry
Nil				

Present Proposed quarries

Sl.No	Name of the Owner	Village & S.F.No	Extent in Hect	Distance from this proposed quarry
1	M/s.V.K.P. Engineering Ind (P) Ltd	Peruntholuvu (V) 538/1(P), 539/1(P) &	4.94.95	-

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		539/2(P)		

Expired quarries

Sl.No	Name of the Owner	Village & S.F.No	Extent in Hect	Distance from this proposed quarry
Nil				

Conditions to be Complied before commencing mining operations:-

1. The project proponent shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing the public that
   I. The project has been accorded Environmental Clearance.
   II. Copies of clearance letters are available with the Tamil Nadu Pollution Control Board.
   III. Environmental Clearance may also be seen on the website of the SEIAA.
   IV. The advertisement should be made within 7 days from the date of receipt of the clearance letter and a copy of the same shall be forwarded to the SEIAA.
2. Mining activity should be reviewed by the District Collector after three years and decide for further extension.
3. The applicant has to obtain land use classification as industrial use before issue/renewal of mining lease.
4. NOC from the Standing committee of the NBWL shall be obtained, if protected areas are located within 10 Km from the proposed project site.
5. The project proponent shall comply the conditions laid down in the Section V, Rule 36 of Tamil Nadu Minor Minerals Concession Rules 1959.
6. A copy of the Environment Clearance letter shall be sent by the proponent to the concerned Panchayat, Town Panchayat / Panchayat union/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the proponent and also kept at the site, for the general public to see.

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7. Quarry lease area should be demarcated on the ground with wire fencing to show the boundary of the lease area on all sides with red flags on every pillar shall be erected before commencement of quarrying.
8. The proponent shall ensure that First Aid Box is available at site.
9. The excavation activity shall not alter the natural drainage pattern of the area.
10. The excavated pit shall be restored by the project proponent for useful purposes.
11. The proponent shall quarry and remove only in the permitted areas as per the approved Mining Plan details.
12. The quarrying operation shall be restricted between 7AM and 5 PM.
13. The proponent shall take necessary measures to ensure that there shall not be any adverse impacts due to quarrying operation on the nearby human habitations, by way of pollution to the environment.
14. A minimum distance of 50mts. From any civil structure shall be kept from the periphery of any excavation area.
15. Depth of quarrying shall be 2m above the ground water table /approved depth of mining whichever is lesser to be considered as a safe guard against Environmental Contamination and over exploitation of resources.
16. The mined out pits should be backfilled where warranted and area should be suitably landscaped to prevent environmental degradation. The mine closure plan as furnished in the proposal shall be strictly followed with back filling and tree plantation.
17. Wet drilling method is to be adopted to control dust emissions. Delay detonators and shock tube initiation system for blasting shall be used so as to reduce vibration and dust.
18. Drilling and blasting shall be done only either by licensed explosive agent or by the proponent after obtaining required approvals from Competent Authorities.
19. The explosives shall be stored at site as per the conditions stipulated in the permits issued by the licensing Authority.
20. Blasting shall be carried out after announcing to the public adequate through public address system to avoid any accident.

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21. A study has to be conducted to assess the optimum blast parameters and blast design to keep the vibration limits less than prescribed levels and only such design and parameters should be implemented while blasting is done. Periodical monitoring of the vibration at specified location to be conducted and records kept for inspection.
22. The Proponent shall take appropriate measures to ensure that the GLC shall comply with the revised NAAQ norms notified by MoEF& CC, GoI on 16.11.2009.
23. The following measures are to be implemented to reduce Air Pollution during transportation of mineral
    i. Roads shall be graded to mitigate the dust emission.
    ii. Water shall be sprinkled at regular interval on the main road and other service roads to suppress dust
24. The following measures are to be implemented to reduce Noise Pollution
    i. Proper and regular maintenance of vehicles and other equipment
    ii. Limiting time exposure of workers to excessive noise.
    iii. The workers employed shall be provided with protection equipment and earmuffs etc.
    iv. Speed of trucks entering or leaving the mine is to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks.
25. Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010, dt: 11.01.2010 issued by the MoEF& CC, GoI to control noise to the prescribed levels.
26. Suitable conservation measures to augment groundwater resources in the area shall be planned and implemented in consultation with Regional Director, CGWB. Suitable measures should be taken for rainwater harvesting.
27. Permission from the competent authority should be obtained for drawl of ground water, if any, required for this project.
28. Topsoil, if any, shall be stacked properly with proper slope with adequate measures and should be used for plantation purpose.

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29. The following measures are to be adopted to control erosion of dumps:-
    i. Retention/ toe walls shall be provided at the foot of the dumps.
    ii. Worked out slopes are to be stabilized by planting appropriate shrub/ grass species on the slopes.
30. Waste oils, used oils generated from the EM machines, mining operations, if any, shall be disposed as per the Hazardous& other wastes (Management, and Trans Boundary Movement) Rules, 2016 and its amendments thereof to the recyclers authorized by TNPCB.
31. Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
32. Rain water harvesting to collect and utilize the entire water falling in land area should be provided.
33. Rain water getting accumulated in the quarry floor shall not be discharged directly to the nearby stream or water body. If it is to be let into the nearby water body, it has to be discharged into a silt trap on the surface within the lease area and only the overflow after allowing settling of soil be let into the nearby waterways. The silt trap should be of sufficient dimensions to catch all the silt water being pumped out during one season. The silt trap should be cleaned of all the deposited silt at the end of the season and kept ready for taking care of the silt in the next season.
34. The lease holder shall undertake adequate safeguard measures during extraction of material and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area during the mining operation. If at any stage, if it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out. District Collector/mining officer shall ensure this.
35. No tree-felling shall be done in the leased area, except only with the permission from competent Authority.

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36. To take up environmental monitoring of the proposed quarry site before, during and after the mining activities including vibration study data, water, air & flora/fauna environment, slurry water generated/disposed and method of disposal, involving a reputed academic Institution.
37. It shall be ensured that the total extent of nearby quarries(existing, abandoned and proposed) located within 500 meter radius from the periphery of this quarry is not exceeding 5 hectares within the mining lease period of this application.
38. It shall be ensured that there is no habitation is located within 300 meter radius from the periphery of the quarry site and also ensure that no hindrance will be caused to the people of the habitation located within 500m radius from the periphery of the quarry site.
39. Free Silica test should be conducted and reported to TNPCB, Department of Geology and Mining and Regional Director, MoEF& CC, GOI.
40. Air sampling at intersection point should be conducted and reported to TNPCB, Department of Geology and Mining and Regional Director, MoEF& CC, GOI.
41. Bunds to be provided at the boundary of the project site.
42. The project proponent shall undertake plantation/afforestation work by planting the native species on all side of the lease area at the rate of 400/Ha. Suitable tall tree saplings should be planted on the bunds and other suitable areas in and around the work place.
43. At least 10 Neem trees should be planted around the boundary of the quarry site.
44. Floor of excavated pit to be levelled and sides to be sloped with gentle slope (Except for granite quarries) in the mine closure phase.
45. The Project Proponent shall ensure a minimum of 2.5% of the annual turnover will be utilized for the CSR Activity
46. The Project Proponent shall provide solar lighting system to the nearby villages.
47. Rainwater shall be pumped out Via Settling Tank only
48. Earthen bunds and barbed wire fencing around the pits with green belt all along the boundary shall be developed and maintained.
49. Safety equipments to be provided to all the employees.

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36. To take up environmental monitoring of the proposed quarry site before, during and after the mining activities including vibration study data, water, air & flora/fauna environment, slurry water generated/disposed and method of disposal, involving a reputed academic Institution.
37. It shall be ensured that the total extent of nearby quarries(existing, abandoned and proposed) located within 500 meter radius from the periphery of this quarry is not exceeding 5 hectares within the mining lease period of this application.
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61. Proper barrier for reducing the Noise level shall be established like providing Green Belt along the boundary of the quarrying site, etc. and to prevent dust pollution, suitable working methodology needs to be adopted taking wind direction into consideration.
62. The operation of the quarry should not affect the agriculture activity & water bodies near the project site.
63. Transportation of the quarried materials shall not cause any hindrance to the Village people/Existing Village road.
64. The Project Proponent shall comply with the mining and other relevant rules and regulations where ever applicable.
65. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be monitored by the District Authorities.
66. The recommendation for the issue of environmental clearance is subject to the outcome of the Hon'ble NGT, Principal Bench, New Delhi in O.A No.186 of 2016 (M.A.No.350/2016), O.A. No.200/2016, O.A.No.580/2016 (M.A.No.1182/2016), O.A.No.102/2017, O.A.No.404/2016 (M.A.No. 758/2016,M.A.No.920/2016,M.A.No.1122/2016, M.A.No.12/2017 & M.A. No. 843/2017) and O.A.No.405/2016 and O.A.No.520 of 2016 (M.A.No. 981 /2016, M.A.No.982/2016 & M.A.No.384/2017).
67. To ensure safety measures along the boundary of the quarry site, security guards are to be engaged during the entire period of mining operation.
68. All the commitment made by the project proponent in the proposal shall be strictly followed.
69. The mine closure plan submitted by the project proponent shall be strictly followed after the lapse of the mine as reported. The district administration should ensure the fully implementation of mine closure plan before release of lease deed.
70. All the condition imposed by the District Collector, Rc.No.738/Kanimam/2019, dated: 25.12.2019 should be strictly followed.
71. The project proponent shall utilize the CER amount for Rs.3.67 Lakhs (2% of project cost) Developing the drinking water and library facilities in nearby Government School

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per Office Memorandum of MoEF& CC dated 01.05.2018. The above activity shall be carried out before obtaining CTO from TNPCB.

72. The Project proponent has to strictly comply the outcome/direction of the Hon'ble NGT, Principle Bench, New Delhi in the O.A No.186 of 2016 (M.A.No.350/2016), O.A. No.200/2016, O.A.No.580/2016 (M.A.No.1182/2016), O.A.No.102/2017, O.A.No.404/ 2016 (M.A.No. 758/2016, M.A. No. 920 /2016, M.A.No.1122/2016, M.A.No. 12/2017 & M.A.No.843/2017), O.A.No.405/2016 and O.A.No.520 of 2016 (M.A.No.981/2016, M.A.No.982/2016 & M.A.No.384/2017).
73. The EMP Cost shall be deposited in a nationalized bank by opening separate account and head wise expense statement shall be furnished to TNPCB with a copy to SEIAA annually.
74. 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.
75. If there is any change in the proposal of production or handling the waste amendment has to be submitted to SEIAA for further approval.

General Conditions:

1. EC is given only on the factual records, documents and the commitment furnished in non judicial stamp paper by the proponent.
2. The Proponent shall obtain the Consent from the TNPC Board before commencing the activity.
3. No change in mining technology and scope of working should be made without prior approval of the SEIAA, Tamil Nadu.
4. No change in the calendar plan including excavation, quantum of mineral (minor mineral) should be made.
5. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as loading and unloading point and all transfer points. Extensive water sprinkling shall be

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13/5/2020 SEIAA-TN

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carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

6. Effective safeguards shall be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth.
7. A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation.
8. Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
9. Vehicular emissions shall be kept under control and be regularly monitored. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
10. Access and haul roads to the quarrying area should be restored in a mutually agreeable manner where these are considered unnecessary after extraction has been completed.
11. All Personnel shall be provided with protective respiratory devices including safety shoes, masks, gloves etc. Supervisory people should be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
12. Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly. The workers shall be provided with personnel protective measures such as masks, gloves, boots etc.
13. Workers/labourers shall be provided with facilities for drinking water and sanitation facility for Female and Male separately.
14. The project proponent shall ensure that child labour is not employed in the project as per the sworn affidavit furnished.
15. The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be

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SEIAA-TN

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reported to the Ministry of Environment and Forests and its Regional Office located at Chennai.

16. The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.
17. This Environmental Clearance does not imply that the other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would be considering the project on merits and be taking decisions independently of the Environmental Clearance
18. The SEIAA, Tamil Nadu may alter/modify the above conditions or stipulate any further conditions in the interest of environment protection.
19. The SEIAA, Tamil Nadu may cancel the environmental clearance granted to this project under the provisions of EIA Notification, 2006, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the environmental clearance.
20. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
21. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, along with their amendments, Minor Mineral Conservation & Development Rules, 2010 framed under MMDR Act 1957,National Commission for protection of Child Right Rules,2006, Wildlife Protection Act, 1972, Forest Conservation Act, 1980, Biodiversity Conservation Act, 2016, the Biological Diversity Act,2002 and Biological diversity Rules, 2004 and Rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/Hon'ble High Court of Madras and any other Courts of Law relating to the subject matter.

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SEIAA-TN

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22. Any other conditions stipulated by other Statutory/Government authorities shall be complied.
23. Any appeal against this environmental clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
24. The Environmental Clearance is issued based on the documents furnished by the project proponent. In case any documents found to be incorrect/not in order at a later date the Environmental Clearance issued to the project will be deemed to be revoked/ cancelled.

MEMBER SECRETARY
SEIAA-TN

Copy to:

1. The Secretary, Ministry of Mines, Government of India, ShastriBhawan, New Delhi.
2. The Principal Secretary, Environment and Forests Department, Tamil Nadu.
3. The Additional Chief Secretary, Industries Department, Tamil Nadu.
4. The Additional Principal Chief Conservator of Forests, Regional Office (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Chairman, Central Pollution Control Board, PariveshBhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
6. The Chairman, TNPC Board, 76, Mount Salai,Guindy, Chennai-32
7. The District Collector, Tiruppur District
8. The Commissioner of Geology and Mines,Guindy,Chennai-32
9. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
10. Spare.

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GLOBAL LAB AND CONSULTANCY SERVICES LLP
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TC-6060

TEST REPORT

ULR-TC606025000006591F

Report Number : GLCS/TR01333/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 1	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01333/2025-26
Location Name	PROJECT AREA - CORE	**Date of Analysis**	29-05-2025
Sampling Hours	15.20 - 15.20	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 3'17.69"N** **77°27'40.76"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
1	16.20	37.5	49.2	46.47
2	17.20	37.9	47.3	44.76
3	18.20	38.1	49.2	46.51
4	19.20	36.9	45.6	43.14
5	20.20	36.2	45.1	42.62
6	21.20	35.5	45.9	43.27
7	22.20	34.7	42.2	39.90
8	23.20	33.6	42.9	40.37

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

Note: The test results are only to the sample submitted for test. Any Correction of the test report on full or part shall invalidate the report. Samples are not drawn by us unless otherwise stated. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. Perishable samples will be discarded immediately after reporting. We do not accept only liability with regard to origin or source from which the samples are extracted. The Laboratory is not responsible for authenticity of photocopied test reports. Any holder of this report is advised that information contained here on reflects the laboratory's finding at the time of its intervention only and within the limits of client instructions. The authenticity of the test reports issued by us can be verified by submitting on E-mail request with report number and report date along with report copy.

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TEST REPORT

ULR-TC606025000006591F

Report Number : GLCS/TR01333/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 1	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01333/2025-26
Location Name	PROJECT AREA - CORE	**Date of Analysis**	29-05-2025
Sampling Hours	15.20 - 15.20	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 3'17.69"N** **77°27'40.76"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
9	00.20	33.9	40.5	38.35
10	01.20	34.1	39.5	37.59
11	02.20	32.8	37.4	35.68
12	03.20	32.9	36.3	34.92
13	04.20	30.5	35.6	33.76
14	05.20	31.4	36.8	34.89
15	06.20	32.5	37.8	35.91
16	07.20	33.6	37.1	35.69

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

Note: The test results are only to the sample submitted for test. Any Correction of the test report on full or part shall invalidate the report. Samples are not drawn by us unless otherwise stated. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. Perishable samples will be discarded immediately after reporting. We do not accept only liability with regard to origin or source from which the samples are extracted. The Laboratory is not responsible for authenticity of photocopied test reports. Any holder of this report is advised that information contained here on reflects the laboratory's finding at the time of its intervention only and within the limits of client instructions. The authenticity of the test reports issued by us can be verified by submitting on E-mail request with report number and report date along with report copy.

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TEST REPORT

ULR-TC606025000006591F

Report Number : GLCS/TR01333/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 1	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01333/2025-26
Location Name	PROJECT AREA - CORE	**Date of Analysis**	29-05-2025
Sampling Hours	15.20 - 15.20	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 3'17.69"N** **77°27'40.76"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
17	08.20	35.5	41.3	39.30
18	09.20	35.9	43.6	41.27
19	10.20	38.6	47.4	44.93
20	11.20	41.5	52.4	49.73
21	12.20	41.6	52.9	50.20
22	13.20	41.9	53.5	50.78
23	14.20	40.8	51.1	48.48
24	15.20	39.8	50.6	47.94
		Day Mean dB(A)		**44.4**
		Night Mean dB(A)		**36.9**
Limits as per The Noise Pollution (Regulation & Control) Rules, 2010 of MoEFCC / CPCB (Industrial Area)				**Day Time : 75 dB (A)**
				Night Time : 70 dB (A)

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

Note: The test results are only to the sample submitted for test. Any Correction of the test report on full or part shall invalidate the report. Samples are not drawn by us unless otherwise stated. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. Perishable samples will be discarded immediately after reporting. We do not accept only liability with regard to origin or source from which the samples are extracted. The Laboratory is not responsible for authenticity of photocopied test reports. Any holder of this report is advised that information contained here on reflects the laboratory's finding at the time of its intervention only and within the limits of client instructions. The authenticity of the test reports issued by us can be verified by submitting on E-mail request with report number and report date along with report copy.

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TC-6060

TEST REPORT

ULR-TC606025000006592F

Report Number : GLCS/TR01334/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 2	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01334/2025-26
Location Name	PROJECT AREA - CORE	**Date of Analysis**	29-05-2025
Sampling Hours	15.50 - 15.50	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 3'27.91"N** **77°27'56.57"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
1	16.50	39.3	48.3	45.80
2	17.50	40.9	49.5	47.05
3	18.50	38.5	48.1	45.54
4	19.50	36.5	45.6	43.09
5	20.50	35.1	45.2	42.59
6	21.50	35.9	43.3	41.02
7	22.50	35.2	41.7	39.57
8	23.50	34.1	40.2	38.14

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000006592F

Report Number : GLCS/TR01334/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 2	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01334/2025-26
Location Name	PROJECT AREA - CORE	**Date of Analysis**	29-05-2025
Sampling Hours	15.50 - 15.50	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 3'27.91"N** **77°27'56.57"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
9	00.50	33.5	38.9	36.99
10	01.50	32.4	37.4	35.58
11	02.50	30.9	36.1	34.24
12	03.50	31.2	36.6	34.69
13	04.50	30.9	34.9	33.35
14	05.50	31.4	35.6	33.99
15	06.50	33.5	37.8	36.16
16	07.50	35.8	42.2	40.09

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

Note: The test results are only to the sample submitted for test. Any Correction of the test report on full or part shall invalidate the report. Samples are not drawn by us unless otherwise stated. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. Perishable samples will be discarded immediately after reporting. We do not accept only liability with regard to origin or source from which the samples are extracted. The Laboratory is not responsible for authenticity of photocopied test reports. Any holder of this report is advised that information contained here on reflects the laboratory's finding at the time of its intervention only and within the limits of client instructions. The authenticity of the test reports issued by us can be verified by submitting on E-mail request with report number and report date along with report copy.

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TC-6060

TEST REPORT

ULR-TC606025000006592F

Report Number : GLCS/TR01334/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 2	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01334/2025-26
Location Name	PROJECT AREA - CORE	**Date of Analysis**	29-05-2025
Sampling Hours	15.50 - 15.50	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 3'27.91"N** **77°27'56.57"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
17	08.50	37.1	45.1	42.73
18	09.50	39.5	48.3	45.83
19	10.50	40.2	49.8	47.24
20	11.50	42.6	50.3	47.97
21	12.50	40.9	51.1	48.49
22	13.50	41.8	50.9	48.39
23	14.50	42.5	50.2	47.87
24	15.50	40.8	49.3	46.86
		Day Mean dB(A)		
		Night Mean dB(A)		
Limits as per The Noise Pollution (Regulation & Control) Rules, 2010 of MoEFCC / CPCB (Industrial Area)				**Day Time : 75 dB (A)** **Night Time : 70 dB (A)**

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

Note: The test results are only to the sample submitted for test. Any Correction of the test report on full or part shall invalidate the report. Samples are not drawn by us unless otherwise stated. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. Perishable samples will be discarded immediately after reporting. We do not accept only liability with regard to origin or source from which the samples are extracted. The Laboratory is not responsible for authenticity of photocopied test reports. Any holder of this report is advised that information contained here on reflects the laboratory's finding at the time of its intervention only and within the limits of client instructions. The authenticity of the test reports issued by us can be verified by submitting on E-mail request with report number and report date along with report copy.

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TC-6060

TEST REPORT

ULR-TC606025000006593F

Report Number : GLCS/TR01335/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 3	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01335/2025-26
Location Name	PERUMTHOLUVU	**Date of Analysis**	29-05-2025
Sampling Hours	16.30 - 16.30	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 2'47.05"N** **77°26'3.32"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
1	17.30	38.5	50.1	47.38
2	18.30	37.2	51.9	49.03
3	19.30	35.6	50.2	47.34
4	20.30	36.9	47.2	44.58
5	21.30	33.4	42.6	40.08
6	22.30	32.1	40.8	38.34
7	23.30	30.7	35.9	34.04
8	00.30	32.4	38.1	36.12

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000006593F

Report Number : GLCS/TR01335/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 3	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01335/2025-26
Location Name	PERUMTHOLUVU	**Date of Analysis**	29-05-2025
Sampling Hours	16.30 - 16.30	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 2'47.05"N** **77°26'3.32"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
9	01.30	31.7	36.2	34.51
10	02.30	30.6	35.9	34.01
11	03.30	31.4	36.7	34.81
12	04.30	31.9	36.9	35.08
13	05.30	30.5	35.2	33.46
14	06.30	31.2	50.3	47.34
15	07.30	33.6	45.6	42.86
16	08.30	34.4	58.8	55.81

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000006593F

Report Number : GLCS/TR01335/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 3	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01335/2025-26
Location Name	PERUMTHOLUVU	**Date of Analysis**	29-05-2025
Sampling Hours	16.30 - 16.30	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 2'47.05"N** **77°26'3.32"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
17	09.30	38.9	50.1	47.41
18	10.30	40.1	52.9	50.11
19	11.30	42.5	53.1	50.45
20	12.30	43.8	55.1	52.40
21	13.30	41.6	53.3	50.57
22	14.30	42.5	55.9	53.08
23	15.30	41.1	52.7	49.98
24	16.30	39.8	50.2	47.57
		Day Mean dB(A)		**48.5**
		Night Mean dB(A)		**35.0**
Limits as per The Noise Pollution (Regulation & Control) Rules, 2010 of MoEFCC / CPCB (Industrial Area)				**Day Time : 75 dB (A)**
				Night Time : 70 dB (A)

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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Report Number : GLCS/TR01336/2025-26 **Report Date** : 30-05-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 4	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01336/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	29-05-2025
Sampling Hours	17.00 - 17.00	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 5'16.62"N** **77°31'2.36"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
1	18.00	40.4	51.5	48.81
2	19.00	39.4	50.3	47.63
3	20.00	38.4	47.6	45.08
4	21.00	36.7	45.9	43.38
5	22.00	35.4	46.3	43.63
6	23.00	34.6	42.8	40.40
7	00.00	33.6	41.9	39.49
8	01.00	32.6	40.7	38.32

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

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Report Number : GLCS/TR01336/2025-26 **Report Date** : 30-05-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 4	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01336/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	29-05-2025
Sampling Hours	17.00 - 17.00	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 5'16.62"N** **77°31'2.36"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
9	02.00	31.5	41.5	38.90
10	03.00	32.6	38.9	36.80
11	04.00	31.7	37.1	35.19
12	05.00	30.2	36.9	34.73
13	06.00	33.8	39.2	37.29
14	07.00	35.1	50.5	47.61
15	08.00	36.5	48.5	45.76
16	09.00	39.4	49.6	46.99

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

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Report Number : GLCS/TR01336/2025-26 **Report Date** : 30-05-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 4	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01336/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	29-05-2025
Sampling Hours	17.00 - 17.00	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 5'16.62"N** **77°31'2.36"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
17	10.00	38.6	50.2	47.48
18	11.00	40.8	53.6	50.81
19	12.00	41.5	53.7	50.94
20	13.00	42.6	53.1	50.46
21	14.00	42.5	54.4	51.66
22	15.00	40.1	52.9	50.11
23	16.00	41.5	53.3	50.57
24	17.00	38.9	49.5	46.85
		Day Mean dB(A)		**47.6**
		Night Mean dB(A)		**38.4**
Limits as per The Noise Pollution (Regulation & Control) Rules, 2010 of MoEFCC / CPCB (Industrial Area)				**Day Time : 75 dB (A)** **Night Time : 70 dB (A)**

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000006595F

Report Number : GLCS/TR01337/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 5	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01337/2025-26
Location Name	SANARPATTI	**Date of Analysis**	29-05-2025
Sampling Hours	17.35 - 17.35	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 1'20.16"N** **77°29'16.89"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
1	18.35	40.1	50.2	47.59
2	19.35	37.5	40.6	39.32
3	20.35	34.9	39.6	37.86
4	21.35	35.1	39.1	37.55
5	22.35	34.6	39.5	37.71
6	23.35	33.5	38.9	36.99
7	00.35	33.2	37.6	35.93
8	01.35	31.5	36.6	34.76

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000006595F

Report Number : GLCS/TR01337/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 5	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01337/2025-26
Location Name	SANARPATTI	**Date of Analysis**	29-05-2025
Sampling Hours	17.35 - 17.35	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 1'20.16"N** **77°29'16.89"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
9	02.35	31.9	36.3	34.63
10	03.35	32.5	35.3	34.12
11	04.35	31.9	36.3	34.63
12	05.35	32.6	39.5	37.30
13	06.35	32.8	41.5	39.04
14	07.35	33.4	43.6	40.99
15	08.35	35.5	45.8	43.18
16	09.35	36.2	48.1	45.36

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000006595F

Report Number : GLCS/TR01337/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 5	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01337/2025-26
Location Name	SANARPATTI	**Date of Analysis**	29-05-2025
Sampling Hours	17.35 - 17.35	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 1'20.16"N** **77°29'16.89"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
17	10.35	37.4	49.6	46.84
18	11.35	39.5	50.2	47.54
19	12.35	40.5	51.7	49.01
20	13.35	41.5	54.1	51.32
21	14.35	42.6	57.2	54.34
22	15.35	43.6	55.6	52.86
23	16.35	40.5	51.2	48.54
24	17.35	41.8	51.9	49.29
		Day Mean dB(A)		**45.4**
		Night Mean dB(A)		**35.8**
Limits as per The Noise Pollution (Regulation & Control) Rules, 2010 of MoEFCC / CPCB (Industrial Area)				**Day Time : 75 dB (A)**
				Night Time : 70 dB (A)

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000006596F

Report Number : GLCS/TR01338/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 6	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01338/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	29-05-2025
Sampling Hours	18.05 - 18.05	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 5'59.87"N** **77°26'23.41"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
1	19.05	42.1	52.1	49.50
2	20.05	39.8	48.5	46.04
3	21.05	37.5	43.6	41.54
4	22.05	35.6	41.5	39.48
5	23.05	34.6	39.1	37.41
6	00.05	34.9	39.2	37.56
7	01.05	33.1	37.1	35.55
8	02.05	32.9	38.6	36.62

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000006596F

Report Number : GLCS/TR01338/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 6	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01338/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	29-05-2025
Sampling Hours	18.05 - 18.05	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 5'59.87"N** **77°26'23.41"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
9	03.05	32.5	39.5	37.28
10	04.05	30.9	39.5	37.05
11	05.05	31.4	40.5	37.99
12	06.05	33.6	42.9	40.37
13	07.05	35.9	44.6	42.14
14	08.05	36.7	47.2	44.56
15	09.05	41.5	50.6	48.09
16	10.05	42.6	51.6	49.10

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000006596F

Report Number : GLCS/TR01338/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 6	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01338/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	29-05-2025
Sampling Hours	18.05 - 18.05	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 5'59.87"N** **77°26'23.41"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
17	11.05	44.7	53.5	51.03
18	12.05	43.2	54.1	51.43
19	13.05	42.5	51.4	48.92
20	14.05	41.9	50.6	48.14
21	15.05	43.6	52.5	50.02
22	16.05	44.5	54.6	51.99
23	17.05	42.7	52.6	50.01
24	18.05	41.9	51.9	49.30
		Day Mean dB(A)		**47.6**
		Night Mean dB(A)		**37.4**
Limits as per The Noise Pollution (Regulation & Control) Rules, 2010 of MoEFCC / CPCB (Industrial Area)				**Day Time : 75 dB (A)** **Night Time : 70 dB (A)**

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000006597F

Report Number : GLCS/TR01339/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 1	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01339/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	29-05-2025
Sampling Hours	18.35 - 18.35	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 0'29.53"N** **77°26'30.41"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
1	19.35	39.4	52.2	49.41
2	20.35	36.5	53.8	50.87
3	21.35	35.1	49.7	46.84
4	22.35	36.5	43.6	41.36
5	23.35	33.9	39.7	37.70
6	00.35	34.9	38.2	36.86
7	01.35	34.2	36.6	35.56
8	02.35	33.7	38.5	36.73

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000006597F

Report Number : GLCS/TR01339/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 1	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01339/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	29-05-2025
Sampling Hours	18.35 - 18.35	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 0'29.53"N** **77°26'30.41"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
9	03.35	34.2	40.1	38.08
10	04.35	33.3	41.2	38.84
11	05.35	34.5	38.9	37.23
12	06.35	33.6	37.6	36.05
13	07.35	33.9	41.5	39.19
14	08.35	33.4	42.9	40.35
15	09.35	40.6	51.2	48.55
16	10.35	41.6	52.9	50.20

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000006597F

Report Number : GLCS/TR01339/2025-26 **Report Date** : 30-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District-**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District-**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0486/2025-26	**Sampled by**	Laboratory
Sample Name	AMBIENT NOISE LEVEL MONITORING - 1	**Sampling Method**	GLCS/SOP/N/014
Sampling Description	-	**Sample Code**	GLCS/01339/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	29-05-2025
Sampling Hours	18.35 - 18.35	**Date of Completion**	29-05-2025
Sampling Date	26-04-2025 - 27-04-2025	**Sampling Receipt Date**	28-04-2025
Location Co-ordinates		**11° 0'29.53"N** **77°26'30.41"E**	

Sl.No.	Time(Hrs)	Min dB (A) Day	Max dB (A) Day	Leq dB (A) Day
17	11.35	39.5	54.5	51.62
18	12.35	40.1	51.2	48.51
19	13.35	41.5	53.2	50.47
20	14.35	42.9	54.6	51.87
21	15.35	43.8	55.6	52.87
22	16.35	41.4	58.5	55.57
23	17.35	40.5	59.2	56.25
24	18.35	40.9	56.6	53.71
		Day Mean dB(A)		**48.9**
		Night Mean dB(A)		**37.8**
Limits as per The Noise Pollution (Regulation & Control) Rules, 2010 of MoEFCC / CPCB (Industrial Area)				**Day Time : 75 dB (A)** **Night Time : 70 dB (A)**

Note : MoEFCC - Ministry of Environment, Forest and Climate Change, **CPCB -** Central Pollution Control Board,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007732F

Report Number : GLCS/TR01738/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 1	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01738/2025-26
Location Name	CORE ZONE	**Date of Analysis**	06-05-2025
Sampling Hours	03.50	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 3'18.09"N** **77°27'44.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Available Nitrogen as N	GLCS/SOP/S/029 ;Issue no.02: 2024	kg/ha	445.8
2	Available Phosphorous(as P)	GLCS/SOP/S/005 ; Issue no:02: 2024	mg/kg	16.51
3	Boron	USEPA-6010D:2014	mg/kg	3.86
4	Bulk Density	GLCS/SOP/S/017; Issue no:02: 2024	g/cc	1.008
5	Cadmium	USEPA-6010 D-2014	mg/kg	2.53
6	Cation Exchange Capacity	GLCS/SOP/S/024; Issue no:02: 2024	meq/100g	37.7
7	Chlorides (as Cl-) in saturation extract	GLCS/SOP/S/004; Issue no:02: 2024	meq/l	10.2
8	Chromium	USEPA-6010D-2014	mg/kg	9.45

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007732F

Report Number : GLCS/TR01738/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 1	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01738/2025-26
Location Name	CORE ZONE	**Date of Analysis**	06-05-2025
Sampling Hours	03.50	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 3'18.09"N** **77°27'44.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Copper	USEPA-6010D :2014	mg/kg	BDL(DL: 0.5)
10	Exchangeable Calcium (as Ca)	GLCS/SOP/S/020; Issue no:02: 2024	meq/100g	1.6
11	Exchangeable Magnesium (as Mg)	GLCS/SOP/S/021; Issue no:02: 2024	meq/100g	1.2
12	Iron	USEPA-6010 D-2014	mg/kg	38.19
13	Lead	USEPA-6010D-2014	mg/kg	1.46
14	Manganese	USEPA-6010 D-2014	mg/kg	5.06
15	Organic Carbon	GLCS/SOP/S/003; Issue no: 02: 2024	%	0.3825
16	Organic Matter	GLCS/SOP/S/003; Issue no:02: 2024	%	0.659

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007732F

Report Number : GLCS/TR01738/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 1	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01738/2025-26
Location Name	CORE ZONE	**Date of Analysis**	06-05-2025
Sampling Hours	03.50	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 3'18.09"N** **77°27'44.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	pH Value	IS 2720 (Part 26): 1987(Reaffirmed 2021)	-	7.89
18	Soluble Potassium (as K) in saturation extract	GLCS/SOP/S/006; Issue no:02 : 2024	mg/100g	0.65
19	Specific Electrical Conductivity	IS 14767: 2000(Reaffirmed 2021)	µS/cm	438
20	Sulphate (as SO4)	GLCS/SOP/S/009; Issue no:02: 2024	mg/100g	3.65
21	Texture : Clay	GLCS/SOP/S/015 ;Issue no:02: 2024	%	37.14
22	Texture : Sand	GLCS/SOP/S/015; Issue no:02: 2024	%	19.43
23	Texture : Silt	GLCS/SOP/S/015 ; Issue no:02: 2024	%	43.44
24	Water Holding Capacity	GLCS/SOP/S/016; Issue no:02: 2024	%	49.0

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007732F

Report Number : GLCS/TR01738/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 1	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01738/2025-26
Location Name	CORE ZONE	**Date of Analysis**	06-05-2025
Sampling Hours	03.50	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 3'18.09"N** **77°27'44.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Zinc	USEPA-6010D-2014	mg/kg	6.39

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007733F

Report Number : GLCS/TR01739/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 2	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01739/2025-26
Location Name	CORE ZONE	**Date of Analysis**	06-05-2025
Sampling Hours	05.05	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 3'26.93"N** **77°28'0.29"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Available Nitrogen as N	GLCS/SOP/S/029 ;Issue no.02: 2024	kg/ha	362.3
2	Available Phosphorous(as P)	GLCS/SOP/S/005 ; Issue no:02: 2024	mg/kg	17.05
3	Boron	USEPA-6010D:2014	mg/kg	3.10
4	Bulk Density	GLCS/SOP/S/017; Issue no:02: 2024	g/cc	0.99
5	Cadmium	USEPA-6010 D-2014	mg/kg	2.83
6	Cation Exchange Capacity	GLCS/SOP/S/024; Issue no:02: 2024	meq/100g	36.4
7	Chlorides (as Cl-) in saturation extract	GLCS/SOP/S/004; Issue no:02: 2024	meq/l	9.5
8	Chromium	USEPA-6010D-2014	mg/kg	10.12

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007733F

Report Number : GLCS/TR01739/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 2	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01739/2025-26
Location Name	CORE ZONE	**Date of Analysis**	06-05-2025
Sampling Hours	05.05	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 3'26.93"N** **77°28'0.29"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Copper	USEPA-6010D :2014	mg/kg	BDL(DL: 0.5)
10	Exchangeable Calcium (as Ca)	GLCS/SOP/S/020; Issue no:02: 2024	meq/100g	1.7
11	Exchangeable Magnesium (as Mg)	GLCS/SOP/S/021; Issue no:02: 2024	meq/100g	1.0
12	Iron	USEPA-6010 D-2014	mg/kg	31.44
13	Lead	USEPA-6010D-2014	mg/kg	0.54
14	Manganese	USEPA-6010 D-2014	mg/kg	0.67
15	Organic Carbon	GLCS/SOP/S/003; Issue no: 02: 2024	%	0.460
16	Organic Matter	GLCS/SOP/S/003; Issue no:02: 2024	%	0.794

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007733F

Report Number : GLCS/TR01739/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 2	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01739/2025-26
Location Name	CORE ZONE	**Date of Analysis**	06-05-2025
Sampling Hours	05.05	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 3'26.93"N** **77°28'0.29"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	pH Value	IS 2720 (Part 26): 1987(Reaffirmed 2021)	-	6.79
18	Soluble Potassium (as K) in saturation extract	GLCS/SOP/S/006; Issue no:02 : 2024	mg/100g	1.23
19	Specific Electrical Conductivity	IS 14767: 2000(Reaffirmed 2021)	µS/cm	358
20	Sulphate (as SO4)	GLCS/SOP/S/009; Issue no:02: 2024	mg/100g	5.80
21	Texture : Clay	GLCS/SOP/S/015 ;Issue no:02: 2024	%	39.99
22	Texture : Sand	GLCS/SOP/S/015; Issue no:02: 2024	%	19.91
23	Texture : Silt	GLCS/SOP/S/015 ; Issue no:02: 2024	%	40.11
24	Water Holding Capacity	GLCS/SOP/S/016; Issue no:02: 2024	%	45.7

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007733F

Report Number : GLCS/TR01739/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 2	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01739/2025-26
Location Name	CORE ZONE	**Date of Analysis**	06-05-2025
Sampling Hours	05.05	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 3'26.93"N** **77°28'0.29"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Zinc	USEPA-6010D-2014	mg/kg	6.21

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007734F

Report Number : GLCS/TR01740/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 3	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01740/2025-26
Location Name	PERUMTHOLUVU	**Date of Analysis**	06-05-2025
Sampling Hours	05.20	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 2'48.73"N** **77°26'4.58"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Available Nitrogen as N	GLCS/SOP/S/029 ;Issue no.02: 2024	kg/ha	332.5
2	Available Phosphorous(as P)	GLCS/SOP/S/005 ; Issue no:02: 2024	mg/kg	15.8
3	Boron	USEPA-6010D:2014	mg/kg	5.26
4	Bulk Density	GLCS/SOP/S/017; Issue no:02: 2024	g/cc	1.001
5	Cadmium	USEPA-6010 D-2014	mg/kg	3.85
6	Cation Exchange Capacity	GLCS/SOP/S/024; Issue no:02: 2024	meq/100g	31.3
7	Chlorides (as Cl-) in saturation extract	GLCS/SOP/S/004; Issue no:02: 2024	meq/l	8.9
8	Chromium	USEPA-6010D-2014	mg/kg	19.64

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007734F

Report Number : GLCS/TR01740/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 3	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01740/2025-26
Location Name	PERUMTHOLUVU	**Date of Analysis**	06-05-2025
Sampling Hours	05.20	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 2'48.73"N** **77°26'4.58"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Copper	USEPA-6010D :2014	mg/kg	4.25
10	Exchangeable Calcium (as Ca)	GLCS/SOP/S/020; Issue no:02: 2024	meq/100g	2.2
11	Exchangeable Magnesium (as Mg)	GLCS/SOP/S/021; Issue no:02: 2024	meq/100g	1.5
12	Iron	USEPA-6010 D-2014	mg/kg	29.97
13	Lead	USEPA-6010D-2014	mg/kg	0.81
14	Manganese	USEPA-6010 D-2014	mg/kg	40.50
15	Organic Carbon	GLCS/SOP/S/003; Issue no: 02: 2024	%	0.533
16	Organic Matter	GLCS/SOP/S/003; Issue no:02: 2024	%	0.920

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007734F

Report Number : GLCS/TR01740/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 3	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01740/2025-26
Location Name	PERUMTHOLUVU	**Date of Analysis**	06-05-2025
Sampling Hours	05.20	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 2'48.73"N** **77°26'4.58"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	pH Value	IS 2720 (Part 26): 1987(Reaffirmed 2021)	-	7.53
18	Soluble Potassium (as K) in saturation extract	GLCS/SOP/S/006; Issue no:02 : 2024	mg/100g	0.88
19	Specific Electrical Conductivity	IS 14767: 2000(Reaffirmed 2021)	µS/cm	368
20	Sulphate (as SO4)	GLCS/SOP/S/009; Issue no:02: 2024	mg/100g	6.2
21	Texture : Clay	GLCS/SOP/S/015 ;Issue no:02: 2024	%	36.42
22	Texture : Sand	GLCS/SOP/S/015; Issue no:02: 2024	%	21.59
23	Texture : Silt	GLCS/SOP/S/015 ; Issue no:02: 2024	%	41.99
24	Water Holding Capacity	GLCS/SOP/S/016; Issue no:02: 2024	%	48.9

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007734F

Report Number : GLCS/TR01740/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 3	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01740/2025-26
Location Name	PERUMTHOLUVU	**Date of Analysis**	06-05-2025
Sampling Hours	05.20	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 2'48.73"N** **77°26'4.58"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Zinc	USEPA-6010D-2014	mg/kg	13.16

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007735F

Report Number : GLCS/TR01741/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 4	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01741/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.40	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 5'18.44"N** **77°31'1.74"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Available Nitrogen as N	GLCS/SOP/S/029 ;Issue no.02: 2024	kg/ha	347.6
2	Available Phosphorous(as P)	GLCS/SOP/S/005 ; Issue no:02: 2024	mg/kg	16.5
3	Boron	USEPA-6010D:2014	mg/kg	9.83
4	Bulk Density	GLCS/SOP/S/017; Issue no:02: 2024	g/cc	1.003
5	Cadmium	USEPA-6010 D-2014	mg/kg	1.80
6	Cation Exchange Capacity	GLCS/SOP/S/024; Issue no:02: 2024	meq/100g	29.5
7	Chlorides (as Cl-) in saturation extract	GLCS/SOP/S/004; Issue no:02: 2024	meq/l	7.9
8	Chromium	USEPA-6010D-2014	mg/kg	14.42

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

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For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007735F

Report Number : GLCS/TR01741/2025-26 **Report Date** : 24-06-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 4	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01741/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.40	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 5'18.44"N** **77°31'1.74"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Copper	USEPA-6010D :2014	mg/kg	BDL(DL: 0.5)
10	Exchangeable Calcium (as Ca)	GLCS/SOP/S/020; Issue no:02: 2024	meq/100g	2.3
11	Exchangeable Magnesium (as Mg)	GLCS/SOP/S/021; Issue no:02: 2024	meq/100g	1.1
12	Iron	USEPA-6010 D-2014	mg/kg	33.09
13	Lead	USEPA-6010D-2014	mg/kg	BDL(DL: 0.5)
14	Manganese	USEPA-6010 D-2014	mg/kg	9.01
15	Organic Carbon	GLCS/SOP/S/003; Issue no: 02: 2024	%	0.3396
16	Organic Matter	GLCS/SOP/S/003; Issue no:02: 2024	%	0.585

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

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For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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Salem – 636 016. Tamil Nadu. India.
Phone Nos.: +91 427 2970 989 / 70944 52628
E-Mail: lab@glcs.in; Web: www.glcs.in

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TC-6060

TEST REPORT

ULR-TC606025000007735F

Report Number : GLCS/TR01741/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 4	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01741/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.40	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 5'18.44"N** **77°31'1.74"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	pH Value	IS 2720 (Part 26): 1987(Reaffirmed 2021)	-	7.72
18	Soluble Potassium (as K) in saturation extract	GLCS/SOP/S/006; Issue no:02 : 2024	mg/100g	0.70
19	Specific Electrical Conductivity	IS 14767: 2000(Reaffirmed 2021)	µS/cm	428
20	Sulphate (as SO4)	GLCS/SOP/S/009; Issue no:02: 2024	mg/100g	5.2
21	Texture : Clay	GLCS/SOP/S/015 ;Issue no:02: 2024	%	27.16
22	Texture : Sand	GLCS/SOP/S/015; Issue no:02: 2024	%	26.45
23	Texture : Silt	GLCS/SOP/S/015 ; Issue no:02: 2024	%	46.39
24	Water Holding Capacity	GLCS/SOP/S/016; Issue no:02: 2024	%	42.94

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007735F

Report Number : GLCS/TR01741/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 4	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01741/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.40	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 5'18.44"N** **77°31'1.74"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Zinc	USEPA-6010D-2014	mg/kg	6.88

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TEST REPORT

ULR-TC606025000007736F

Report Number : GLCS/TR01742/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 5	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01742/2025-26
Location Name	SANARPATTI	**Date of Analysis**	06-05-2025
Sampling Hours	06.00	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 1'20.63"N** **77°29'16.53"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Available Nitrogen as N	GLCS/SOP/S/029 ;Issue no.02: 2024	kg/ha	313.1
2	Available Phosphorous(as P)	GLCS/SOP/S/005 ; Issue no:02: 2024	mg/kg	15.7
3	Boron	USEPA-6010D:2014	mg/kg	6.46
4	Bulk Density	GLCS/SOP/S/017; Issue no:02: 2024	g/cc	1.003
5	Cadmium	USEPA-6010 D-2014	mg/kg	1.66
6	Cation Exchange Capacity	GLCS/SOP/S/024; Issue no:02: 2024	meq/100g	29.4
7	Chlorides (as Cl-) in saturation extract	GLCS/SOP/S/004; Issue no:02: 2024	meq/l	11.5
8	Chromium	USEPA-6010D-2014	mg/kg	4.99

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007736F

Report Number : GLCS/TR01742/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 5	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01742/2025-26
Location Name	SANARPATTI	**Date of Analysis**	06-05-2025
Sampling Hours	06.00	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 1'20.63"N** **77°29'16.53"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Copper	USEPA-6010D :2014	mg/kg	3.14
10	Exchangeable Calcium (as Ca)	GLCS/SOP/S/020; Issue no:02: 2024	meq/100g	2.7
11	Exchangeable Magnesium (as Mg)	GLCS/SOP/S/021; Issue no:02: 2024	meq/100g	1.4
12	Iron	USEPA-6010 D-2014	mg/kg	31.57
13	Lead	USEPA-6010D-2014	mg/kg	0.74
14	Manganese	USEPA-6010 D-2014	mg/kg	4.43
15	Organic Carbon	GLCS/SOP/S/003; Issue no: 02: 2024	%	0.6143
16	Organic Matter	GLCS/SOP/S/003; Issue no:02: 2024	%	1.059

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007736F

Report Number : GLCS/TR01742/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 5	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01742/2025-26
Location Name	SANARPATTI	**Date of Analysis**	06-05-2025
Sampling Hours	06.00	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 1'20.63"N** **77°29'16.53"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	pH Value	IS 2720 (Part 26): 1987(Reaffirmed 2021)	-	8.01
18	Soluble Potassium (as K) in saturation extract	GLCS/SOP/S/006; Issue no:02 : 2024	mg/100g	0.63
19	Specific Electrical Conductivity	IS 14767: 2000(Reaffirmed 2021)	µS/cm	475
20	Sulphate (as SO4)	GLCS/SOP/S/009; Issue no:02: 2024	mg/100g	4.8
21	Texture : Clay	GLCS/SOP/S/015 ;Issue no:02: 2024	%	35.88
22	Texture : Sand	GLCS/SOP/S/015; Issue no:02: 2024	%	17.09
23	Texture : Silt	GLCS/SOP/S/015 ; Issue no:02: 2024	%	47.04
24	Water Holding Capacity	GLCS/SOP/S/016; Issue no:02: 2024	%	41.0

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007736F

Report Number : GLCS/TR01742/2025-26 **Report Date** : 24-06-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 5	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01742/2025-26
Location Name	SANARPATTI	**Date of Analysis**	06-05-2025
Sampling Hours	06.00	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 1'20.63"N** **77°29'16.53"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Zinc	USEPA-6010D-2014	mg/kg	7.94

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TEST REPORT

ULR-TC606025000007737F

Report Number : GLCS/TR01743/2025-26 **Report Date** : 24-06-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 6	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01743/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	06.30	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 6'0.42"N** **77°26'23.57"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Available Nitrogen as N	GLCS/SOP/S/029 ;Issue no.02: 2024	kg/ha	299.9
2	Available Phosphorous(as P)	GLCS/SOP/S/005 ; Issue no:02: 2024	mg/kg	14.85
3	Boron	USEPA-6010D:2014	mg/kg	2.76
4	Bulk Density	GLCS/SOP/S/017; Issue no:02: 2024	g/cc	1.002
5	Cadmium	USEPA-6010 D-2014	mg/kg	2.30
6	Cation Exchange Capacity	GLCS/SOP/S/024; Issue no:02: 2024	meq/100g	26.2
7	Chlorides (as Cl-) in saturation extract	GLCS/SOP/S/004; Issue no:02: 2024	meq/l	11.6
8	Chromium	USEPA-6010D-2014	mg/kg	11.21

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

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For Global Lab and Consultancy Services LLP

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 6	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01743/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	06.30	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 6'0.42"N** **77°26'23.57"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Copper	USEPA-6010D :2014	mg/kg	2.76
10	Exchangeable Calcium (as Ca)	GLCS/SOP/S/020; Issue no:02: 2024	meq/100g	1.6
11	Exchangeable Magnesium (as Mg)	GLCS/SOP/S/021; Issue no:02: 2024	meq/100g	0.9
12	Iron	USEPA-6010 D-2014	mg/kg	21.81
13	Lead	USEPA-6010D-2014	mg/kg	BDL(DL: 0.5)
14	Manganese	USEPA-6010 D-2014	mg/kg	BDL(DL: 0.5)
15	Organic Carbon	GLCS/SOP/S/003; Issue no: 02: 2024	%	0.484
16	Organic Matter	GLCS/SOP/S/003; Issue no:02: 2024	%	0.835

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For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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Phone Nos.: +91 427 2970 989 / 70944 52628
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TC-6060

TEST REPORT

ULR-TC606025000007737F

Report Number : GLCS/TR01743/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 6	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01743/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	06.30	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 6'0.42"N** **77°26'23.57"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	pH Value	IS 2720 (Part 26): 1987(Reaffirmed 2021)	-	7.40
18	Soluble Potassium (as K) in saturation extract	GLCS/SOP/S/006; Issue no:02 : 2024	mg/100g	0.50
19	Specific Electrical Conductivity	IS 14767: 2000(Reaffirmed 2021)	µS/cm	328
20	Sulphate (as SO4)	GLCS/SOP/S/009; Issue no:02: 2024	mg/100g	4.40
21	Texture : Clay	GLCS/SOP/S/015 ;Issue no:02: 2024	%	37.80
22	Texture : Sand	GLCS/SOP/S/015; Issue no:02: 2024	%	18.33
23	Texture : Silt	GLCS/SOP/S/015 ; Issue no:02: 2024	%	43.87
24	Water Holding Capacity	GLCS/SOP/S/016; Issue no:02: 2024	%	41.2

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007737F

Report Number : GLCS/TR01743/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SOIL - 6	**Sampling Method**	GLCS/SOP/S/014
Sampling Description	Powder	**Sample Code**	GLCS/01743/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	06.30	**Date of Completion**	22-06-2025
Sampling Date	03-05-2025	**Avg Temperature**	- °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	- %
Location Co-ordinates		**11° 6'0.42"N** **77°26'23.57"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Zinc	USEPA-6010D-2014	mg/kg	7.68

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007665F

Report Number : GLCS/TR01744/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SURFACE WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01744/2025-26
Location Name	NOYYAL RIVER	**Date of Analysis**	06-05-2025
Sampling Hours	11.50	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'53.29"N** **77°27'47.22"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Aluminium	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	0.023
2	Ammoniacal Nitrogen as NH3-N	IS 3025 (Part 34)/Sec 1: 2023	mg/l	BDL (DL: 1.0)
3	Arsenic as As	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)
4	Barium as Ba	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	0.010
5	Biochemical Oxygen Demand (BOD) at 27°C for 3 Days	IS 3025 (Part 44): 2023	mg/l	10.0
6	Boron as B	IS 3025 (Part 57): 2021	mg/l	BDL (DL: 0.1)
7	Cadmium as Cd	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
8	Calcium as Ca	IS 3025 (Part 40): 1991 (Reaffirmed 2019)	mg/l	83.3

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TEST REPORT

ULR-TC606025000007665F

Report Number : GLCS/TR01744/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SURFACE WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01744/2025-26
Location Name	NOYYAL RIVER	**Date of Analysis**	06-05-2025
Sampling Hours	11.50	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'53.29"N** **77°27'47.22"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Chemical Oxygen Demand (COD)	IS 3025 (Part 58): 2023	mg/l	30.0
10	Chloride as Cl-	IS 3025 (Part 32): 1988 (Reaffirmed 2019)	mg/l	295.9
11	Chromium as Cr	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
12	Color	IS 3025 (Part 4): 2021	CU	< 1
13	Copper as Cu	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
14	Cyanide as CN	IS 3025 part 27/Sec 1: 2021	mg/l	BDL (DL: 0.01)
15	Dissolved Oxygen (DO)	IS 3025 (Part 38): 1989 (Reaffirmed 2019)	mg/l	7.2
16	Electrical Conductivity	IS 3025 (Part 14): 2013 (Reaffirmed 2019)	µS/cm	1695.0

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TC-6060

TEST REPORT

ULR-TC606025000007665F

Report Number : GLCS/TR01744/2025-26 **Report Date** : 22-06-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SURFACE WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01744/2025-26
Location Name	NOYYAL RIVER	**Date of Analysis**	06-05-2025
Sampling Hours	11.50	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'53.29"N** **77°27'47.22"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	Fluoride as F-	GLCS/SOP/W/015; Issue no :02: 2024	mg/l	0.39
18	Free Residual Chlorine as Cl2	IS 3025 (Part 26): 2021	mg/l	BDL (DL: 1.0)
19	Iron as Fe	IS 3025 (Part 53): 2024	mg/l	0.38
20	Lead as Pb	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
21	Magnesium as Mg	IS 3025 (Part 46): 2023	mg/l	44.7
22	Manganese as Mn	IS 3025 (Part 59): 2023	mg/l	BDL (DL: 0.01)
23	Mercury as Hg	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)
24	Molybdenum as Mo	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)

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TC-6060

TEST REPORT

ULR-TC606025000007665F

Report Number : GLCS/TR01744/2025-26 **Report Date** : 22-06-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SURFACE WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01744/2025-26
Location Name	NOYYAL RIVER	**Date of Analysis**	06-05-2025
Sampling Hours	11.50	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'53.29"N** **77°27'47.22"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Nitrate as NO3	IS 3025 (Part 34)/Sec 1: 2023	mg/l	5.2
26	Odor	IS 3025 (Part 5): 2018	-	Agreeable
27	pH	IS 3025 (Part 11): 2022	-	7.98
28	Phenols	IS 3025 PART 43 SECTION 1: 2022	mg/l	BDL (DL: 0.01)
29	Selenium as Se	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.005)
30	Sulphate as SO4	IS 3025 (Part 24) SECTION 1: 2022	mg/l	67.8
31	Sulphide as S (Iodometric Method)	GLCS/SOP/W/066: 2023	mg/l	BDL (DL: 1.0)
32	Total Alkalinity as CaCO3	IS 3025 (Part 23): 2023	mg/l	324.0

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Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007665F

Report Number : GLCS/TR01744/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SURFACE WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01744/2025-26
Location Name	NOYYAL RIVER	**Date of Analysis**	06-05-2025
Sampling Hours	11.50	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'53.29"N** **77°27'47.22"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
33	Total Dissolved Solids (TDS)	IS 3025 (Part 16): 2023	mg/l	988.0
34	Total Hardness as CaCO3	IS 3025 (Part 21): 2009 (Reaffirmed 2019)	mg/l	392.0
35	Total Suspended Solids	is 3025 part 17: 2022	mg/l	3.0
36	Turbidity	IS 3025 (Part 10): 2023	NTU	4.0
37	Zinc as Zn	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000005656F

Report Number : GLCS/TR01744/2025-26 **Report Date** : 12-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	SURFACE WATER - 1	**Sampling Method**	GLCS/M/SOP/05
Sampling Description	Liquid	**Sample Code**	GLCS/01744/2025-26
Location Name	NOYYAL RIVER	**Date of Analysis**	06-05-2025
Sampling Hours	11.50	**Date of Completion**	07-05-2025
Sampling Date	04-05-2025	**Avg Temperature**	25 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	50 %
Location Co-ordinates		**11° 6'53.29"N** **77°27'47.22"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Escherichia coli	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent
2	Total Coliforms	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
A. Sathishkumar
Technical Manager- Microbiology

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007738F

Report Number : GLCS/TR01745/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01745/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	03.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'2.39"N** **77°27'57.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
1	Aluminium	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	0.034		
2	Ammoniacal Nitrogen as NH3-N	IS 3025 PART 34/Sec 1: 2023	mg/l	BDL (DL: 1.0)		
3	Arsenic as As	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)		
4	Barium as Ba	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	0.093		
5	Boron as B	IS 3025 (Part 57): 2021	mg/l	BDL (DL: 0.1)		
6	Cadmium as Cd	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
7	Calcium as Ca	IS 3025 (Part 40): 1991 (Reaffirmed 2019)	mg/l	78.5		
8	Chloride as Cl-	IS 3025 (Part 32): 1988 (Reaffirmed 2019)	mg/l	241.9		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007738F

Report Number : GLCS/TR01745/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01745/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	03.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'2.39"N** **77°27'57.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
9	Chromium as Cr	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
10	Color	IS 3025 (Part 4): 2021	CU	< 1		
11	Copper as Cu	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
12	Cyanide as CN	IS 3025 part 27/Sec 1: 2021	mg/l	BDL (DL: 0.01)		
13	Electrical Conductivity (EC)	IS 3025 (Part 14): 2013 (Reaffirmed 2019)	µS/cm	1485.0		
14	Fluoride as F-	GLCS/SOP/W/015; Issue No:02: 2024	mg/l	0.36		
15	Free Residual Chlorine as Cl2	IS 3025 (Part 26): 2021	mg/l	BDL (DL: 1.0)		
16	Iron as Fe	IS 3025 (Part 53): 2024	mg/l	0.38		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007738F

Report Number : GLCS/TR01745/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01745/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	03.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'2.39"N** **77°27'57.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
17	Lead as Pb	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
18	Magnesium as Mg	IS 3025 (Part 46): 2023	mg/l	33.0		
19	Manganese as Mn	IS 3025 (Part 59): 2023	mg/l	BDL (DL: 0.1)		
20	Mercury as Hg	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.005)		
21	Molybdenum as Mo	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
22	Nitrate as NO3	IS 3025 (Part 34)/Sec 1: 2023	mg/l	BDL (DL: 2.0)		
23	Odor	IS 3025 (Part 5): 2018	-	Agreeable		
24	pH	IS 3025 (Part 11): 2022	-	7.81		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007738F

Report Number : GLCS/TR01745/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01745/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	03.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'2.39"N** **77°27'57.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
25	Phenols	IS 3025 PART 43 Section 1: 2022	mg/l	BDL (DL: 0.01)		
26	Selenium as Se	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.005)		
27	Sulphate as SO4	IS 3025 (Part 24) Section 1: 2022	mg/l	48.2		
28	Sulphide as S (IodometricMethod)	GLCS/SOP/W/066: 2023	mg/l	BDL (DL: 1.0)		
29	Total Alkalinity as CaCO3	IS 3025 (Part 23): 2023	mg/l	292.0		
30	Total Dissolved Solids (TDS)	IS 3025 (Part 16): 2023	mg/l	876.0		
31	Total Hardness as CaCO3	IS 3025 (Part 21): 2009 (Reaffirmed 2019)	mg/l	332.0		
32	Total Suspended Solids (TSS)	IS 3025 (Part 17): 2022	mg/l	BDL (DL: 2.0)		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007738F

Report Number : GLCS/TR01745/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01745/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	03.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'2.39"N** **77°27'57.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
33	Turbidity	IS 3025 (Part 10): 2023	NTU	< 1		
34	Zinc as Zn	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000005657F

Report Number : GLCS/TR01745/2025-26 **Report Date** : 12-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 1	**Sampling Method**	GLCS/M/SOP/05
Sampling Description	Liquid	**Sample Code**	GLCS/01745/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	03.15	**Date of Completion**	10-05-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.2 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	50 %
Location Co-ordinates		**11° 3'2.39"N** **77°27'57.46"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Escherichia coli	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent
2	Total Coliforms	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Present

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
A. Sathishkumar
Technical Manager- Microbiology

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007666F

Report Number : GLCS/TR01746/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01746/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.4 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	51 %
Location Co-ordinates		**11° 5'16.59"N** **77°31'1.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Aluminium	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
2	Ammoniacal Nitrogen as NH3-N	IS 3025 PART 34/Sec 1: 2023	mg/l	BDL (DL: 1.0)
3	Arsenic as As	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)
4	Barium as Ba	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
5	Boron as B	IS 3025 (Part 57): 2021	mg/l	BDL (DL: 0.1)
6	Cadmium as Cd	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
7	Calcium as Ca	IS 3025 (Part 40): 1991 (Reaffirmed 2019)	mg/l	75.3
8	Chloride as Cl-	IS 3025 (Part 32): 1988 (Reaffirmed 2019)	mg/l	239.9

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007666F

Report Number : GLCS/TR01746/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01746/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.4 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	51 %
Location Co-ordinates		**11° 5'16.59"N** **77°31'1.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Chromium as Cr	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
10	Color	IS 3025 (Part 4): 2021	CU	< 1
11	Copper as Cu	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
12	Cyanide as CN	IS 3025 part 27/Sec 1: 2021	mg/l	BDL (DL: 0.01)
13	Electrical Conductivity (EC)	IS 3025 (Part 14): 2013 (Reaffirmed 2019)	µS/cm	1465.0
14	Fluoride as F-	GLCS/SOP/W/015; Issue No:02: 2024	mg/l	0.35
15	Free Residual Chlorine as Cl2	IS 3025 (Part 26): 2021	mg/l	BDL (DL: 1.0)
16	Iron as Fe	IS 3025 (Part 53): 2024	mg/l	0.34

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

Note: The test results are only to the sample submitted for test. Any Correction of the test report on full or part shall invalidate the report. Samples are not drawn by us unless otherwise stated. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. Perishable samples will be discarded immediately after reporting. We do not accept only liability with regard to origin or source from which the samples are extracted. The Laboratory is not responsible for authenticity of photocopied test reports. Any holder of this report is advised that information contained here on reflects the laboratory's finding at the time of its intervention only and within the limits of client instructions. The authenticity of the test reports issued by us can be verified by submitting on E-mail request with report number and report date along with report copy.

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TC-6060

TEST REPORT

ULR-TC606025000007666F

Report Number : GLCS/TR01746/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01746/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.4 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	51 %
Location Co-ordinates		**11° 5'16.59"N** **77°31'1.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	Lead as Pb	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
18	Magnesium as Mg	IS 3025 (Part 46): 2023	mg/l	36.4
19	Manganese as Mn	IS 3025 (Part 59): 2023	mg/l	BDL (DL: 0.01)
20	Mercury as Hg	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)
21	Molybdenum as Mo	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
22	Nitrate as NO3	IS 3025 (Part 34)/Sec 1: 2023	mg/l	BDL (DL: 2.0)
23	Odor	IS 3025 (Part 5): 2018	-	Agreeable
24	pH	IS 3025 (Part 11): 2022	-	7.79

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Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007666F

Report Number : GLCS/TR01746/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01746/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.4 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	51 %
Location Co-ordinates		**11° 5'16.59"N** **77°31'1.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Phenols	IS 3025 PART 43 Section 1: 2022	mg/l	BDL (DL: 0.01)
26	Selenium as Se	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.005)
27	Sulphate as SO4	IS 3025 (Part 24) Section 1: 2022	mg/l	59.8
28	Sulphide as S (IodometricMethod)	GLCS/SOP/W/066: 2023	mg/l	BDL (DL: 1.0)
29	Total Alkalinity as CaCO3	IS 3025 (Part 23): 2023	mg/l	296.0
30	Total Dissolved Solids (TDS)	IS 3025 (Part 16): 2023	mg/l	864.0
31	Total Hardness as CaCO3	IS 3025 (Part 21): 2009 (Reaffirmed 2019)	mg/l	340.0
32	Total Suspended Solids (TSS)	IS 3025 (Part 17): 2022	mg/l	BDL (DL: 2.0)

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007666F

Report Number : GLCS/TR01746/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01746/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.15	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.4 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	51 %
Location Co-ordinates		**11° 5'16.59"N** **77°31'1.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
33	Turbidity	IS 3025 (Part 10): 2023	NTU	< 1
34	Zinc as Zn	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000005658F

Report Number : GLCS/TR01746/2025-26 **Report Date** : 12-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 2	**Sampling Method**	GLCS/M/SOP/05
Sampling Description	Liquid	**Sample Code**	GLCS/01746/2025-26
Location Name	SAAVADIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.15	**Date of Completion**	10-05-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.4 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	51 %
Location Co-ordinates		**11° 5'16.59"N** **77°31'1.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Escherichia coli	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent
2	Total Coliforms	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Present

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
A. Sathishkumar
Technical Manager- Microbiology

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007783F

Report Number : GLCS/TR01747/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 3	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01747/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	02-05-2025
Sampling Hours	06.00	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 0'32.24"N** **77°26'29.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Aluminium	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
2	Ammoniacal Nitrogen as NH3-N	IS 3025 PART 34/Sec 1: 2023	mg/l	BDL (DL: 1.0)
3	Arsenic as As	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)
4	Barium as Ba	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
5	Boron as B	IS 3025 (Part 57): 2021	mg/l	BDL (DL: 0.01)
6	Cadmium as Cd	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
7	Calcium as Ca	IS 3025 (Part 40): 1991 (Reaffirmed 2019)	mg/l	76.9
8	Chloride as Cl-	IS 3025 (Part 32): 1988 (Reaffirmed 2019)	mg/l	247.9

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Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007783F

Report Number : GLCS/TR01747/2025-26 **Report Date** : 24-06-2025

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Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 3	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01747/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	02-05-2025
Sampling Hours	06.00	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 0'32.24"N** **77°26'29.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Chromium as Cr	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
10	Color	IS 3025 (Part 4): 2021	CU	< 1
11	Copper as Cu	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
12	Cyanide as CN	IS 3025 part 27/Sec 1: 2021	mg/l	BDL (DL: 0.01)
13	Electrical Conductivity (EC)	IS 3025 (Part 14): 2013 (Reaffirmed 2019)	µS/cm	1385
14	Fluoride as F-	GLCS/SOP/W/015; Issue No:02: 2024	mg/l	0.33
15	Free Residual Chlorine as Cl2	IS 3025 (Part 26): 2021	mg/l	BDL (DL: 1.0)
16	Iron as Fe	IS 3025 (Part 53): 2024	mg/l	0.33

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007783F

Report Number : GLCS/TR01747/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 3	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01747/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	02-05-2025
Sampling Hours	06.00	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 0'32.24"N** **77°26'29.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	Lead as Pb	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
18	Magnesium as Mg	IS 3025 (Part 46): 2023	mg/l	37.9
19	Manganese as Mn	IS 3025 (Part 59): 2023	mg/l	BDL (DL: 0.1)
20	Mercury as Hg	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.005)
21	Molybdenum as Mo	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	0.010
22	Nitrate as NO3	IS 3025 (Part 34)/Sec 1: 2023	mg/l	BDL (DL: 2.0)
23	Odor	IS 3025 (Part 5): 2018	-	Agreeable
24	pH	IS 3025 (Part 11): 2022	-	7.84

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007783F

Report Number : GLCS/TR01747/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 3	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01747/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	02-05-2025
Sampling Hours	06.00	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 0'32.24"N** **77°26'29.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Phenols	IS 3025 PART 43 Section 1: 2022	mg/l	BDL (DL: 0.1)
26	Selenium as Se	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.005)
27	Sulphate as SO4	IS 3025 (Part 24) Section 1: 2022	mg/l	41.1
28	Sulphide as S (IodometricMethod)	GLCS/SOP/W/066: 2023	mg/l	BDL (DL: 1.0)
29	Total Alkalinity as CaCO3	IS 3025 (Part 23): 2023	mg/l	304.0
30	Total Dissolved Solids (TDS)	IS 3025 (Part 16): 2023	mg/l	817
31	Total Hardness as CaCO3	IS 3025 (Part 21): 2009 (Reaffirmed 2019)	mg/l	392.0
32	Total Suspended Solids (TSS)	IS 3025 (Part 17): 2022	mg/l	BDL (DL: 2.0)

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007783F

Report Number : GLCS/TR01747/2025-26 **Report Date** : 24-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 3	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01747/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	02-05-2025
Sampling Hours	06.00	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 0'32.24"N** **77°26'29.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
33	Turbidity	IS 3025 (Part 10): 2023	NTU	< 1
34	Zinc as Zn	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	0.025

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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E-Mail: lab@glcs.in; Web: www.glcs.in

TC-6060

TEST REPORT

ULR-TC606025000005659F

Report Number : GLCS/TR01747/2025-26 **Report Date** : 12-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	WELL WATER - 3	**Sampling Method**	GLCS/M/SOP/05
Sampling Description	Liquid	**Sample Code**	GLCS/01747/2025-26
Location Name	ALAGUMALAI	**Date of Analysis**	06-05-2025
Sampling Hours	06.00	**Date of Completion**	07-05-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.5 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	50 %
Location Co-ordinates		**11° 0'32.24"N** **77°26'29.61"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Escherichia coli	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent
2	Total Coliforms	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
A. Sathishkumar
Technical Manager- Microbiology

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000007668F

Report Number : GLCS/TR01748/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01748/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	04.30	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'12.36"N** **77°28'5.75"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
1	Aluminium	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
2	Ammoniacal Nitrogen as NH3-N	IS 3025 PART 34/Sec 1: 2023	mg/l	BDL (DL: 1.0)		
3	Arsenic as As	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)		
4	Barium as Ba	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
5	Boron as B	IS 3025 (Part 57): 2021	mg/l	BDL (DL: 1.0)		
6	Cadmium as Cd	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
7	Calcium as Ca	IS 3025 (Part 40): 1991 (Reaffirmed 2019)	mg/l	60.9		
8	Chloride as Cl-	IS 3025 (Part 32): 1988 (Reaffirmed 2019)	mg/l	201.9		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007668F

Report Number : GLCS/TR01748/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01748/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	04.30	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'12.36"N** **77°28'5.75"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
9	Chromium as Cr	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
10	Color	IS 3025 (Part 4): 2021	CU	< 1		
11	Copper as Cu	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
12	Cyanide as CN	IS 3025 part 27/Sec 1: 2021	mg/l	BDL (DL: 0.01)		
13	Electrical Conductivity (EC)	IS 3025 (Part 14): 2013 (Reaffirmed 2019)	µS/cm	1309.0		
14	Fluoride as F-	GLCS/SOP/W/015; Issue No:02: 2024	mg/l	0.32		
15	Free Residual Chlorine as Cl2	IS 3025 (Part 26): 2021	mg/l	BDL (DL: 1.0)		
16	Iron as Fe	IS 3025 (Part 53): 2024	mg/l	0.38		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TEST REPORT

ULR-TC606025000007668F

Report Number : GLCS/TR01748/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01748/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	04.30	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'12.36"N** **77°28'5.75"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
17	Lead as Pb	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
18	Magnesium as Mg	IS 3025 (Part 46): 2023	mg/l	34.0		
19	Manganese as Mn	IS 3025 (Part 59): 2023	mg/l	BDL (DL: 0.1)		
20	Mercury as Hg	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)		
21	Molybdenum as Mo	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		
22	Nitrate as NO3	IS 3025 (Part 34)/Sec 1: 2023	mg/l	BDL (DL: 2.0)		
23	Odor	IS 3025 (Part 5): 2018	-	Agreeable		
24	pH	IS 3025 (Part 11): 2022	-	7.31		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007668F

Report Number : GLCS/TR01748/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01748/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	04.30	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'12.36"N** **77°28'5.75"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
25	Phenols	IS 3025 PART 43 Section 1: 2022	mg/l	BDL (DL: 0.01)		
26	Selenium as Se	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.005)		
27	Sulphate as SO4	IS 3025 (Part 24) Section 1: 2022	mg/l	36.6		
28	Sulphide as S (IodometricMethod)	GLCS/SOP/W/066: 2023	mg/l	BDL (DL: 1.0)		
29	Total Alkalinity as CaCO3	IS 3025 (Part 23): 2023	mg/l	260.0		
30	Total Dissolved Solids (TDS)	IS 3025 (Part 16): 2023	mg/l	772.0		
31	Total Hardness as CaCO3	IS 3025 (Part 21): 2009 (Reaffirmed 2019)	mg/l	292.0		
32	Total Suspended Solids (TSS)	IS 3025 (Part 17): 2022	mg/l	BDL (DL: 2.0)		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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Phone Nos.: +91 427 2970 989 / 70944 52628
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TC-6060

TEST REPORT

ULR-TC606025000007668F

Report Number : GLCS/TR01748/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 1	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01748/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	04.30	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 3'12.36"N** **77°28'5.75"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT	LIMITS	
					Acceptable Limits	Permissible Limits
33	Turbidity	IS 3025 (Part 10): 2023	NTU	< 1		
34	Zinc as Zn	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)		

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

Note: The test results are only to the sample submitted for test. Any Correction of the test report on full or part shall invalidate the report. Samples are not drawn by us unless otherwise stated. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. Perishable samples will be discarded immediately after reporting. We do not accept only liability with regard to origin or source from which the samples are extracted. The Laboratory is not responsible for authenticity of photocopied test reports. Any holder of this report is advised that information contained here on reflects the laboratory's finding at the time of its intervention only and within the limits of client instructions. The authenticity of the test reports issued by us can be verified by submitting on E-mail request with report number and report date along with report copy.

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Phone Nos.: +91 427 2970 989 / 70944 52628
E-Mail: lab@glcs.in; Web: www.glcs.in

TC-6060

TEST REPORT

ULR-TC606025000005660F

Report Number : GLCS/TR01748/2025-26 **Report Date** : 12-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 1	**Sampling Method**	GLCS/M/SOP/05
Sampling Description	Liquid	**Sample Code**	GLCS/01748/2025-26
Location Name	NERA PROJECT AREA	**Date of Analysis**	06-05-2025
Sampling Hours	04.30	**Date of Completion**	07-05-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.3 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	51 %
Location Co-ordinates		**11° 3'12.36"N** **77°28'5.75"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Escherichia coli	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent
2	Total Coliforms	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
A. Sathishkumar
Technical Manager- Microbiology

*****End of Report*****

Note: The test results are only to the sample submitted for test. Any Correction of the test report on full or part shall invalidate the report. Samples are not drawn by us unless otherwise stated. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. Perishable samples will be discarded immediately after reporting. We do not accept only liability with regard to origin or source from which the samples are extracted. The Laboratory is not responsible for authenticity of photocopied test reports. Any holder of this report is advised that information contained here on reflects the laboratory's finding at the time of its intervention only and within the limits of client instructions. The authenticity of the test reports issued by us can be verified by submitting on E-mail request with report number and report date along with report copy.

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TC-6060

TEST REPORT

ULR-TC606025000007669F

Report Number : GLCS/TR01749/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01749/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.45	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'0.23"N** **77°26'21.72"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Aluminium	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
2	Ammoniacal Nitrogen as NH3-N	IS 3025 PART 34/Sec 1: 2023	mg/l	BDL (DL: 1.0)
3	Arsenic as As	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)
4	Barium as Ba	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
5	Boron as B	IS 3025 (Part 57): 2021	mg/l	BDL (DL: 0.1)
6	Cadmium as Cd	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
7	Calcium as Ca	IS 3025 (Part 40): 1991 (Reaffirmed 2019)	mg/l	62.5
8	Chloride as Cl-	IS 3025 (Part 32): 1988 (Reaffirmed 2019)	mg/l	211.9

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007669F

Report Number : GLCS/TR01749/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01749/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.45	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'0.23"N** **77°26'21.72"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
9	Chromium as Cr	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
10	Color	IS 3025 (Part 4): 2021	CU	< 1
11	Copper as Cu	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
12	Cyanide as CN	IS 3025 part 27/Sec 1: 2021	mg/l	BDL (DL: 0.01)
13	Electrical Conductivity (EC)	IS 3025 (Part 14): 2013 (Reaffirmed 2019)	µS/cm	1319.0
14	Fluoride as F-	GLCS/SOP/W/015; Issue No:02: 2024	mg/l	0.31
15	Free Residual Chlorine as Cl2	IS 3025 (Part 26): 2021	mg/l	BDL (DL: 1.0)
16	Iron as Fe	IS 3025 (Part 53): 2024	mg/l	0.36

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007669F

Report Number : GLCS/TR01749/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01749/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.45	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'0.23"N** **77°26'21.72"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
17	Lead as Pb	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
18	Magnesium as Mg	IS 3025 (Part 46): 2023	mg/l	36.9
19	Manganese as Mn	IS 3025 (Part 59): 2023	mg/l	BDL (DL: 0.1)
20	Mercury as Hg	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.002)
21	Molybdenum as Mo	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)
22	Nitrate as NO3	IS 3025 (Part 34)/Sec 1: 2023	mg/l	BDL (DL: 2.0)
23	Odor	IS 3025 (Part 5): 2018	-	Agreeable
24	pH	IS 3025 (Part 11): 2022	-	7.65

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For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007669F

Report Number : GLCS/TR01749/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01749/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.45	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'0.23"N** **77°26'21.72"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
25	Phenols	IS 3025 PART 43 Section 1: 2022	mg/l	BDL (DL: 0.1)
26	Selenium as Se	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.005)
27	Sulphate as SO4	IS 3025 (Part 24) Section 1: 2022	mg/l	34.8
28	Sulphide as S (IodometricMethod)	GLCS/SOP/W/066: 2023	mg/l	BDL (DL: 1.0)
29	Total Alkalinity as CaCO3	IS 3025 (Part 23): 2023	mg/l	256.0
30	Total Dissolved Solids (TDS)	IS 3025 (Part 16): 2023	mg/l	778.0
31	Total Hardness as CaCO3	IS 3025 (Part 21): 2009 (Reaffirmed 2019)	mg/l	308.0
32	Total Suspended Solids (TSS)	IS 3025 (Part 17): 2022	mg/l	BDL (DL: 2.0)

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

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TC-6060

TEST REPORT

ULR-TC606025000007669F

Report Number : GLCS/TR01749/2025-26 **Report Date** : 22-06-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 2	**Sampling Method**	GLCS/SOP/W/025
Sampling Description	Liquid	**Sample Code**	GLCS/01749/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.45	**Date of Completion**	20-06-2025
Sampling Date	04-05-2025	**Sampling Receipt Date**	06-05-2025
Location Co-ordinates		**11° 6'0.23"N** **77°26'21.72"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
33	Turbidity	IS 3025 (Part 10): 2023	NTU	< 1
34	Zinc as Zn	GLCS/SOP/W/62 Issue No:1:Dated:10.09.2022	mg/l	BDL (DL: 0.01)

Note : BDL - Below Detection Limit, **DL -** Detection Limit,

For Global Lab and Consultancy Services LLP

Authorised Signatory
L.Sudha Priya
Technical Manager

*****End of Report*****

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TC-6060

TEST REPORT

ULR-TC606025000005661F

Report Number : GLCS/TR01749/2025-26 **Report Date** : 12-05-2025

Issued To : **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** Thiru.P.Jagadeesan,Director, No:11/32 Vettukattu Valasu, Ingur,Perundurai **Erode District**		**Site Address:** **TVL. V.K.P ENGINEERING IND PRIVATE LIMITED** ROUGH STONE GRAVEL QUARRY Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk **Tiruppur District**	
Attention	Mr. Sankar	**Sample Condition**	Good
TRF No.	TRF/0576/2025-26	**Sampled by**	Laboratory
Sample Name	BOREWELL WATER - 2	**Sampling Method**	GLCS/M/SOP/05
Sampling Description	Liquid	**Sample Code**	GLCS/01749/2025-26
Location Name	MUDALIPALAYAM	**Date of Analysis**	06-05-2025
Sampling Hours	05.45	**Date of Completion**	10-05-2025
Sampling Date	04-05-2025	**Avg Temperature**	25.2 °C
Sampling Receipt Date	06-05-2025	**Avg Humidity**	50 %
Location Co-ordinates		**11° 6'0.23"N** **77°26'21.72"E**	

Sl.No	TEST PARAMETER	TEST METHOD	UNITS	RESULT
1	Escherichia coli	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Absent
2	Total Coliforms	IS: 15185 - 2016(Reaffirmed 2021)	Per 100ml	Present

Global Lab and Consultancy Services LLP Laboratory Salem-636016

For Global Lab and Consultancy Services LLP

Authorised Signatory
A. Sathishkumar
Technical Manager- Microbiology

*****End of Report*****

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Web: www.glcs.in

SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ1 – Project area - Core
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11526,12061,12099,12536,00002,00247,00281,913,937,1287,1312,573,668,1665,1731, 2086,2124,2436,2450,2795,2802,3080,3087,3421,3428,**		
Location Coordinates	**11° 3'20.98"N 77°27'44.34"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	O3 (µg/m3)	NH3 (µg/m3)	CO (mg/ m3)
14.03.2025	15.30 – 15.30	41.3	21.2	BDL(DL:4.0)	18.9	BDL(DL:5.0)	BDL(DL:20.0)	BDL(DL:1.15)
21.03.2025	15.30 – 15.30	39.9	19.5	4.1	18.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
22.03.2025	15.40 – 15.40	40.4	19.1	BDL(DL:4.0)	19.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
28.03.2025	15.30 – 15.30	40.2	20.8	4.2	17.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
29.03.2025	15.40 – 15.40	38.6	19.1	4.4	16.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
04.04.2025	15.00 – 15.00	40.2	20.0	4.1	16.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
03.04.2025	15.10 – 15.10	39.7	19.5	4.4	17.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
11.04.2025	15.30 – 15.30	39.2	18.3	4.0	17.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
12.04.2025	15.40 – 15.40	38.3	17.9	BDL(DL:4.0)	16.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
18.04.2025	15.30 – 15.30	37.6	17.0	BDL(DL:4.0)	18.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
19.04.2025	15.40 – 15.40	39.7	19.5	4.2	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
25.04.2025	15.00 – 15.00	39.6	17.9	4.6	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
26.04.2025	15.10 – 15.10	38.9	18.7	4.2	17.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
02.05.2025	15.30 – 15.30	39.6	18.7	4.5	18.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
03.05.2025	15.40 – 15.40	39.1	19.1	4.4	19.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
09.05.2025	15.30 – 15.30	39.7	19.1	4.2	17.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
10.05.2025	15.40 – 15.40	38.9	18.7	4.3	20.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
16.05.2025	15.30 – 15.30	39.4	17.9	4.3	18.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
17.05.2025	15.40 – 15.40	39.8	19.5	5.9	20.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
23.05.2025	16.00 – 16.00	40.0	19.5	BDL(DL:4.0)	21.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
24.05.2025	16.10 – 16.10	38.2	19.4	BDL(DL:4.0)	20.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
30.05.2025	16.00 – 16.00	38.8	17.0	6.7	20.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
31.05.2025	16.10 – 16.10	38.1	19.1	5.7	20.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
06.06.2025	16.00 – 16.00	39.9	18.3	5.5	20.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
07.06.2025	16.10 – 16.10	39.6	17.6	5.1	18.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
NAAQ* Standard		<100	<60	<80	<80	<180	<400	<4

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

Verified by

Global Lab and Consultancy Services LLP * Salem 636016.

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ1 – Project area - Core
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11526,12061,12099,12536,00002,00247, 00281,913,937,1287, 1312,573,668,1665, 1731, 2086,2124,2436,2450,2795, 2802,3080,3087,3421,3428,**		
Location Coordinates	**11° 3'20.98"N 77°27'44.34"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	Ni (ng/m^3)	As (ng/m^3)	C6H6 (µg/m^3)	BaP (ng/m^3)	Pb (µg/m^3)	
14.03.2025	15.35 – 19.35	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
21.03.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
22.03.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
28.03.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
29.03.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
04.04.2025	15.00 – 15.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
05.04.2025	15.10 – 15.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
11.04.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
12.04.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
18.04.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
19.04.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
25.04.2025	15.00 – 15.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
26.04.2025	15.10 – 15.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
02.05.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
03.05.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
09.05.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
10.05.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
16.05.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
17.05.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
23.05.2025	16.00 – 16.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
24.05.2025	16.10 – 16.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
30.05.2025	16.00 – 16.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
31.05.2025	16.10 – 16.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
06.06.2025	16.00 – 16.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
07.06.2025	16.10 – 16.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
NAAQ* Standard		<20	<6.0	<5.0	<1.0	<1.0	

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

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Global Lab and Consultancy Services LLP ★ Salem 636016.

************End of Report************

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ2 – Project area - Core
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11627,12062,12100,12537,00003,00248,00282,914,1288,1313,574,669,1666,1732,2087,2125,2437, 2451,2796,2803,3081,3088,3422,3429,**		
Location Coordinates	**11° 3'28.09"N 77°27'55.56"E**		
Report Date	**01.07.2025**		

Date	Period. Hrs	PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	O3 (µg/m3)	NH3 (µg/m3)	CO (mg/ m3)
14.03.2025	16.45 – 16.45	42.7	22.0	4.5	18.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
21.03.2025	16.45 – 16.45	40.2	20.4	4.0	19.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
22.03.2025	16.55 - 16.55	41.2	20.4	4.6	19.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
28.03.2025	16.45 – 16.45	41.3	21.2	4.4	16.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
29.03.2025	16.55 – 16.55	39.7	19.5	4.3	16.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
04.04.2025	15.30 – 15.30	41.6	21.6	4.8	18.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
05.04.2025	15.40 – 15.40	40.1	20.0	5.1	17.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
11.04.2025	16.45 – 16.45	38.4	17.9	4.4	18.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
12.04.2025	16.55 - 16.55	39.1	19.2	4.5	17.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
18.04.2025	16.45 – 16.45	38.2	18.3	4.6	17.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
19.04.2025	16.55 - 16.55	40.8	20.8	4.3	16.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
25.04.2025	15.30 – 15.30	41.1	19.5	4.9	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
26.04.2025	15.40 – 15.40	39.6	19.5	4.8	18.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
02.05.2025	16.45 – 16.45	40.4	19.5	4.2	19.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
03.05.2025	16.55 - 16.55	38.8	18.7	4.6	20.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
09.05.2025	16.45 – 16.45	38.2	18.3	5.2	20.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
10.05.2025	16.55 - 16.55	39.8	19.1	4.7	17.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
16.05.2025	16.45 – 16.45	38.3	18.3	BDL(DL:4.0)	23.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
17.05.2025	16.55 - 16.55	40.1	20.0	4.7	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
23.05.2025	16.20 – 16.20	39.9	18.7	BDL(DL:4.0)	19.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
24.05.2025	16.30 – 16.30	39.6	18.3	4.6	19.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
30.05.2025	16.20 – 16.20	30.8	19.1	5.1	19.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
31.05.2025	16.30 – 16.30	40.7	20.4	4.6	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
06.06.2025	16.20 – 16.20	40.6	19.1	4.9	21.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
07.06.2025	16.30 – 16.30	41.9	20.4	4.6	16.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
NAAQ* Standard		<100	<60	<80	<80	<180	<400	<4

Note: BDL: Below Detection Limit; DL: Detection Limit

Remarks: The values observed for the pollutants given above are within the CPCB standards.

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ2 – Project area - Core
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11627,12062,12100,12537,00003,00248,00282,914, 938,1288,1313,574,669, 1666, 1732,2087,2125,2437,2451,2796,2803,3081,3088,3422,3429,**		
Location Coordinates	**11° 3'28.09"N 77°27'55.56"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	Ni (ng/m^3)	As (ng/m^3)	C6H6 (µg/m^3)	BaP (ng/m^3)	Pb (µg/m^3)	
14.03.2025	16.50 – 20.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
21.03.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
22.03.2025	16.55 – 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
28.03.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
29.03.2025	16.55 – 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
04.04.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
05.04.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
11.04.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
12.04.2025	16.55 -16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
18.04.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
19.04.2025	16.55 - 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
25.04.2025	15.30 – 15.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
26.04.2025	15.40 – 15.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
02.05.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
03.05.2025	16.55 - 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
09.05.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
10.05.2025	16.55 - 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
16.05.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
17.05.2025	16.55 - 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
23.05.2025	16.20 – 16.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
24.05.2025	16.30 – 16.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
30.05.2025	16.20 – 16.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
31.05.2025	16.30 – 16.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
06.06.2025	16.20 – 16.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
07.06.2025	16.30 – 16.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
NAAQ* Standard		<20	<6.0	<5.0	<1.0	<1.0	

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

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************End of Report************

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 3 – Perumtholuvu
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11628,12063,12101,12538,00004,00249,00283,00915, 939, 1289,1314,575,670,1667,1733,2088,2126,2438,2452,2797,2804,3082,3089,3423,3430,**		
Location Coordinates	**11° 2'47.89"N 77°26'3.81"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	O3 (µg/m3)	NH3 (µg/m3)	CO (mg/ m3)
14.03.2025	17.00 – 17.00	44.4	23.3	4.2	19.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
21.03.2025	17.00 – 17.00	41.3	21.2	4.1	17.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
22.03.2025	17.10 – 17.10	42.3	21.6	4.6	17.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
28.03.2025	17.00 – 17.00	42.7	22.4	4.2	16.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
29.03.2025	17.10 – 17.10	40.2	20.0	4.4	16.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
04.04.2025	16.10 – 16.10	42.7	22.4	4.6	16.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
05.04.2025	16.20 – 16.20	42.4	21.2	4.3	18.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
11.04.2025	17.00 – 17.00	40.1	19.1	BDL(DL:4.0)	16.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
12.04.2025	17.10 – 17.10	40.2	20.0	4.4	17.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
18.04.2025	17.00 – 17.00	39.6	19.1	4.4	17.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
19.04.2025	17.10 – 17.10	41.2	21.2	5.1	17.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
25.04.2025	16.10 – 16.10	43.21	21.2	4.9	17.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
26.04.2025	16.20 – 16.20	42.8	22.0	4.6	17.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
02.05.2025	17.00 – 17.00	41.2	20.8	4.4	19.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
03.05.2025	17.10 – 17.10	42.2	20.4	BDL(DL:4.0)	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
09.05.2025	17.00 – 17.00	43.6	22.9	4.9	19.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
10.05.2025	17.10 – 17.10	42.1	21.6	4.6	17.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
16.05.2025	17.00 – 17.00	40.4	19.1	4.3	17.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
17.05.2025	17.10 – 17.10	41.3	21.2	5.5	17.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
23.05.2025	16.45 – 16.45	40.4	20.4	BDL(DL:4.0)	19.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
24.05.2025	16.55 – 16.55	40.4	19.1	4.7	19.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
30.05.2025	16.45 – 16.45	42.6	21.2	5.7	19.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
31.05.2025	16.55 – 16.55	41.1	21.2	BDL(DL:4.0)	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
06.06.2025	16.45 – 16.45	44.4	23.3	4.8	19.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
07.06.2025	16.55 – 16.55	43.1	22.5	5.4	16.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
NAAQ* Standard		<100	<60	<80	<80	<180	<400	<4

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 3 – Perumtholuvu
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11628,12063,12101,12538,00004,00249,00283,00915, 939, 1289,1314,575,670,1667, 1733,2088, 2126,2438,2452,2797,2804,3082,3089,3423,3430,**		
Location Coordinates	**11° 2'47.89"N 77°26'3.81"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	Ni (ng/m^3)	As (ng/m^3)	C6H6 (µg/m^3)	BaP (ng/m^3)	Pb (µg/m^3)	
14.03.2025	17.05 – 21.05	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
21.03.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
22.03.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
28.03.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
29.03.2025	17.10 - 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
04.04.2025	16.10 – 16.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
05.04.2025	16.20 – 16.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
11.04.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
12.04.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
18.04.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
19.04.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
25.04.2025	16.10 – 16.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
26.04.2025	16.20 – 16.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
02.05.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
03.05.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
09.05.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
10.05.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
16.05.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
17.05.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
23.05.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
24.05.2025	16.55 – 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
30.05.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
31.05.2025	16.55 – 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
06.06.2025	16.45 – 16.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
07.06.2025	16.55 – 16.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
NAAQ* Standard		<20	<6.0	<5.0	<1.0	<1.0	

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

Global Lab and Consultancy Services LLP * Salem 636016.

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************End of Report************

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 4 – Saavadipalayam
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11629,12064,12102,12539, 00005,00250,00284,916,940, 1290,1315,576,671,1668,1734, 2089,2127,2439,2453,2798,2805,3083,3090,3424,3431,**		
Location Coordinates	**11° 5'15.92"N 77°31'2.36"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	O3 (µg/m3)	NH3 (µg/m3)	CO (mg/ m3)
14.03.2025	17.20 – 17.20	42.2	21.6	4.3	7.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
21.03.2025	17.20 - 17.20	42.6	22.4	4.1	18.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
22.03.2025	17.30 – 17.30	43.7	22.4	4.5	18.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
28.03.2025	17.20 – 17.20	43.2	23.7	4.5	17.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
29.03.2025	17.30 – 17.30	41.4	20.8	4.5	17.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
04.04.2025	16.40 – 16.40	43.3	23.7	4.2	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
05.04.2025	16.50 – 16.50	43.9	23.3	4.3	17.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
11.04.2025	17.20 - 17.20	41.3	20.0	4.2	17.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
12.04.2025	17.30 – 17.30	41.4	21.2	4.7	17.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
18.04.2025	17.20 - 17.20	40.2	20.0	4.2	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
19.04.2025	17.30 – 17.30	44.7	20.8	5.0	18.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
25.04.2025	16.40 – 16.40	44.4	23.7	5.2	17.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
26.04.2025	16.50 – 16.50	44.2	21.5	4.6	19.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
02.05.2025	17.20 - 17.20	44.6	22.5	4.6	19.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
03.05.2025	17.30 – 17.30	43.2	22.0	4.5	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
09.05.2025	17.20 - 17.20	44.8	23.7	BDL(DL:4.0)	18.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
10.05.2025	17.30 – 17.30	45.2	22.9	BDL(DL:4.0)	17.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
16.05.2025	17.20 - 17.20	41.6	21.2	BDL(DL:4.0)	19.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
17.05.2025	17.30 – 17.30	42.4	22.0	4.3	19.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
23.05.2025	17.00 – 17.00	41.3	21.2	4.9	19.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
24.05.2025	17.10 – 17.10	41.3	20.0	5.6	17.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
30.05.2025	17.00 – 17.00	41.9	20.2	4.8	19.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
31.05.2025	17.10 – 17.10	39.2	20.0	4.1	18.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
06.06.2025	17.00 – 17.00	42.1	21.2	4.2	17.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
07.06.2025	17.10 – 17.10	42.3	21.6	4.5	18.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
NAAQ* Standard		<100	<60	<80	<80	<180	<400	<4

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

Salem 636016. Global Lab and Consultancy Services LLP

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 4 – Saavadipalayam
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11629,12064,12102,12539,00005,00250,00284,916,940, 1290,1315,575,576,671,1668, 1734,2089,2127,2439,2453,2798,2805,3083,3090,3424,3431,**		
Location Coordinates	**8 11° 5'15.92"N 77°31'2.36"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	Ni (ng/m^3)	As (ng/m^3)	C6H6 (µg/m^3)	BaP (ng/m^3)	Pb (µg/m^3)	
14.03.2025	17.25 – 21.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
21.03.2025	17.20 – 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
22.03.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
28.03.2025	17.20 – 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
29.03.2025	17.30 - 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
04.04.2025	16.40 – 16.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
05.04.2025	16.50 – 16.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
11.04.2025	17.20 - 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
12.04.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
18.04.2025	17.20 – 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
19.04.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
25.04.2025	16.40 – 16.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
26.04.2025	16.50 – 16.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
02.05.2025	17.20 - 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
03.05.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
09.05.2025	17.20 – 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
10.05.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
16.05.2025	17.20 - 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
17.05.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
23.05.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
24.05.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
30.05.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
31.05.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
06.06.2025	17.00 – 17.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
07.06.2025	17.10 – 17.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
NAAQ* Standard		<20	<6.0	<5.0	<1.0	<1.0	

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

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************End of Report************

GLOBAL LAB AND CONSULTANCY SERVICES LLP
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SUMMARY REPORT

Isued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 5 – Sanarpatti
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11626,12065,12103,12540,00006,00251,00285,917,941,** 1291,1316,577,672,1669,1735,2090,**2128,2440,2454,2799,2806,3084,3091,3425,3432,**		
Location Coordinates	**11° 1'20.49"N 77°29'16.88"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	O3 (µg/m3)	NH3 (µg/m3)	CO (mg/ m3)
14.03.2025	17.40 – 17.40	46.6	24.1	4.2	18.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
21.03.2025	17.40 – 17.40	43.8	23.7	4.6	17.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
22.03.2025	17.50 – 17.50	42.9	21.2	5.3	18.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
28.03.2025	17.40 – 17.40	41.2	21.2	4.5	18.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
29.03.2025	17.50 – 17.50	42.2	21.2	4.2	17.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
04.04.2025	17.15 – 17.15	44.1	24.9	4.7	19.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
05.04.2025	17.25 – 17.25	44.8	24.5	5.0	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
11.04.2025	17.40 – 17.40	42.3	21.2	4.3	19.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
12.04.2025	17.50 – 17.50	42.3	20.8	4.1	18.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
18.04.2025	17.40 – 17.40	41.5	21.2	4.1	16.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
19.04.2025	17.50 – 17.50	43.6	22.5	4.3	16.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
25.04.2025	17.15 – 17.15	41.7	21.6	5.1	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
26.04.2025	17.25 – 17.25	41.1	21.6	4.4	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
02.05.2025	17.40 – 17.40	42.3	20.4	4.5	17.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
03.05.2025	17.50 – 17.50	42.3	21.6	BDL(DL:4.0)	17.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
09.05.2025	17.40 – 17.40	42.1	19.5	4.1	17.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
10.05.2025	17.50 – 17.50	41.5	20.8	4.3	16.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
16.05.2025	17.40 – 17.40	42.4	21.6	BDL(DL:4.0)	18.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
17.05.2025	17.50 – 17.50	42.8	22.4	BDL(DL:4.0)	17.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
23.05.2025	17.20 – 17.20	42.6	21.6	5.6	19.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
24.05.2025	17.30 – 17.30	41.6	20.4	4.9	19.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
30.05.2025	17.20 - 17.20	46.4	23.3	4.6	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
31.05.2025	17.30 – 17.30	42.2	21.6	4.2	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
06.06.2025	17.20 - 17.20	45.2	24.1	4.4	17.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
07.06.2025	17.30 – 17.30	44.8	22.0	4.0	18.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
NAAQ* Standard		<100	<60	<80	<80	<180	<400	<4

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 5 – Sanarpatti
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11630,12065,12103,12540,00006,00251,00285,917,941,** 1291,1316,577,672,1669, 1735, **2090,2128,2440,2454,2799,2806,3084,3091,3425,3432,**		
Location Coordinates	**11° 1'20.49"N 77°29'16.88"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	Ni (ng/m^3)	As (ng/m^3)	C6H6 (µg/m^3)	BaP (ng/m^3)	Pb (µg/m^3)	
14.03.2025	17.45 – 21.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
21.03.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
22.03.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
28.03.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
29.03.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
04.04.2025	17.15 – 17.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
05.04.2025	17.25 – 17.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
11.04.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
12.04.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
18.04.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
19.04.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
25.04.2025	17.15 – 17.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
26.04.2025	17.25 – 17.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
02.05.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
03.05.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
09.05.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
10.05.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
16.05.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
17.05.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
23.05.2025	17.20 – 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
24.05.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
30.05.2025	17.20 – 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
31.05.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
06.06.2025	17.20 - 17.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
07.06.2025	17.30 – 17.30	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
NAAQ* Standard		<20	<6.0	<5.0	<1.0	<1.0	

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

Global Lab and Consultancy Services LLP ★ Salem 636016.

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**********End of Report**********

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 6 - Mudalipalayam
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11631,12066,12104,12541,00007,00252,00286,918,942,** 1292,1317,578,673,1670,1736,2091,**2129,2441,2455,2800,2807,3085,3092,3426,3433,**		
Location Coordinates	**11° 6'0.73"N 77°26'23.30"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	O3 (µg/m3)	NH3 (µg/m3)	CO (mg/ m3)
14.03.2025	18.00 – 18.00	40.2	20.8	4.2	17.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
21.03.2025	18.00 - 18.00	42.7	22.4	4.5	17.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
22.03.2025	18.10 – 18.10	41.7	20.8	4.3	17.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
28.03.2025	18.00 – 18.00	44.4	24.5	4.6	17.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
29.03.2025	18.10 – 18.10	43.3	21.6	4.6	16.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
04.04.2025	17.45 – 17.45	45.0	25.3	5.1	18.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
05.04.2025	17.55 - 17.55	43.6	23.7	4.4	17.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
11.04.2025	18.00 - 18.00	41.9	20.4	4.4	18.8	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
12.04.2025	18.10 – 18.10	44.7	22.8	4.6	18.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
18.04.2025	18.00 - 18.00	42.7	22.4	4.0	17.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
19.04.2025	18.10 – 18.10	42.5	20.4	4.1	16.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
25.04.2025	17.45 – 17.45	42.9	22.0	4.8	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
26.04.2025	17.55 - 17.55	43.4	23.3	4.8	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
02.05.2025	18.00 - 18.00	43.6	22.9	4.7	18.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
03.05.2025	18.10 – 18.10	41.5	20.8	5.1	17.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
09.05.2025	18.00 - 18.00	41.7	19.1	4.3	17.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
10.05.2025	18.10 – 18.10	43.3	21.6	4.9	20.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
16.05.2025	18.00 - 18.00	43.3	22.9	4.6	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
17.05.2025	18.10 – 18.10	43.2	22.9	BDL(DL:4.0)	18.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
23.05.2025	17.40 – 17.40	41.7	20.4	6.4	17.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
24.05.2025	17.50 – 17.50	42.7	21.2	4.7	19.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
30.05.2025	17.40 – 17.40	40.6	20.4	4.3	19.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
31.05.2025	17.50 – 17.50	41.3	19.5	5.0	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
06.06.2025	17.40 – 17.40	43.1	22.5	4.1	18.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
07.06.2025	18.10 – 18.10	46.4	24.5	4.4	17.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
NAAQ* Standard		<100	<60	<80	<80	<180	<400	<4

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

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LABORATORY | CONSULTANCY | SUSTAINABILITY
S.F.No.92/3A2, Geetha Nagar,
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Salem - 636 016. Tamil Nadu.
Phone: 0427 - 2970989 / +91 70944 53636
E-Mail: lab@glcs.in
Web: www.glcs.in

SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 6 - Mudalipalayam
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11632,12066,12104,12541,00007, 00252,00286,918,942,** 1292, 1317,578,673,1670, 1736, **2091,2129,2441,2455,2800,2807,3085,3092,** 3426,3433,		
Location Coordinates	**11° 6'0.73"N 77°26'23.30"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	Ni (ng/m^3)	As (ng/m^3)	C6H6 (µg/m^3)	BaP (ng/m^3)	Pb (µg/m^3)	
14.03.2025	18.05 – 22.05	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
21.03.2025	18.00 – 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
22.03.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
28.03.2025	18.00 – 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
29.03.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
04.04.2025	17.45 – 17.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
05.04.2025	17.55 – 17.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
11.04.2025	18.00 - 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
12.04.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
18.04.2025	18.00 - 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
19.04.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
25.04.2025	17.45 – 17.45	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
26.04.2025	17.55 - 17.55	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
02.05.2025	18.00 - 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
03.05.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
09.05.2025	18.00 - 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
10.05.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
16.05.2025	18.00 - 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
17.05.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
23.05.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
24.05.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
30.05.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
31.05.2025	17.50 – 17.50	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
06.06.2025	17.40 – 17.40	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
07.06.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
NAAQ* Standard		<20	<6.0	<5.0	<1.0	<1.0	

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

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**********End of Report**********

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 7 – Alagumalai
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11632,12067,12105,12542,00008,00253,00287,919,943,** 1293,1318,579,674,1671,1737, **2092,2130,2442,2456,2801,2808,3086,3093,3427,3434,**		
Location Coordinates	**11° 0'29.65"N 77°26'29.32"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	PM10 (µg/m3)	PM2.5 (µg/m3)	SO2 (µg/m3)	NO2 (µg/m3)	O3 (µg/m3)	NH3 (µg/m3)	CO (mg/ m3)
14.03.2025	18.15 – 18.15	41.1	21.2	4.4	19.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
21.03.2025	18.15 – 18.15	44.6	24.9	4.6	18.15	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
22.03.2025	18.25 – 18.25	43.9	22.0	4.3	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
28.03.2025	18.15 – 18.15	43.6	23.7	4.8	17.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
29.03.2025	18.25 – 18.25	44.8	22.0	4.5	17.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
04.04.2025	18.15 – 18.15	44.9	24.5	4.5	17.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
05.04.2025	18.25 – 18.25	42.1	22.4	4.2	18.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
11.04.2025	18.15 – 18.15	40.4	19.9	BDL(DL:4.0)	18.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
12.04.2025	18.25 – 18.25	43.8	22.4	4.7	18.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
18.04.2025	18.15 – 18.15	41.9	21.6	4.3	17.5	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
19.04.2025	18.25 – 18.25	41.4	21.6	4.0	17.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
25.04.2025	18.15 – 18.15	43.6	22.5	4.7	19.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
26.04.2025	18.25 – 18.25	40.2	20.4	4.5	18.6	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
02.05.2025	18.15 – 18.15	45.5	23.3	4.6	19.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
03.05.2025	18.25 – 18.25	44.9	22.5	5.4	1737	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
09.05.2025	18.15 – 18.15	44.2	22.5	5.5	18.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
10.05.2025	18.25 – 18.25	41.4	22.5	4.7	18.4	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
16.05.2025	18.15 – 18.15	42.7	22.0	6.1	19.1	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
17.05.2025	18.25 – 18.25	43.5	23.7	BDL(DL:4.0)	17.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
23.05.2025	18.00 – 18.00	42.9	21.2	5.9	17.3	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
24.05.2025	18.10 – 18.10	41.8	20.8	BDL(DL:4.0)	20.2	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
30.05.2025	18.00 – 18.00	44.3	22.9	4.1	17.7	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
31.05.2025	18.10 – 18.10	42.5	21.2	4.6	18.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
06.06.2025	18.00 – 18.00	46.2	23.3	4.5	17.0	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
07.06.2025	18.10 – 18.10	45.2	22.9	5.3	16.9	BDL(DL:5.0)	BDL(DL:20.0	BDL(DL:1.15)
NAAQ* Standard		<100	<60	<80	<80	<180	<400	<4

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

Global Lab and Consultancy Services LLP ★ Salem 636016.

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SUMMARY REPORT

Issued To	***V.K.P Engineering Ind Private Limited,*** Thiru.P.Jagadeesan,Director, No:11/32, Vettukattu Valasu, Ingur,Perundurai, Erode District, Tamil Nadu , India		
Site Location	*ROUGH STONE GRAVEL QUARRY, Lease Area: 1.64.38Ha, Sf.No:543/2, Lease Area: 4.51.0 Ha, Sf.No:536, 537/1, 537/2 and Lease Area: 2.90.0 Ha, Sf.No:537/3, 538/2A, 538/2B,539/2B Peruntholuvu Village, Thiruppur South Taluk , Tiruppur District, TAMILNADU, India*		
Sampling Method	GLCS/SOP/AAQ/015	**Sample Drawn by**	Laboratory
Sample Name	Air Quality Monitoring	**Sampling Location**	AAQ 7 – Alagumalai
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sample Code	**GLCS/11632,12067,12105,12542,00008,00253,00287,919,943,** 1293, 1318,579,674,1671,1737, **2092,2130,2442,2456,** 2801,2808,3093, **3427,3434,**		
Location Coordinates	**11° 0'29.65"N 77°26'29.32"E**		
Report Date	**01.07.2025**		

Date	Period. hrs	Ni (ng/m³)	As (ng/m³)	C6H6 (µg/m³)	BaP (ng/m³)	Pb (µg/m³)	
14.03.2025	18.20 – 22.20	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
21.03.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
22.03.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
28.03.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
29.03.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
04.04.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
05.04.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
11.04.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
12.04.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
18.04.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
19.04.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
25.04.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
26.04.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
02.05.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
03.05.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
09.05.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
10.05.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
16.05.2025	18.15 – 18.15	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
17.05.2025	18.25 – 18.25	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
23.05.2025	18.00 – 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
24.05.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
30.05.2025	18.00 – 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
31.05.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
06.06.2025	18.00 – 18.00	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
07.06.2025	18.10 – 18.10	BDL (DL:.1)	BDL (DL:1)	BDL (DL:1.0)	BDL (DL:0.5)	BDL (DL:0.01)	
NAAQ* Standard		<20	<6.0	<5.0	<1.0	<1.0	

Note: BDL: Below Detection Limit; DL: Detection Limit
Remarks: The values observed for the pollutants given above are within the CPCB standards.

Global Lab and Consultancy Services LLP * Salem 636016.

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*************End of Report*************

QUALITY COUNCIL® OF INDIA
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National Accreditation Board for Education and Training

Certificate of Accreditation

Geo Exploration & Mining Solutions, Salem

No. 17, Advaitha Ashram Road, Fairlands, Salem – 636 004, Tamilnadu, India.

*The organization is accredited as **Category-A** under the QCI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3: for preparing EIA-EMP reports in the following Sectors –*

S.No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1	Mining of minerals opencast only	1	1 (a) (i)	A
2	Industrial estates/ parks/ complexes/areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather Complexes	31	7 (c)	B
3	Building and construction projects	38	8(a)	B

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated Jan 06, 2023 and posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no QCI/NABET/ENV/ACO/23/2684 dated Feb 20, 2023. The accreditation needs to be renewed before the expiry date by Geo Exploration & Mining Solutions, Salem following due process of assessment.

Sr. Director, NABET
Dated: Feb 20, 2023

Certificate No.
NABET/EIA/2225/RA 0276

Valid up to
August 06, 2025

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to the QCI-NABET website.

Inspection Report- 1.64.38

அனுப்புநர்

திரு.கெகரிசங்கர்.எம்.எஸ்.சி.எம்.பில்.,
வட்டாட்சியர்,
திருப்பூர் தெற்கு.

பெறுநர்:

சார் ஆட்சியர்,
திருப்பூர்.

ந.க.எண்.3887/2023/அ1, நாள்: .02.2024.

அம்மையீர்,

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல எண்.543-இல் 1.64.38 ஹெக் பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 5 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி - Tvl.VKP.Engineers Ind.(p) Ltd நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் என்பவர் குவாரி உரிமம் கோரியது - அறிக்கை அனுப்புதல் - தொடர்பாக.

பொருள்:
1. தி/வா. Tvl.VKP.Engineers Ind.(p) Ltd நிறுவனத்தின் விண்ணப்பம்
2. திருப்பூர் சார் ஆட்சியர் அவர்களின் ந.க.எண்.5664/2023/அ3, நாள்:20.10.2023.
3. திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களின் ந.க.எண்.3887/2023/அ1, நாள்:09.11.2023.
4. தெற்கு அவினாசிபாளையம் நில வருவாய் ஆய்வாளர் அயிக்கை, நாள்:28.11.2023, இவ்வலுவலக நாள்:02.01.2023.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் விஸ்தீரண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் அளித்துள்ளதின் பேரில் பார்வை 4-இல் காணும் நில வருவாய் ஆய்வாளர் சமர்ப்பித்துள்ள அறிக்கையின் அடிப்படையில் புலத்தணிக்கை மற்றும் விசாரணை மேற்கொண்டு எனதறிக்கையினை கீழ்கண்டுள்ளவாறு சமர்ப்பித்துக்கொள்கிறேன்.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரும் புல எண்கள் மற்றும் உரிமையாளர்கள் குறித்த விபரம் பின்வருமாறு.

வ.எண்.	உரிமையாளரின் பெயர் முகவரி (திருவாளர்கள்)	ஆவண எண். (தொட்டிபாளையம் சார்பதிவாளர் அலுவலகம்)	புல எண்.	பரப்பு (பு.ஏக்கர்)

1.	சிவகாமி, க/பெ.பழனிசாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம்	4244/2021, 24.08.2021	543	4.06
2.	சரோஜினி, க/பெ.நஞ்சப்பன், 116, முருங்கத்தொழுவு கிராமம், பெருந்துறை வட்டம்.			

மேற்காண் புலத்திற்குரிய தற்போதைய உட்பிரிவு எண் 543/2 என்பதாகும் மேலும் மேற்காண் புலத்திற்குரிய கணிணி சிட்டா எண் 2844-ல் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது.

மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 543/2-இல் பு.ஹெக் 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீரண நிலத்தில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 10.11.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டு அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை எனவே.

மேற்படி தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்.543/2 நெ. காலையில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என கிராம நிர்வாக அலுவலரிடம் பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள்.543/2 -இல் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக பிரஸ்தாப புலமானது புலத்தணிக்கை செய்யப்பட்டதில் கீழ் கண்டவாறு புலத்தின் தன்மை உள்ளது.

1. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.

2. பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.

3. பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.

4. பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.

5. பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை. பிரஸ்தாப புலமான 543/2 நெ.காலையின் மேல்புற எல்லையில் இருந்து சுமார் 35 மீட்டர்தூரத்தில் புல எண் 543/1 நெ.காலையில் உயர் மின்னழுத்த கோபுரம் செல்கிறது.

6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்களில் கவரப்படுவதில்லை மேலும்,

8. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே இந்நேர்வில் V.K.P Engineers India (P) Ltd நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம்,புல எண் 543 -இல் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க பரிந்துரை செய்து இத்துடன் நில வருவாய் ஆய்வாளர் அறிக்கை, கிராம நிர்வாக அலுவலர் அறிக்கை, அ1 விளம்பர அறிவிப்பு, மனுதாரர் மற்றும் பொதுமக்கள் வாக்குமூலம், கிராமக்கணக்கு நகல்கள், தொடர்புடைய ஆவணங்களை இணைத்தனுப்பியுள்ளேன் என்பதையும் பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

இணைப்பு-மேற்கண்டவாறு,

தங்கள் உண்மையுள்ள

வட்டாட்சியர்,
திருப்பூர் தெற்கு.

15/04/24

புலத்தணிக்கை குறிப்பு

கிராமம் பெருந்தெழுவு கிராமம

புல எண்: புல எண்.543

தணிக்கை நாள்: .05.2024.

நோக்கம் குவாரி குத்தகை உரிமம் கோரியது.

திருப்பூர் மாவட்டம், திருப்பூர் வருவாய் கோட்டம், திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் விஸ்தீரண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் அளித்துள்ளதின் பேரில் பார்வையில் காணும் திருப்பூர் தெற்கு வட்டாட்சியரின் அறிக்கையில் அளித்துள்ளதின் போரில் புலத்தணிக்கை மேற்கொள்ளப்பட்டது. புலுத்தணிக்கையின் போது திருப்பூர் தெற்கு வட்டாட்சியர், தெற்க அவிநாசிபாளையம் நில வருவாய் ஆய்வாளர், உள்வட்ட அளவர் மற்றும் பெருந்தெழுவு கிராம நிர்வாக அலுவலர் ஆகியோர் உடனிருந்தனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள்.543/2 -இல் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக பிரஸ்தாப புலமானது புலத்தணிக்கை செய்யப்பட்டதில் கீழ் கண்டவாறு புலத்தின் தன்மை உள்ளது.

1. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.

2. பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள்எதுவுமில்லை.

3. பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.

4. பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள்எதுவுமில்லை.

5. பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள்செல்வதில்லை.

6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்களில் கவரப்படுவதில்லை மேலும்,

8. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே இந்நேர்வில் திருப்பூர் தெற்கு வட்டாட்சியரின் அறிக்கையின் பேரில் V.K.P Engineers India (P) Ltd நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம்,புல எண் 543 -இல் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது குறித்து பரிந்துரை செய்து திருப்பூர் மாவட்ட ஆட்சியர் அவர்களுக்கு அனுப்பும் பொருட்டு வரைவு ஒப்புதலுக்காக வைக்கப்பட்டுள்ளது.

சார் ஆட்சியர்(பொ),
திருப்பூர்.

அனுப்புநர்
திரு.ராம்குமார்,
சார் ஆட்சியர்(பொ),
திருப்பூர்.

பெறுநர்
மாவட்ட ஆட்சியர்,
திருப்பூர்.

மூ.மு.எண்.5352/2023/அ3,நாள்: .05.2024.

அய்யா,

பொருள்: **கனிமங்களும் சுரங்கங்களும்** - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல எண்.543-இல் 1.64.38 ஹெக் பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 5 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி - Tvl.VKP.Engineers Ind.(p) Ltd நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் என்பவர் குவாரி உரிமம் கோரியது - அறிக்கை அனுப்புதல் - தொடர்பாக.

பொருள்: திருப்பூர் தெற்கு வட்டாட்சியரின் ந.க.எண்:3887/2023/அ1, நாள்: 15.02.2024

திருப்பூர் மாவட்டம், திருப்பூர் வருவாய் கோட்டம், திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் விஸ்தீரண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் அளித்துள்ளதின் பேரில் பார்வையில் காணும் திருப்பூர் தெற்கு வட்டாட்சியரின் அறிக்கையின் பேரில் புலத்தணிக்கை மேற்கொண்டு எனத்தறிக்கையினை பின்வருமாறு சமர்பித்துக்கொள்கிறேன்.

திருப்பூர் மாவட்டம்,திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரும் புல எண்கள் மற்றும் உரிமையாளர்கள் குறித்த விபரம் பின்வருமாறு.

வ.எண்.	உரிமையாளரின் பெயர் முகவரி (திருவாளர்கள்)	ஆவண எண். (தொட்டிபாளையம் சார்பதிவாளர் அலுவலகம்)	புல எண்.	பரப்பு (பு.ஏக்கர்)
1.	சிவகாமி, க/பெ.பழனிசாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம்	4244/2021, 24.08.2021	543	4.06

2.	சரோஜினி, க/பெ.நஞ்சப்பன், 116, முருங்கத்தொழுவு கிராமம், பெருந்துறை வட்டம்.			

மேற்காண் புலத்திற்குரிய தற்போதைய உட்பிரிவு எண் 543/2 என்பதாகும் மேலும் மேற்காண் புலத்திற்குரிய கனிணி சிட்டா எண் 2844-ல் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது.

மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 543/2-இல் பு.ஹெக் 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீரண நிலத்தில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 10.11.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டு அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை எனவே.

மேற்படி தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்.543/2 நெ. காலையில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என கிராம நிர்வாக அலுவலரிடம் பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள்.543/2 -இல் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக பிரஸ்தாப புலமானது புலத்தணிக்கை செய்யப்பட்டதில் கீழ் கண்டவாறு புலத்தின் தன்மை உள்ளது.

1. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.

2. பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள்எதுவுமில்லை.

3. பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.

4. பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள்எதுவுமில்லை.

5. பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள்செல்வதில்லை.

6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்களில் கவரப்படுவதில்லை மேலும்,

8. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே இந்நேர்வில் திருப்பூர் தெற்கு வட்டாட்சியரின் அறிக்கையின் பேரில் V.K.P Engineers India (P) Ltd நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம்,புல எண் 543 -இல் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கலாம் என்பதை பணிவுடன் தெரிவித்துக்கொள்கிறேன்.

சார் ஆட்சியர்(பொ),
திருப்பூர்.

5887/2023

000084

வட்டாட்சியர் அலுவலகம்,
திருப்பூர் தெற்கு.
நாள்:09.11.2023.

ந.க.எண்:3887/2023/அ1.

குறிப்பாணை

வட்டாட்சியர் அலுவலகம் திருப்பூர் (தெற்கு) 02 JAN 2024

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல எண்.543-இல் 1.64.38 ஹெக் பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 5 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி - Tvl.VKP.Engineers Ind.(p) Ltd நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் என்பவர் குவாரி உரிமம் கோரியது - அறிக்கை கோருதல் - தொடர்பாக.

பார்வை: திருப்பூர் சார் ஆட்சியர் அலுவலக கடித ந.க.எண்.5664/2023/2023/அ3, நாள்:30.10.2023.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம் புல எண்.543-இல் 1.64.38 ஹெக் பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 5 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி - Tvl.VKP.Engineers Ind.(p) Ltd நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் என்பவர் குவாரி உரிமம் கோரியது மனு அளித்தது தொடர்பாக.

1. குத்தகை வழங்கக் கேட்கும் புலத்தின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைக் கற்கள் நடப்பட்டுள்ளதா?
2. குவாரி குத்தகை தொடர்பாக பொதுமக்கள் ஆட்சேபனை ஏதும் உள்ளதா என "ஏ1" விளம்பரம் மூலம் கண்டறிந்தும் மேலும்,
3. குத்தகை வழங்க கேட்கும் புலத்திலிருந்து 300 மீட்டர் சுற்றளவிற்குள் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள் மற்றும் கட்டுமானங்கள் ஏதும் உள்ளதா எனவும்,
4. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் நிலத்தின் மீதான உரிமை (Surface right) விலை வைப்பதாரருக்கு உள்ளதா? போன்ற விபரங்களுடன் மேலும் இத்துடன்

கிராம கணக்குகளு ன் நகல் மற்றும் பிரசித்தம் செய்யப்பட்ட ஏ1 நோட்டீஸ் நகலுடன் குவாரி உரியம் வழங்குவது தொடர்பான தங்களது குறிப்பான பரிந்துரை அறிக்கையை (Google Map 300M, Mining plan) உடன் அனுப்பி வைக்குமாறு தெற்கு அவினாசிபாளையம் நில வருவாய் ஆய்வாளர் கேட்டுக்கொள்ளப்படுகிறார்.

இணைப்பு-மேற்கண்டவாறு

ஒம்/-எஸ்.கௌரிசங்கர்
வட்டாட்சியர்,
திருப்பூர் தெற்கு.

பெறுநர்:-
நில வருவாய் ஆய்வாளர்,
தெற்கு அவினாசிபாளையம்.

/உண்மைநகல்/உத்தரவுப்படி/

வட்டாட்சியருக்காக

09/11/23

605 A

619 A

நில வருவாய் ஆய்வாளர் அலுவலகம்,
தெற்கு அவினாசிபாளையம்.
நாள்: 28.11.2023.

பார்வை :
1. மனுதாரர் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம்.
2. திருப்பூர் சார் ஆட்சியர் அவர்களின் ந.க.எண் 5664/2023/அ3, நாள்: 20.10.2023.
3. திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களின் ந.க.எண் 3887/2023/அ1, நாள்: 09.11.2023.
4. பெருந்தொழுவு கிராம நிர்வாக அலுவலரின் அறிக்கை, நாள்: 27.11.2023.

பணிந்தனுப்பப்படுகிறது.

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் செய்துள்ளதன் நேர்வில், அறிக்கை அனுப்பி வைக்குமாறு பார்வை 3-ல் காணும் குறிப்பாணையில் தெரிவிக்கப்பட்டதன் பேரில் கிராம நிர்வாக அலுவலர் சமர்ப்பித்துள்ள அறிக்கையின் அடிப்படையில் புலத்தணிக்கை மற்றும் விசாரணை மேற்கொண்டு எனதறிக்கையினை பின்வருமாறு சமர்ப்பித்து கொள்கிறேன்

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரும் புல எண்கள், உரிமையாளர்கள் குறித்த விபரம் பின்வருமாறு.

வ. எண்	உரிமையாளரின் பெயர் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார்பதிவாளர் அலுவலகம்)	புல எண்	பரப்பு (பு.ஏக்கர்)
1	சிவகாமி, க/பெ.பழனிச்சாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம், திருப்பூர் தெற்கு வட்டம்.	4244/2021, 24.08.2021	543	4.06
2	சரோஜினி, க/பெ.நஞ்சப்பன், 116, முருங்கத்தொழுவு கிராமம், பெருந்துறை வட்டம்.			

மேற்காண் புலத்திற்குரிய தற்போதைய உட்பிரிவு எண் 543/2 என்பதாகும். மேலும் மேற்காண் புலத்திற்குரிய கனிணி சிட்டா எண் 2844-ல் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது.

மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 543/2 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 10.11.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டது. அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை.

மேற்படி தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 543/2 நெ. காலையில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 543/2 நெ. காலையில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக பிரஸ்தாப புலமானது புலத்தணிக்கை செய்யப்பட்டது.

1. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.
2. பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.
3. பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.
4. பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.
5. பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை. பிரஸ்தாப புலமான 543/2 நெ.காலையின் மேல்புற எல்லையில் இருந்து சுமார் 35 மீட்டர்தூரத்தில் புல எண் 543/1 நெ.காலையில் உயர் மின்னழுத்த கோபுரம் செல்கிறது.
6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.
7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்களில் கவரப்படுவதில்லை.

8. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே இந்நேர்வில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், புல எண் 543 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க பரிந்துரை செய்யலாம் எனவும், இத்துடன் கி.நி.அலுவலர் அறிக்கை, அ1 விளம்பர அறிவிப்பு, மனுதாரர்/பொதுமக்கள் வாக்குமூலம், கிராமக்கணக்கு நகல்கள் மற்றும் ஆவணங்களை இணைத்தனுப்பியுள்ளேன் என்பதையும் பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

நில வருவாய் ஆய்வாளர்
தெற்கு அவினாசிபாளையம் உள்வட்டம்,
திருப்பூர் தெற்கு வட்டம்.

பெறுநர்:
வட்டாட்சியர்,
திருப்பூர் தெற்கு.

கிராம நிர்வாக அலுவலகம்,
பெருந்தொழுவு.
நாள்: 27.11.2023.

பார்வை :
1. மனுதாரர் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம்.
2. திருப்பூர் சார் ஆட்சியர் அவர்களின் ந.க.எண் 5664/2023/அ3, நாள்: 20.10.2023.
3. திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களின் ந.க.எண் 3887/2023/அ1, நாள்: 09.11.2023.

பணிந்தனுப்பப்படுகிறது.

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் செய்துள்ளதன் நேர்வில், அறிக்கை அனுப்பி வைக்குமாறு பார்வை 3-ல் காணும் குறிப்பாணையில் தெரிவிக்கப்பட்டதன் பேரில் புலத்தணிக்கை மற்றும் விசாரணை மேற்கொண்டு எனதறிக்கையினை பின்வருமாறு சமர்ப்பித்து கொள்கிறேன்

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரும் புல எண்கள், உரிமையாளர்கள் குறித்த விபரம் பின்வருமாறு.

வ. எண்	உரிமையாளரின் பெயர் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார்பதிவாளர் அலுவலகம்)	புல எண்	பரப்பு (பு.ஏக்கர்)
1	சிவகாமி, க/பெ.பழனிச்சாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம், திருப்பூர் தெற்கு வட்டம்.	4244/2021, 24.08.2021	543	4.06
2	சரோஜினி, க/பெ.நஞ்சப்பன், 116, முருங்கத்தொழுவு கிராமம், பெருந்துறை வட்டம்.			

மேற்காண் புலத்திற்குரிய தற்போதைய உட்பிரிவு எண் 543/2 என்பதாகும். மேலும் மேற்காண் புலத்திற்குரிய கணினி சிட்டா எண் 2844-ல் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது.

மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 543/2 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 10.11.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டது. அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை.

மேற்படி தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 543/2 நெ. காலையில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 543/2 நெ. காலையில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக பிரஸ்தாப புலமானது புலத்தணிக்கை செய்யப்பட்டது.

1. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.
2. பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.
3. பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.
4. பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.
5. பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை. பிரஸ்தாப புலமான 543/2 நெ.காலையின் மேல்புற எல்லையில் இருந்து சுமார் 35 மீட்டர்தூரத்தில் புல எண் 543/1 நெ.காலையில் உயர் மின்னழுத்த கோபுரம் செல்கிறது.
6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.
7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்களில் கவரப்படுவதில்லை.
8. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே இந்நேர்வில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், புல எண் 543 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க பரிந்துரை செய்யலாம் எனவும், இத்துடன் அ1 விளம்பர அறிவிப்பு, மனுதாரர்/பொதுமக்கள் வாக்குமூலம், கிராமக்கணக்கு நகல்கள் மற்றும் ஆவணங்களை இணைத்தனுப்பியுள்ளேன் என்பதையும் பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

29/11/2023

கிராம நிர்வாக அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

பெறுநர்:
வட்டாட்சியர்,
திருப்பூர் தெற்கு.

நில வருவாய் ஆய்வாளர் அலுவலகம்,
தெற்கு அவினாசிபாளையம்.
நாள்: 10.11.2023.

"அ1" விளம்பர அறிவிப்பு

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543/2 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் செய்துள்ளனர். இந்நேர்வில் மேற்காண் மனுவின் மீது நடவடிக்கை மேற்கொண்டு குவாரி உரிமம் வழங்க உரிய முன்மொழிவுகள் தயார் செய்யப்படவுள்ளது. மேற்காண் புலங்களில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்கும் குவாரி உரிமம் வழங்கிட பொதுமக்களுக்கு ஆட்சேபணை ஏதுமிருப்பின் தெற்கு அவினாசிபாளையம் உள்வட்ட நிலவருவாய் ஆய்வாளரிடமோ அல்லது திருப்பூர் தெற்கு வட்டாட்சியரிடமோ பதினைந்து தினங்களுக்குள் எழுத்து மூலமாக தெரிவிக்கும் படி கேட்டுக் கொள்ளப்படுகிறது. குறித்த காலக்கெடுவிற்குள் ஆட்சேபணைகள் ஏதும் வரப்பெறாத பட்சத்தில், சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க உரிமம் வழங்கிட உரிய நடவடிக்கைகள் மேற்கொள்ளப்படும் என்பது இதன்மூலம் தெரிவித்துக் கொள்ளப்படுகிறது.

10/11/23
நில வருவாய் ஆய்வாளர்
தெற்கு அவினாசிபாளையம் உள்வட்டம்,
திருப்பூர் தெற்கு வட்டம்.

பெறுநர்
கிராம நிர்வாக அலுவலர்,
பெருந்தொழுவு கிராமம்.

(கிராமத்தில் அறிவிப்பினை விளம்பரம் செய்து அதன் விபரத்தினை மீள சமர்ப்பிக்குமாறு பணிக்கப்படுகிறது.)

தகவல் தெரிந்து கொண்டோம்.

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
1.	C. Selvaraj S/O Chinnasamy 3/216 Kandem Pleuyam Perunthuvu	C. Selvaraj
2.	P. [illegible] S/O [illegible] 3/93, [illegible] [illegible], [illegible]	[illegible]

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626 A

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
3.	P. Balasuppramani S/o palanisamy, 3/72 Kandipalayam, Perumtholuvu, Tirupur	
4	சாமியப்பன் 3/164, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	சாமியப்பன்
5	[illegible] S/o [illegible] 3/33, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	[illegible]
6	N. சேனாபதி S/o நாச்சிமுத்து 3/65, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	சேனாபதி
7	G. Rathinasamy, S/o. Govindasamy 1/210, Kandhampalayam Perumtholuvu, Tirupur	G. Rathinasamy
8	P. [illegible] S/o [illegible] 3/76 கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	[illegible]
9	S. Eswaramoorthy S/o Sanygoundar 3/168A, Kandhampalaya. Perumtholuvu, Tirupur	
10	Vignesh kumar Kandhampalayam, Perumtholuvu	Vignesh

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
11	ஜெயக்கொடி S/o வெங்கையா 1/208 பெருந்தொழுவு.	ஜெயக்கொடி. V.
12.	சின்னச்சாமி S/o வேலையன் 3/216 கந்தாம் பாளையம் பெருந்தொழுவு	சின்னச்சாமி
13.	3/139, AD காலனி, கந்தாம்பாளையம், பெருந்தொழுவு	[illegible] M
14.	ஈஸ்வரி S/o குமரேசன் 3/139 கந்தாம்பாளையம் பெருந்தொழுவு	ஈஸ்வரி
15	நந்தினி S/o குமரேசன் 3/139, கந்தாம்பாளையம் பெருந்தொழுவு	[illegible]
16	வேலுசாமி S/o சின்னசாமி 3/216, கந்தாம்பாளையம் பெருந்தொழுவு	[illegible]
17	பழனி S/o பழனிச்சாமி 3/80 கந்தாம் பாளையம் பெருந்தொழுவு	பழனி
18	J. Mariammal, w/o, Jayanthiraman, 3/202, Kandhampalayam Perundurai, Erode	J. Mariammal

19	[illegible]	[illegible]
20	N. சேஷையப்பன் த/o நாகுதிருநாவுக்கரசன் 3/45, திருநாம்பாளையம் பெருந்துறை, திருப்பூர்	சேஷையப்பன்

ப.அ

இராமத்தில் அனைவரும் அமைதியும் ஒற்றுமையும் உள்ளனர் என தெரிவிக்கப்பட்டது.

கிராம நீர்வாக அலுவலர்
பிறப்பு. இறப்பு பதிவாளர்
17. பெருந்துறை கிராமம்
திருப்பூர் வட்டம்

பொதுமக்கள் வாக்குமூலம்

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் வசித்து வரும் பொதுமக்கள் ஆகிய நாங்கள் திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களுக்கு அளித்திடும் வாக்குமூலம். திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543/2 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) நெ. காலையில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் சார்பில் மனு செய்துள்ளது தொடர்பாக இந்த வாக்குமூலத்தை அளிக்கிறோம் என்பதை நன்கு அறிவோம்.

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543/2 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) நெ. காலையில் விஸ்தீர்ண பூமியானது தொட்டிபாளையம் சார்பதிவாளர் அலுவலக ஆவண எண் 4244/2021, நாள்: 24.08.2021-ன் படி நஞ்சப்பன் மனைவி திருமதி.சரோஜினி, பழனிச்சாமி மனைவி திருமதி.சிவகாமி ஆகியோருக்கு பாத்தியப்பட்டு அனுபவத்தில் இருந்து வருகிறது என்பதை நாங்கள் நன்கு அறிவோம். மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2844-ல் மேற்படி நபர்களின் பெயர் தாக்கலில் உள்ளது எனவும் மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி நபர்களின் சம்மத கடிதம் பெறப்பட்டுள்ளதன் அடிப்படையில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் பெயரில் பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி மனு செய்யப்பட்டுள்ளது எனவும் அறிவோம். குவாரி குத்தகை உரிமம் வழங்கக் கோரும் புலங்களின் எல்லைகள் வரையறுக்கப்பட்டு, நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது எனவும் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மற்றும் கட்டுமானங்கள் எதுவுமில்லை எனவும் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் போன்றவைகள் எதுவுமில்லை எனவும் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை எனவும் உறுதி கூறுகிறோம்.

எனவே திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543/2 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ணத்தில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கிட எங்களுக்கு எவ்வித ஆட்சேபணையுமில்லை எனவும் வரும்காலத்திலும் இது தொடர்பாக எவ்வித ஆட்சேபணையும் எழுப்ப மாட்டோம் எனவும் உறுதி கூறுகிறோம்.

நாங்கள் மேற்கூறியவையாவும் உண்மை என்றும், இத்தகவல்கள் உண்மைக்கு புறம்பானவை என பின்னர் தெரியவரும் பட்சத்தில் அரசு எடுக்கும் உரிமையியல் மற்றும் குற்றவியல் நடவடிக்கைகளுக்கு கட்டுப்பட்டு நடப்போம் எனவும் உறுதி கூறுகிறோம்.

//படிக்க கேட்டோம் சரிதான்//
//படித்து பார்த்தோம் சரிதான்//

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
1	Selvaraj S/o Chinnusamy Kandampalayam 3/214 Perumanallur	C. Selvaraj
2.	தேவராயப்பன் S/o நாச்சிமுத்து. 3/167, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	தேவராயப்பன்
3.	P. ரதி S/o மாரிமுத்து 3/124, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	ரதி
4	சின்னு S/o. ரங்கவேல் 3/189, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	சின்னு
5.	P. ராமசாமி S/o பழனிசாமி 3/176, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	P. ராமசாமி
6.	S. கண்ணம்மாள் சாமியப்பன் 3/164, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	கண்ணம்மாள்
7	M. Ajith, S/o Murugesh 3/189, Kandhampalayam Peruntholuvu, Tirupur.	M. Ajith
8	S. Thangaraj S/o Samiyappan, 3/67, Kandampalayam Peruntholuvu, Tirupur	Thangaraj

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631 A

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
9	R. SOUNDARARAJAN S/o M. Ramasamy. 3/158 Kandampalayam perumthottam Tirupur.	R. Soundar
10	SHRUTHI. W/o soundararajan kandampalayam perumthottam Tirupur	Shruth.
11	Visalatchi Kandampalayam perumthottam Tirupur	R விசாலாட்சி
12	[illegible] [illegible] திருப்பூர்	P. [illegible]
13	மயிலாத்தாள் W/o, ராமசாமி 3/156, கந்தாம்பாளையம் பெருந்தொழு, திருப்பூர்	மயிலாத்தாள்
14	M. Ramasamy S/o Muthusamy 3/158, Vannankadu, Kandhampalayam Perumtholuvu, Tirupur	[illegible]
15.	C. சோலைத்தம்மாள் W/o, இன்னசாமி 3/216, கந்தாம்பாளையம் பெருந்தொழு, திருப்பூர்	சி. சோலைத்தம்மாள்
16	P. சாமியப்பன் S/o பெரியசாமி 3/164, கந்தாம்பாளையம் பெருந்தொழு, திருப்பூர்	சாமியப்பன்

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
17	Chinnasamy S/o Chinnan Kandam Puthur 3/216 Perumanallur	சின்னசாமி
18	R. சங்கீதா W/o ரவி, 3/126, கந்தாம்பாளையம் பெருமாநல்லூர், திருப்பூர்	R சங்கீதா
19	R. தனசாமி S/o ராமசாமி 3/176, கந்தாம்பாளையம் பெருமாநல்லூர், திருப்பூர்	R. தனசாமி
20	L. Natarajan S/o Loganathan 3/143, Kandhampalayam Perumanallur, Tirupur	L. Natarajan
21	S. ஜோமதி W/o, செந்தில்குமார் 3/168, கந்தாம்பாளையம் பெருமாநல்லூர், திருப்பூர்	S. Gnomathi
22	M. Selvaraj. S/o Moliappagoundar 3/140, Kandhampalayam Perumanallur, Tirupur	M Selvaraj
23	S. ரங்கராஜ்குமார் S/o சாமிதுரைராஜ D.No: 3/168A, கந்தாம்பாளையம் பெருமாநல்லூர். திருப்பூர்	S. Rangarajkumar
24	~~M. செந்தில்குமார்~~ E. செந்தில்குமார் S/o. ரங்கராஜ்குமார் 3/168, கந்தாம்பாளையம் பெருமாநல்லூர், திருப்பூர்	E. Senthilkumar

[illegible]

[illegible]

வாக்குமூலம்.

ஈரோடு மாவட்டம், பெருந்துறை வட்டம், ஈங்கூர் கிராமம், வெட்டுக்காட்டு வலசு, கதவு எண் 11/32 என்ற முகவரியில் வசித்து வரும் பழனிச்சாமி மகன் திரு.ஜெகதீசன் ஆகிய நான் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் சார்பில் திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களுக்கு அளித்திடும் வாக்குமூலம். திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543/2 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ணத்தில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரி மனு செய்துள்ளது தொடர்பாக இந்த வாக்குமூலத்தை அளிக்கிறேன் என்பதை நன்கு அறிவேன்.

நான் ஈரோடு மாவட்டம், பெருந்துறை வட்டம், ஈங்கூர் கிராமம், வெட்டுக்காட்டு வலசு, கதவு எண் 11/32 என்ற முகவரியில் வசித்து வருகிறேன். திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543/2 நெ. காலையில் பு.ஹெக். 1.64.38 ஏர்ஸ் (பு.ஏக்கர் 4.06) விஸ்தீர்ண பூமியானது தொட்டிபாளையம் சார்பதிவாளர் அலுவலக ஆவண எண் 4244/2021, நாள்: 24.08.2021-ன் படி பழனிச்சாமி மனைவி திருமதி.சிவகாமி, நஞ்சப்பன் மனைவி திருமதி.சரோஜினி ஆகியோருக்கு பாத்தியப்பட்டு அனுபவத்தில் இருந்து வருகிறது. மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2844 ஆகியவைகளில் மேற்படி நபர்களின் பெயர் தாக்கலில் உள்ளது. மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி நபர்களின் சம்மத கடிதம் பெறப்பட்டுள்ளதன் அடிப்படையில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் பெயரில் பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி மனு செய்துள்ளேன். குவாரி குத்தகை உரிமம் வழங்கக் கோரும் புலங்களின் எல்லைகள் வரையறுக்கப்பட்டு, நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது எனவும் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மற்றும் கட்டுமானங்கள் எதுவுமில்லை எனவும் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் போன்றவைகள் எதுவுமில்லை எனவும் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை எனவும் உறுதி கூறுகிறேன்.

எனவே திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் கிராமம், பெருந்தொழுவு கிராமம், புல எண் 543/2 நெ. காலையில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கிட வேண்டுமாறு பணிவுடன் கேட்டுக் கொள்கிறேன். நான் மேற்கூறியவையாவும் உண்மை என்றும், இத்தகவல்கள் உண்மைக்கு புறம்பானவை என பின்னர் தெரியவரும் பட்சத்தில் அரசு எடுக்கும் உரிமையியல் மற்றும் குற்றவியல் நடவடிக்கைகளுக்கு கட்டுப்பட்டு நடப்பேன் எனவும் உறுதிகூறுகிறேன்.

//படித்து பார்த்தேன் சரிதான்//

//என் முன்னால்//

620 A

634 A

சார் ஆட்சியர் அலுவலகம்,
திருப்பூர்.
நாள்: 20 .10.2023

ந.க.எண்: 5664/2023/அ3

குறிப்பாணை

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல எண். 543-ல 1.64.38 ஹெக்டர் பட்டா நிலப்பரப்பில் சாதாரண கற்கள்/கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind.(P) Ltd., நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் என்பவர் குவாரி உரிமம் கோரியது-விசாரணை அறிக்கை கோருதல் - தொடர்பாக.

பார்வை: துணை இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை திருப்பூர் அவர்களின் கடித ந.க.677/2023/கனிமம், நாள்: 12.10.2023.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண். 543-ல் 1.64.38 ஹெக்டர் பரப்பளவுள்ள பட்டா பூமியிலிருந்து சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 5 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரிய Tvl.V.K.P.Engineers Ind.(P) Ltd., நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் என்பவரின் மனு பார்வையில் காணும் கடிதம் வாயிலாக பெறப்பட்டுள்ளது. இந்நேர்வில்,

1. குத்தகை வழங்கக் கேட்கும் புலத்தின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைக் கற்கள் நடப்பட்டுள்ளதா?
2. குவாரி குத்தகை தொடர்பாக பொதுமக்கள் ஆட்சேபணை ஏதும் உள்ளதா என "ஏ1" விளம்பரம் மூலம் கண்டறிந்தும்,
3. குத்தகை வழங்க கேட்கும் புலத்திலிருந்து 300 மீ. சுற்றளவிற்குள் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள் மற்றும் கட்டுமானங்கள் ஏதும் உள்ளதா?
4. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் நிலத்தின் மீதான உரிமை (Surface right) விண்ணப்பதாரருக்கு உள்ளதா? போன்ற விபரங்களுடன்,

கிராம கணக்குகளின் நகல் மற்றும் பிரசித்தம் செய்யப்பட்ட ஏ1 நோட்டீஸ் நகலுடன் குவாரி உரிமம் வழங்குவது தொடர்பான தங்களது குறிப்பான பரிந்துரை அறிக்கையை (Google Map 300M, Mining plan) உடன் அனுப்பி வைக்குமாறு திருப்பூர் தெற்கு வட்டாட்சியர் கேட்டுக் கொள்ளப்படுகிறார்.

இணைப்பு: மனு மற்றும் ஆவணங்கள் நகல்

ஒம்./-ச.ராம்குமார்,
சார் ஆட்சியர்(பொ) மற்றும்
உதவி ஆணையர்(கலால்)
திருப்பூர்

621 A
635 A

பெறுநர்:

வட்டாட்சியர்,
திருப்பூர் தெற்கு.

//உண்மை நகல்/உத்தரவுப்படி//

நேர்முக உதவியாளர்.

அறிக்கை

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம் ரீ.ச. எண் 543/2 ஆகிய காளைக்கு 500 மீட்டர் சுற்றளவில் புராதானச் சின்னங்கள் ஏதுமில்லை பின்னும் 1.0 கி.மீ சுற்றளவில் காப்புக்காடுகள் ஏதுமில்லை என்பதை இதன் மூலம் தெரிவித்துக் கொள்கிறேன்.

/அலுவலக உபயோகத்திற்கு மட்டும்/
/தனிம வளத்துறைக்கு மட்டும்/

4/10/2023

கிராம நிர்வாக அலுவலர்,
பிறப்பு இறப்பு பதிவாளர்,
17,பெருந்தொழுவு கிராமம்,
திருப்பூர் வட்டம்

அறிக்கை

ஈரோடு மாவட்டம், பெருந்துறை வட்டம், சென்னிமலை முருங்கத்தொழுவு கிராமம், கதவு எண் 116-ல் வசிக்கும் காலஞ்சென்ற S.நஞ்சப்பன் அவர்களின் மனைவி N.சரோஜினி - (1) மற்றும் திருப்பூர் மாவட்டம், திருப்பூர் வட்டம், பொலிக்காளிபாளையம் - 641665, சிவசக்தி ரைஸ் மில், கதவு எண் 5/217 -ல் வசிக்கும் பழனிசாமி அவர்களின் மனைவி P.சிவகாமி – (2) ஆகியோர்களுக்கு கூட்டாக திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், ரீ.ச – 543/2 காலையில் பு.ஹெக்டேர் 1.61.38 விஸ்தீரணமுள்ள பூமியானது திருப்பூர் தொட்டிபாளையம் சார்பதிவாளர் அலுவலக கிரைய பத்திர எண் 4244/2021 -ன் படியும் மேற்படி கிராம பட்டா எண் 2844 - ன் படியும் பாத்தியப்பட்டதாகும் என்பதை இதன் மூலம் தெரிவித்துக் கொள்கிறேன்.

/அலுவலக உபயோகத்திற்கு மட்டும்/
/கணினி சான்றிதழுக்கு மட்டும்/

14/10/2022

கிராம நிர்வாக அலுவலர்,
பிறப்பு இறப்பு பதிவாளர்,
17,பெருந்தொழுவு கிராமம்,
திருப்பூர் வட்டம்

Inspection Report- 2.90.0ha

P.ஏரோடு மாவட்டம், பெருந்தொழுவு வட்டம்

P.ஈங்கூர் கிராமம், கிராம. எண் 11/32 என்ற முகவரியில் வசித்து வரும், திரு. V.K. பழனிசாமி மகன் திரு. P. ஜெகதீசன் (1) திரு. V.K. பழனிசாமி மகன் திரு: P. மகேந்திரன் (2) திரு. P. ஜெகதீசன் மனைவி திருமதி ஞானசௌந்தரி (3) திரு: P. மகேந்திரன் மனைவி திருமதி M. புவனேஸ்வரி (4) மற்றும் S. ஈஸ்வரமூர்த்தி அவர்கள் மனைவி திருமதி N. சரோஜினி (5) மற்றும் பழனிசாமி அவர்கள் மனைவி திருமதி P. சிவகாமி ஆகியோர் சேர்ந்து கேட்டுக் கொண்டது திருப்பூர் தென்னி வட்டம், 10. பெருந்தொழு கிராமம் ச.எ. 539/2 எ. சர்வேயில் புஞ்செய் 2.33.0 ஹெக்டேர் என்ற நன்செய், ச.எ. 538/2A எ. சர்வேயில் புஞ்செய் 0.92.25 ச.எ. 538/2B எ. சர்வேயில் புஞ்செய் 0.92.25 ஹெக்டேர் என்ற நன்செய், ஆக மொத்தம் புஞ்செய் 4.17.5 ஹெக்டேர் என்ற நன்செய் திருப்பூர் தொட்டிபாளையம் சார்பதிவாளர் அலுவலக கிரைய பத்திர எண்கள், 3236/2018, 3235/2018 3243/2018, 3242/2018 மற்றும் 5670/2021 ஆகியவை சான்று பத்திரம், கோரிய தானப் பட்டா எண்கள் 8136, 8548, 8549 - ஆகியவைகளின் பரிசீலனை பார்த்தியப் பட்டதாகும் என்பதை இதன் மூலம் தெரிவித்துக் கொள்கின்றேன்.

4/8/2022

கிராம நிர்வாக அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

/அலுவலக உபயோகம் மட்டும்/

வட்டாட்சியர் அலுவலகம்,
திருப்பூர் தெற்கு.

ந.க.எண்.3643/2023/அ1, நாள்:09.10.2023.

குறிப்பாணை

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல.எண்.538/2ஏ-ல் 0.92.25 ஹெக் பரப்பும், 538/2பி-இல் 0.92.25 பரப்பும் 539/2(பி) இல் 1.05.50 பரப்பும், மொத்தம் 2.90.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் மனு அளித்தது - அறிக்கை கோருதல் தொடர்பாக.

பார்வை: திருப்பூர் சார் ஆட்சியர் அவர்கள் கடித ந.க.5352/2023/அ3, நாள்:04.10.2023.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல.எண்.538/2ஏ-ல் 0.92.25 ஹெக் பரப்பும், 538/2பி-இல் 0.92.25 பரப்பும் மற்றும் 539/2(பி)-இல் 1.05.50 ஹெக் பரப்பும், மொத்தம் 2.90.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி **Tvl.V.K.P.Engineers Ind (p) Ltd** நிறுவனத்தினர் மனு அளித்தது. பார்வையில் காணும் கடிதம் வாயிலாக அறிக்கை கோரப்பட்டுள்ளது தொடர்பாக.

1.குத்தகை வழங்கக் கேட்கும் புலத்தின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைக் கற்கள் நடப்பட்டுள்ளதா?

2.குவாரி குத்தகை தொடர்பாக பொதுமக்கள் ஆட்சேபணை ஏதும் உள்ளதா என "ஏ-1" விளம்பரம் மூலம் கண்டறிந்தும், மேலும்

3.குத்தகை வழங்க கேட்கும் புலத்திலிருந்து 300 மீட்டர் சுற்றளவிற்குள் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள் மற்றும் கட்டுமானங்கள் ஏதும் உள்ளதா? மேலும்,

4.குவாரி குத்தகை உரிமம் வழங்கக் கோரும் நிலத்தின் மீதான உரிமை (Surface right) விண்ணப்பதாரருக்கு உள்ளதா? Google Map மற்றும் Minning Plan (திட்ட அறிக்கை) போன்ற விபரங்களுடன்,

கிராம கணக்குகளின் நகல் மற்றும் பிரசித்தம் செய்யப்பட்ட ஏ1 நோட்டீஸ் ஆகியவற்றுடன் குவாரி உரிமம் வழங்குவது தொடர்பான குறிப்பான பரிந்துரையுடன் அறிக்கையினை சமர்ப்பிக்குமாறு தெற்கு அவினாசிபாளையம் நில வருவாய் ஆய்வாளர் கேட்டுக்கொள்ளப்படுகிறார்.

இணைப்பு - மேற்கண்டவாறு

வட்டாட்சியர்,
திருப்பூர் தெற்கு.

பெறுநர்:
நில வருவாய் ஆய்வாளர்,
தெற்கு அவினாசிபாளையம்.

627 A
641 A

அனுப்புநர்

திரு.கௌரிசங்கர்.எம்.எஸ்.சி.எம்.பில்.,
வட்டாட்சியர்,
திருப்பூர் தெற்கு
ந.க.எண்.3643/2024/அ1,

பெறுநர்

சார் ஆட்சியர்,
திருப்பூர்.

நாள்: .02.2024.

அம்மையீர்,

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல.எண்.538/2ஏ-ல் 0.92.25 ஹெக் பரப்பும், 538/2பி-இல் 0.92.25 பரப்பும் 539/2(பி) இல் 1.05.50 பரப்பும், மொத்தம் 2.90.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் மனு அளித்தது - அறிக்கை அனுப்புதல் - தொடர்பாக.

பார்வை: 1. திருப்பூர் சார் ஆட்சியர் அவர்கள் கடித ந.க.5352/2023/அ3, நாள்:04.10.2023.

2. திருப்பூர் தெற்கு வட்டாட்சியர் கடித ந.க.எண்.3643/2023/அ1, நாள்:09.10.2023,

3. தெற்கு அவினாசிபாளையம், நில வருவாய் ஆய்வாளர் அறிக்கை, நாள்:09.11.2023, இவ்வலுவலக நாள்:02.01.2024.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு பெருந்தெழுவு கிராமம், புல எண்.538/2ஏ -இல் பு.ஹெக் 0.92.25 ஏர்ஸ் விஸ்தீர்ண இடமும் புல எண்.538/2பி -இல் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண இடமும் மற்றும் 539/2பி-இல் புஹெக்.1.05.50 ஏர்ஸ் வீஸ்தீர்ண இடமும் ஆக மொத்தம் பு.ஹெக்.2.90.00 ஏர்ஸ் விஸ்தீர்ணமுள்ள இடத்தில் சிறுகனிமம் விதிகளுக்கு உட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டுகள் காலத்திற்கு குவாரி உரிமம் வழங்க கோரி தி/வ.Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் விண்ணப்பம் அளித்துள்ளதின் பேரில் பார்வை-3 இல் காணும் நில வருவாய் ஆய்வாளர் அறிக்கையின் அடிப்படையில் விசாரணை மற்றும் புலத்தணிக்கை மேற்கொண்டு எனது அறிக்கையிலை கீழ்கண்டுள்ளவாறு சமர்ப்பித்துக்கொள்கிறேன்.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொருவு கிராமம், சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி உரிமம் வழங்க கோரும் புல எண்கள் மற்றும் உரிமையாளர் விபரங்கள் பின்வருமாறு,

வ.எண்.	உரிமையாளர் பெயர் மற்றும் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார் பதிவாளர் அலுவலகம்)	புல எண்கள்	பரப்பளவு (ஏக்கர்)
1.	சரோஜினி, க/பெ.நஞ்சப்பன், 116,முருங்கத்தொழுவு, சென்னிமலை, பெருந்தொழுவு வட்டம்,	5670/2021 21.10.2021	538/2ஏ	2.28
2.	சிவகாமி, க/பெ.பழனிசாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம், திருப்பூர் தெற்கு	5670/2021 21.10.2021	538/2பி	2.28
3.	ஜெகதீசன், த/பெ.வி.கே.பழனிசாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3235/2018 21.08.2018	539/2	1.43
4	மங்கேந்திரன் த/பெ.வி.கே.பழனிசாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3236 21.08.2018	539/2	1.43 ¾
5.	புவனேஷ்வரி, த/பெ.பி.மகேந்திரன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3242/2018 21.08.2018	539/2	1.43 ¾
6.	ஞானசுந்தரி, த/பெ.பி.ஜெகதீசன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3243/2018 21.08.2018	539/2	1.43 ¾

மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2848, 2849 மற்றும் 2136 ஆகியவைகளில் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது. மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 538/2A -இல் பு.ஹெக். 0.92.25 ஏர்ஸ்

(பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும், புல எண் 538/2B நெ.காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும் மற்றும் புல எண் 539/2B நெ.காலையில் பு.ஹெக்.1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண இடமும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண நிலத்தில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 11.10.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டது. அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை.

மேற்படி பெருந்தொழுவு கிராமம், புல எண்கள் 538/2A, 538/2B மற்றும் 539/2 ஆகிய -இல் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் பெருந்தொழுவு கிராமம், புல எண்கள் 538/2ஏ, 538/2பி மற்றும் 539/2 ஆகிய நெ.காலைகளில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது பிரஸ்தாப புலங்கள் புலத்தணிக்கை செய்யப்பட்டது தொடர்பாக,

1.குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.

2.பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.

3.பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.

4.பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.

5.பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை.

6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

7.நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்ளில் கவரப்படவில்லை மேலும்,

8.பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே தி/வ.Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2ஏ -இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும், புல எண் 538/2பி-இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும் மற்றும் புல எண் 539/2பி -இல் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண இடமும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க பரிந்துரை செய்து இத்துடன் நில வருவாய் அலுவலர் அறிக்கை, கிராம நிர்வாக அலுவலர் அறிக்கை, அ1 விளம்பர அறிவிப்பு, மனுதார் மற்றும் பொதுமக்கள் வாக்குமூலம், கிராமக்கணக்கு நகல்கள் மற்றும் தொடர்புடைய ஆவணங்களை இணைத்தனுப்பியுள்ளேன் என்பதை பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

இணைப்பு-மேற்கண்டவாறு

தங்கள் உண்மையுள்ள

வட்டாட்சியர்,
திருப்பூர் தெற்கு.

15/07/24

அனுப்புநர்

திரு.ஜெ.வி.சச்சின் ஆனந்த்,எம்.எஸ்.ஸி.,
உதவி புவியியலாளர் /
உதவி இயக்குநர் (பொ),
புவியியல் மற்றும் சுரங்கத்துறை,
திருப்பூர்.

பெறுநர்

சார் ஆட்சியர்,
திருப்பூர்.

ந.க.669/2023/கனிமம் நாள்: 22.09.2023.

ஐயா,

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல எண்கள் 538/2A (0.92.25), 538/2B (0.92.25), 539/2 (P) (1.05.50) ல் மொத்தம் 2.90.0 ஹெக்டர் பட்டா நிலப்பரப்பில் சாதாரண கற்கள் / கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் கோரி Tvl. V.K.P. Engineers Ind. (P) Ltd., நிறுவனத்தினர் மனு செய்துள்ளது - விசாரணை அறிக்கை கேட்டல் - தொடர்பாக.

பார்வை: Tvl. V.K.P. Engineers Ind. (P) Ltd., நிறுவனத்தினர் மனு நாள்: 13.09.2023 (பெறப்பட்ட நாள்.21.09.2023).

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 538/2A (0.92.25), 538/2B (0.92.25), 539/2 (P) (1.05.50) ல் மொத்தம் 2.90.0 ஹெக்டர் பரப்புள்ள பட்டா பூமியிலிருந்து 10 வருடங்களுக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க Tvl. V.K.P. Engineers Ind. (P) Ltd., நிறுவனத்தினர் பார்வையில் கண்டவாறு விண்ணப்பம் செய்துள்ளார். மேற்படி விண்ணப்பம் தொடர்பாக,

1. குத்தகை வழங்கக் கேட்கும் புலத்தின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைக் கற்கள் நடப்பட்டுள்ளதா?
2. குவாரி குத்தகை தொடர்பாக பொதுமக்கள் ஆட்சேபணை ஏதும் உள்ளதா என A1 நோட்டீஸ் பிரசுரம் மூலம் கண்டறிந்தும்,
3. குத்தகை வழங்க கேட்கும் புலத்திலிருந்து 300 மீ சுற்றளவிற்குள் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள் மற்றும் கட்டுமானங்கள் ஏதும் உள்ளதா?
4. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் நிலத்தின் மீதான உரிமை (Surface right) விண்ணப்பதாரருக்கு உள்ளதா? போன்ற விபரங்களுடன்

கிராம கணக்குளின் நகல் மற்றும் பிரசித்தம் செய்யப்பட்ட A1 நோட்டீஸ் ஆகியவற்றுடன் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பான தங்களது குறிப்பான பரிந்துரை அறிக்கையை அனுப்பி வைக்குமாறு கேட்டுக் கொள்ளப்படுகிறது

இணைப்பு:- மனுமற்றும் ஆவணங்கள் நகல்

22/9/23

உதவி புவியியலாளர் /
உதவி இயக்குநர் (பொ),
புவியியல் மற்றும் சுரங்கத்துறை,
திருப்பூர்.

சார் ஆட்சியர் அலுவலகம்,
திருப்பூர்.

ந.க.எண்: 5352/2023/அ3 நாள்:04.10.2023

குறிப்பாணை

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரணகற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம்-பெருந்தொழுவு கிராமம் - புல எண். 538/2A-ல் 0.92.25 ஹெக் பரப்பும், 538/2B-ல் 0.92.25 மற்றும் 539/2(P) ல் 1.05.50 ஹெக் பரப்பும் மொத்தம் 2.90.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் மனு செய்துள்ளது - விசாரணை அறிக்கை கோருதல் - தொடர்பாக.

பார்வை:1. உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை திருப்பூர் அவர்களின் கடித ந.க.669/கனிமம்/2023/, நாள்: 22.09.2023.

2. Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினரின் மனு, நாள்: 13.09.2023.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண். 538/2A-ல் 0.92.25,538/2B-ல் 0.92.25 மற்றும் 539/2(P) ல் 1.05.50 ஹெக பரப்பும் மொத்தம் 2.90.0 பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் பார்வை 2-ல் கண்டவாறு விண்ணப்பம் செய்துள்ளார். மேற்படி விண்ணப்பம் தொடர்பாக,

1.குத்தகை வழங்கக் கேட்கும் புலத்தின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைக் கற்கள் நடப்பட்டுள்ளதா?

2.குவாரி குத்தகை தொடர்பாக பொதுமக்கள் ஆட்சேபணை ஏதும் உள்ளதா என "ஏ1" விளம்பரம் மூலம் கண்டறிந்தும்,

3.குத்தகை வழங்க கேட்கும் புலத்திலிருந்து 300 மீ. சுற்றளவிற்குள் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள் மற்றும் கட்டுமானங்கள் ஏதும் உள்ளதா?

4.குவாரி குத்தகை உரிமம் வழங்கக் கோரும் நிலத்தின் மீதான உரிமை (Surface right) விண்ணப்பதாரருக்கு உள்ளதா? Google Map மற்றும் Minning Plan (திட்ட அறிக்கை) போன்ற விபரங்களுடன்,

கிராம கணக்குகளின் நகல் மற்றும் பிரசித்தம் செய்யப்பட்ட ஏ1 நோட்டீஸ் ஆகியவற்றுடன் குவாரி உரிமம் வழங்குவது தொடர்பான குறிப்பான பரிந்துரையுடன் அறிக்கை அனுப்பி வைக்குமாறு பல்லடம் வட்டாட்சியர் கேட்டுக்கொள்ளப்படுகிறார்.

ஒம்/-ஸ்ருதஞ்ஜெய் நாராயணன்,
சார் ஆட்சியர்,
திருப்பூர்.

பெறுநர்:
வட்டாட்சியர்,
திருப்பூர் தெற்கு

//உண்மை நகல்/உத்திரவுப்படி//

நேர்முக உதவியாளர்
4/10/2023

4/10/23

அனுப்புநர்
திரு.ராம்குமார்,
சார் ஆட்சியர்(பொ),
திருப்பூர்.

பெறுநர்
மாவட்ட ஆட்சியர்,
திருப்பூர்.

மூ.மு.எண்:5664/2023/அ3 நாள்: 05.2024

அய்யா,

பொருள்: **கனிமங்களும் சுரங்கங்களும்** - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல.எண்.538/2ஏ-ல் 0.92.25 ஹெக் பரப்பும், 538/2பி-இல் 0.92.25 பரப்பும் 539/2(பி) இல் 1.05.50 பரப்பும், மொத்தம் 2.90.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் மனு அளித்தது - அறிக்கை அனுப்புதல் - தொடர்பாக.

பார்வை: திருப்பூர் தெற்கு வட்டாட்சியரின் ந.க.3643/2024/அ1, நாள்: 15.02.2024.

திருப்பூர் மாவட்டம், திருப்பூர் வருவாய் கோட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தெழுவு கிராமம், புல எண்.538/2ஏ -இல் பு.ஹெக் 0.92.25 ஏர்ஸ் விஸ்தீர்ண இடமும் புல எண்.538/2பி -இல் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண இடமும் மற்றும் 539/2பி-இல் புஹெக்.1.05.50ஏர்ஸ் வீஸ்தீர்ண இடமும் ஆக மொத்தம் பு.ஹெக்.2.90.00 ஏர்ஸ் விஸ்தீர்ணமுள்ள இடத்தில் சிறுகனிமம் விதிகளுக்கு உட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டுகள் காலத்திற்கு குவாரி உரிமம் வழங்க கோரி தி/வ.Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் விண்ணப்பம் அளித்துள்ளதின் பேரில் பார்வையில் காணும் திருப்பூர் தெற்கு வட்டாட்சியரின் அறிக்கையின் பேரில் புலத்தணிக்கை மேற்கொண்டு எனது அறிக்கையினை கீழ்கண்டுள்ளவாறு சமர்ப்பித்துக்கொள்கிறேன்.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொருவு கிராமம், சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி உரிமம் வழங்க கோரும் புல எண்கள் மற்றும் உரிமையாளர் விபரங்கள் பின்வருமாறு,

வ.எண்.	உரிமையாளர் பெயர் மற்றும் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார் பதிவாளர் அலுவலகம்)	புல எண்கள்	பரப்பளவு (ஏக்கர்)
1.	சரோஜினி, க/பெ.நஞ்சப்பன், 116,முருங்கத்தொழுவு, சென்னிமலை, பெருந்தொழுவு வட்டம்,	5670/2021 21.10.2021	538/2ஏ	2.28
2.	சிவகாமி, க/பெ.பழனிசாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம், திருப்பூர் தெற்கு	5670/2021 21.10.2021	538/2பி	2.28
3.	ஜெகதீசன், த/பெ.வி.கே.பழனிசாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3235/2018 21.08.2018	539/2	1.43
4	மங்கேந்திரன் த/பெ.வி.கே.பழனிசாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3236 21.08.2018	539/2	1.43 ¾
5.	புவனேஷ்வரி, த/பெ.பி.மகேந்திரன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3242/2018 21.08.2018	539/2	1.43 ¾
6.	ஞானசுந்தரி, த/பெ.பி.ஜெகதீசன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3243/2018 21.08.2018	539/2	1.43 ¾

மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2848, 2849 மற்றும் 2136 ஆகியவைகளில் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது. மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 538/2A-இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும், புல எண் 538/2B நெ.காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும் மற்றும் புல எண் 539/2B நெ.காலையில் பு.ஹெக்.1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண இடமும்என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண

நிலத்தில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 11.10.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டது. அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை.

மேற்படி பெருந்தொழுவு கிராமம், புல எண்கள் 538/2A, 538/2Bமற்றும் 539/2 ஆகிய - இல் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் பெருந்தொழுவு கிராமம், புல எண்கள் 538/2ஏ, 538/2பி மற்றும் 539/2 ஆகிய நெ.காலைகளில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது பிரஸ்தாப புலங்கள் புலத்தணிக்கை செய்யப்பட்டது தொடர்பாக,

1.குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.

2.பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.

3.பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.

4.பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.

5.பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை.

6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

7.நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்ளில் கவரப்படவில்லை மேலும்,

8.பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

இந்நேர்வில் திருப்பூர் தெற்கு வட்டாட்சியரின் அறிக்கையின் அடிப்படையில் தி/வ.Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம்,பெருந்தொழுவு கிராமம், புல எண் 538/2ஏ-இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28)

விஸ்தீர்ண இடமும், புல எண் 538/2பி-இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும் மற்றும் புல எண் 539/2பி-இல் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண இடமும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கலாம் என்பதை பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

இணைப்பு-மேற்கண்டவாறு

சார் ஆட்சியர்(பொ),
திருப்பூர்.

புலத்தணிக்கை குறிப்பு

கிராமம் : பெருந்தெழுவு கிராமம

புல எண்: : புல எண்.538/2ஏ, 538/2பி மற்றும் 539/2பி

தணிக்கை நாள்: .05.2024.

நோக்கம் : குவாரி குத்தகை உரிமம் கோரியது.

திருப்பூர் மாவட்டம், திருப்பூர் வருவாய் கோட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தெழுவு கிராமம், புல எண்.538/2ஏ -இல் பு.ஹெக் 0.92.25 ஏர்ஸ் விஸ்தீர்ண இடமும் புல எண்.538/2பி -இல் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண இடமும் மற்றும் 539/2பி-இல் புஹெக்.1.05.50ஏர்ஸ் வீஸ்தீர்ண இடமும் ஆக மொத்தம் பு.ஹெக்.2.90.00 ஏர்ஸ் விஸ்தீர்ணமுள்ள இடத்தில் சிறுகனிமம் விதிகளுக்கு உட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டுகள் காலத்திற்கு குவாரி உரிமம் வழங்க கோரி தி/வ.Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் விண்ணப்பம் அளித்துள்ளதின் போரில் புலத்தணிக்கை மேற்கொள்ளப்பட்டது. புலுத்தணிக்கையின் போது திருப்பூர் தெற்கு வட்டாட்சியர், தெற்க அவிநாசிபாளையம் நில வருவாய் ஆய்வாளர், உள்வட்ட அளவர் மற்றும் பெருந்தெழுவு கிராம நிர்வாக அலுவலர் ஆகியோர் உடனிருந்தனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் பெருந்தொழுவு கிராமம், புல எண்கள் 538/2ஏ, 538/2பி மற்றும் 539/2 ஆகிய நெ.காலைகளில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது பிரஸ்தாப புலங்கள் புலத்தணிக்கை செய்யப்பட்டது தொடர்பாக,

1.குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.

2.பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.

3.பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.

4.பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.

5.பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை.

6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்களில் கவரப்படவில்லை மேலும்,

8.பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

இந்நேர்வில் தி/வ.Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம்,பெருந்தொழுவு கிராமம், புல எண் 538/2ஏ-இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும், புல எண் 538/2பி-இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும் மற்றும் புல எண் 539/2பி-இல் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண இடமும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கலாம் என பரிந்துரை செய்து திருப்பூர் மாவட்ட ஆட்சியர் அவர்களுக்கு வரைவு தயார் செய்து வைக்கவும்.

சார் ஆட்சியர்(பொ)
திருப்பூர்

அனுப்புநர்

திரு.கா.ரமேஷ்,எம்.எஸ்.ஸி.,
துணை இயக்குநர் /
உதவி இயக்குநர் (பொ),
புவியியல் மற்றும் சுரங்கத்துறை,
திருப்பூர்.

பெறுநர்

சார் ஆட்சியர்,
திருப்பூர்.

ந.க.677/கனிமம்/2023 நாள்: 12.10.2023.



பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல எண் 543 ல் 1.64.38 ஹெக்டர் பட்டா நிலப்பரப்பில் சாதாரண கற்கள் / கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் கோரி Tvl. V.K.P. Engineers Ind. (P) Ltd., நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் என்பவர் விண்ணப்பித்துள்ளது - விசாரணை அறிக்கை கேட்டல் - தொடர்பாக.

பார்வை: Tvl. V.K.P. Engineers Ind. (P) Ltd., நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் மனு நாள்: 09.10.2023

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண் 543 ல் 1.64.38 ஹெக்டர் பரப்புள்ள பட்டா பூமியிலிருந்து 10 வருடங்களுக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க Tvl. V.K.P. Engineers Ind. (P) Ltd., நிறுவனத்தின் பங்குதாரர் திரு.ப.ஜெகதீசன் என்பவர் பார்வையில் கண்டவாறு விண்ணப்பம் செய்துள்ளார். மேற்படி விண்ணப்பம் தொடர்பாக,

1. குத்தகை வழங்கக் கேட்கும் புலத்தின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைக் கற்கள் நடப்பட்டுள்ளதா?
2. குவாரி குத்தகை தொடர்பாக பொதுமக்கள் ஆட்சேபணை ஏதும் உள்ளதா என A1 நோட்டீஸ் பிரசுரம் மூலம் கண்டறிந்தும்,
3. குத்தகை வழங்க கேட்கும் புலத்திலிருந்து 300 மீ சுற்றளவிற்குள் கிராம நத்தம், நீர்நிலைகள், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள் மற்றும் கட்டுமானங்கள் ஏதும் உள்ளதா?
4. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் நிலத்தின் மீதான உரிமை (Surface right) விண்ணப்பதாரருக்கு உள்ளதா? போன்ற விவரங்களுடன்

கிராம கணக்குளின் நகல் மற்றும் பிரசித்தம் செய்யப்பட்ட A1 நோட்டீஸ் ஆகியவற்றுடன் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பான தங்களது குறிப்பான / பரிந்துரை அறிக்கையை அனுப்பி வைக்குமாறு கேட்டுக்கொள்கிறேன்

இணைப்பு:- மனு மற்றும் ஆவணங்கள் நகல்

துணை இயக்குநர் /
உதவி இயக்குநர் (பொ),
புவியியல் மற்றும் சுரங்கத்துறை,
திருப்பூர்.

அனுப்புநர்

திரு.கௌரிசங்கர்.எம்.எஸ்.சி.எம்.பில்.,
வட்டாட்சியர்,
திருப்பூர் தெற்கு
ந.க.எண்.3643/2024/அ1,

பெறுநர்

சார் ஆட்சியர்,
திருப்பூர்.

நாள்: .02.2024.

அம்மையீர்,



பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல.எண்.538/2ஏ-ல் 0.92.25 ஹெக் பரப்பும், 538/2பி-இல் 0.92.25 பரப்பும் 539/2(பி) இல் 1.05.50 பரப்பும், மொத்தம் 2.90.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் மனு அளித்தது - அறிக்கை அனுப்புதல் - தொடர்பாக.

பார்வை: 1. திருப்பூர் சார் ஆட்சியர் அவர்கள் கடித ந.க.5352/2023/அ3, நாள்:04.10.2023.

2. திருப்பூர் தெற்கு வட்டாட்சியர் கடித ந.க.எண்.3643/2023/அ1, நாள்:09.10.2023,

3. தெற்கு அவினாசிபாளையம், நில வருவாய் ஆய்வாளர் அறிக்கை, நாள்:09.11.2023, இவ்வலுவலக நாள்:02.01.2024.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு பெருந்தெழுவு கிராமம், புல எண்.538/2ஏ -இல் பு.ஹெக் 0.92.25 ஏர்ஸ் விஸ்தீர்ண இடமும் புல எண்.538/2பி -இல் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண இடமும் மற்றும் 539/2பி-இல் புஹெக்.1.05.50 ஏர்ஸ் வீஸ்தீர்ண இடமும் ஆக மொத்தம் பு.ஹெக்.2.90.00 ஏர்ஸ் விஸ்தீர்ணமுள்ள இடத்தில் சிறுகனிமம் விதிகளுக்கு உட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டுகள் காலத்திற்கு குவாரி உரிமம் வழங்க கோரி தி/வ.Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் விண்ணப்பம் அளித்துள்ளதின் போரில் பார்வை-3 இல் காணும் நில வருவாய் ஆய்வாளர் அறிக்கையின் அடிப்படையில் விசாரணை மற்றும் புலத்தணிக்கை மேற்கொண்டு எனது அறிக்கையினை கீழ்கண்டுள்ளவாறு சமர்ப்பித்துக்கொள்கிறேன்.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொருவு கிராமம், சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி உரிமம் வழங்க கோரும் புல எண்கள் மற்றும் உரிமையாளர் விபரங்கள் பின்வருமாறு,

வ.எண்.	உரிமையாளர் பெயர் மற்றும் முகவரி (திருவாளர்கள்)	ஆவண் எண் (தொட்டிபாளையம் சார் பதிவாளர் அலுவலகம்)	புல எண்கள்	பரப்பளவு (ஏக்கர்)
1.	சரோஜினி, க/பெ.நஞ்சப்பன், 116,முருங்கத்தொழுவு, சென்னிமலை, பெருந்தொழுவு வட்டம்,	5670/2021 21.10.2021	538/2ஏ	2.28
2.	சிவகாமி, க/பெ.பழனிசாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம், திருப்பூர் தெற்கு	5670/2021 21.10.2021	538/2பி	2.28
3.	ஜெகதீசன், த/பெ.வி.கே.பழனிசாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3235/2018 21.08.2018	539/2	1.43
4	மங்கேந்திரன் த/பெ.வி.கே.பழனிசாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3236 21.08.2018	539/2	1.43 ¾
5.	புவனேஷ்வரி, த/பெ.பி.மகேந்திரன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3242/2018 21.08.2018	539/2	1.43 ¾
6.	ஞானசுந்தரி, த/பெ.பி.ஜெகதீசன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்,	3243/2018 21.08.2018	539/2	1.43 ¾

மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2848, 2849 மற்றும் 2136 ஆகியவைகளில் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது. மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 538/2A -இல் பு.ஹெக். 0.92.25 ஏர்ஸ்

(பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும், புல எண் 538/2B நெ.காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும் மற்றும் புல எண் 539/2B நெ.காலையில் பு.ஹெக்.1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண இடமும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண நிலத்தில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 11.10.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டது. அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை.

மேற்படி பெருந்தொழுவு கிராமம், புல எண்கள் 538/2A, 538/2B மற்றும் 539/2 ஆகிய -இல் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் பெருந்தொழுவு கிராமம், புல எண்கள் 538/2ஏ, 538/2பி மற்றும் 539/2 ஆகிய நெ.காலைகளில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது பிரஸ்தாப புலங்கள் புலத்தணிக்கை செய்யப்பட்டது தொடர்பாக,

1.குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.

2.பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.

3.பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.

4.பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.

5.பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை.

6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

7.நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போன்ற இனங்களில் கவரப்படவில்லை மேலும்,

8.பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே தி/வ.Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2ஏ -இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும், புல எண் 538/2பி-இல் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண இடமும் மற்றும் புல எண் 539/2பி -இல் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண இடமும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க பரிந்துரை செய்து இத்துடன் நில வருவாய் அலுவலர் அறிக்கை, கிராம நிர்வாக அலுவலர் அறிக்கை, அ1 விளம்பர அறிவிப்பு, மனுதார் மற்றும் பொதுமக்கள் வாக்குமூலம், கிராமக்கணக்கு நகல்கள் மற்றும் தொடர்புடைய ஆவணங்களை இணைத்தனுப்பியுள்ளேன் என்பதை பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

இணைப்பு-மேற்கண்டவாறு

தங்கள் உண்மையுள்ள

வட்டாட்சியர்,
திருப்பூர் தெற்கு.

15/02/24

நில வருவாய் ஆய்வாளர் அலுவலகம்,
தெற்கு அவினாசிபாளையம்..
நாள்: 09.11.2023.

பார்வை :

1. மனுதாரர் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம்.
2. திருப்பூர் சார் ஆட்சியர் அவர்களின் ந.க.எண் 5353/2023/அ3, நாள்: 04.10.2023.
3. திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களின் ந.க.எண் 3642/2023/அ1, நாள்: 09.10.2023.
4. பெருந்தொழுவு கிராம நிர்வாக அலுவலரின் அறிக்கை, நாள்: 06.11.2023.

பணிந்தனுப்பப்படுகிறது.

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2B நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் செய்துள்ளதன் நேர்வில், அறிக்கை அனுப்பி வைக்குமாறு பார்வை 3-ல் காணும் குறிப்பாணையில் தெரிவிக்கப்பட்டதன் பேரில் கிராம நிர்வாக அலுவலர் சமர்ப்பித்துள்ள அறிக்கையின் அடிப்படையில் புலத்தணிக்கை மற்றும் விசாரணை மேற்கொண்டு எனதறிக்கையினை பின்வருமாறு சமர்ப்பித்து கொள்கிறேன்

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரும் புல எண்கள், உரிமையாளர்கள் குறித்த விபரம் பின்வருமாறு.

வ. எண்	உரிமையாளரின் பெயர் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார்பதிவாளர் அலுவலகம்)	புல எண்	பரப்பு (ஏக்கர்)
1	சரோஜினி, க/பெ.S.நஞ்சப்பன், 116, முருங்கத்தொழுவு, சென்னிமலை, பெருந்துறை வட்டம்.	5670/2021, 21.10.2021	538/2A	2.28
2	சிவகாமி, க/பெ.பழனிச்சாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம் திருப்பூர் தெற்கு வட்டம்.	5670/2021, 21.10.2021	538/2B	2.28
			மொத்தம்	4.56

வ.எண்	உரிமையாளரின் பெயர் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார்பதிவாளர் அலுவலகம்)	புல எண்	பரப்பு (ஏக்கர்)
1	ஜெகதீசன், த/பெ.V.K.பழனிச்சாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்.	3235/2018, 21.08.2018	539/2	1.43¾
2	மகேந்திரன், த/பெ.V.K.பழனிச்சாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்.	3236/2018, 21.08.2018	539/2	1.43¾
3	புவனேஷ்வரி, த/பெ.P.மகேந்திரன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்.	3242/2018, 21.08.2018	539/2	1.43¾
4	ஞானசுந்தரி, த/பெ.P.ஜெகதீசன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்.	3243/2018, 21.08.2018	539/2	1.43¾
			மொத்தம்	5.75

மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2848, 2849 மற்றும் 2136 ஆகியவைகளில் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது. மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2B நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 11.10.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டது. அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை.

மேற்படி தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 538/2A, 538/2B மற்றும் 539/2 ஆகிய நெ. காலைகளில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 538/2A, 538/2B மற்றும் 539/2 ஆகிய நெ. காலைகளில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது பிரஸ்தாப புலங்கள் புலத்தணிக்கை செய்யப்பட்டது.

1. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.
2. பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.
3. பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.
4. பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.
5. பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை.
6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.
7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போனற்ற இனங்ளில் கவரப்படுவதில்லை.
8. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே இந்நேர்வில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2B நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க பரிந்துரை செய்யலாம் எனவும், இத்துடன் கி.நி.அலுவலர் அறிக்கை, அ1 விளம்பர அறிவிப்பு, மனுதாரர்/பொதுமக்கள் வாக்குமூலம், கிராமக்கணக்கு நகல்கள் மற்றும் ஆவணங்களை இணைத்தனுப்பியுள்ளேன் என்பதையும் பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

07.11.23

பெறுநர்:
வட்டாட்சியர், திருப்பூர் தெற்கு.

கிராம நிர்வாக அலுவலகம்,
பெருந்தொழுவு கிராமம்.
நாள்: 10.11.2023.

பார்வை :
1. மனுதாரர் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம்.
2. திருப்பூர் சார் ஆட்சியர் அவர்களின் ந.க.எண் 5353/2023/அ3, நாள்: 04.10.2023.
3. திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களின் ந.க.எண் 3642/2023/அ1, நாள்: 09.10.2023.

பணிந்தனுப்பப்படுகிறது.

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2B நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் செய்துள்ளதன் நேர்வில், அறிக்கை அனுப்பி வைக்குமாறு பார்வை 3-ல் காணும் குறிப்பாணையில் தெரிவிக்கப்பட்டதன் பேரில் புலத்தணிக்கை மற்றும் விசாரணை மேற்கொண்டு எனதறிக்கையினை பின்வருமாறு சமர்ப்பித்து கொள்கிறேன்

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரும் புல எண்கள், உரிமையாளர்கள் குறித்த விபரம் பின்வருமாறு.

வ. எண்	உரிமையாளரின் பெயர் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார்பதிவாளர் அலுவலகம்)	புல எண்	பரப்பு (ஏக்கர்)
1	சரோஜினி, க/பெ.S.நஞ்சப்பன், 116, முருங்கத்தொழுவு, சென்னிமலை, பெருந்துறை வட்டம்.	5670/2021, 21.10.2021	538/2A	2.28
2	சிவகாமி, க/பெ.பழனிச்சாமி, 5/217, சிவசக்தி ரைஸ்மில், பொல்லிகாளிபாளையம் திருப்பூர் தெற்கு வட்டம்.	5670/2021, 21.10.2021	538/2B	2.28
			மொத்தம்	4.56

வ.எண்	உரிமையாளரின் பெயர் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார்பதிவாளர் அலுவலகம்)	புல எண்	பரப்பு (ஏக்கர்)
1	ஜெகதீசன், த/பெ.V.K.பழனிச்சாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்.	3235/2018, 21.08.2018	539/2	1.43¾
2	மகேந்திரன், த/பெ.V.K.பழனிச்சாமி, வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்.	3236/2018, 21.08.2018	539/2	1.43¾
3	புவனேஷ்வரி, த/பெ.P.மகேந்திரன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்.	3242/2018, 21.08.2018	539/2	1.43¾
4	ஞானசுந்தரி, த/பெ.P.ஜெகதீசன், வெட்டுக்காட்டுவலசு, ஈங்கூர், பெருந்துறை வட்டம்.	3243/2018, 21.08.2018	539/2	1.43¾
			மொத்தம்	5.75

மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2848, 2849 மற்றும் 2136 ஆகியவைகளில் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது. மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர். அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2B நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 11.10.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டது. அதன் பேரில் குவாரி குத்தகை உரிம்ம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை.

மேற்படி தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 538/2A, 538/2B மற்றும் 539/2 ஆகிய நெ. காலைகளில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை எதுவுமில்லை என பொதுமக்கள் வாக்குமூலம் அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 538/2A, 538/2B மற்றும் 539/2 ஆகிய நெ. காலைகளில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது பிரஸ்தாப புலங்கள் புலத்தணிக்கை செய்யப்பட்டது.

1. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.
2. பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.
3. பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை.
4. பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.
5. பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை.
6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.
7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போனற்ற இனங்ளில் கவரப்படுவதில்லை.
8. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே இந்நேர்வில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2B நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க பரிந்துரை செய்து, இத்துடன் அ1 விளம்பர அறிவிப்பு, மனுதாரர்/பொதுமக்கள் வாக்குமூலம், கிராமக்கணக்கு நகல்கள் மற்றும் ஆவணங்களை இலைத்தனுப்பியுள்ளேன் என்பதையும் பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

கிராம நிர்வாக அலுவலர்
பிறப்பு இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

பெறுநர்:
வட்டாட்சியர், திருப்பூர் தெற்கு.

650 A

நில வருவாய் ஆய்வாளர் அலுவலகம்,
தெற்கு அவினாசிபாளையம்.
நாள்: 11.10.2023.

"அ1" விளம்பர அறிவிப்பு

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2P நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் செய்துள்ளனர். இந்நேர்வில் மேற்காண் மனுவின் மீது நடவடிக்கை மேற்கொண்டு குவாரி உரிமம் வழங்க உரிய முன்மொழிவுகள் தயார் செய்யப்படவுள்ளது. மேற்காண் புலங்களில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்கும் குவாரி உரிமம் வழங்கிட பொதுமக்களுக்கு ஆட்சேபணை ஏதுமிருப்பின் தெற்கு அவினாசிபாளையம் உள்வட்ட நிலவருவாய் ஆய்வாளரிடமோ அல்லது திருப்பூர் தெற்கு வட்டாட்சியரிடமோ பதினைந்து தினங்களுக்குள் எழுத்து மூலமாக தெரிவிக்கும் படி கேட்டுக் கொள்ளப்படுகிறது. குறித்த காலக்கெடுவிற்குள் ஆட்சேபணைகள் ஏதும் வரப்பெறாத பட்சத்தில், சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க உரிமம் வழங்கிட உரிய நடவடிக்கைகள் மேற்கொள்ளப்படும் என்பது இதன்மூலம் தெரிவித்துக் கொள்ளப்படுகிறது.

11.10.23
நில ஆய்வாளர்
அவினாசிபாளையம் உள்வட்டம்
திருப்பூர் தெற்கு வட்டம்.

பெறுநர்
கிராம நிர்வாக அலுவலர்,
பெருந்தொழுவு கிராமம்.

(கிராமத்தில் அறிவிப்பினை விளம்பரம் செய்து அதன் விபரத்தினை மீள சமர்ப்பிக்குமாறு பணிக்கப்படுகிறது.)

தகவல் தெரிந்து கொண்டோம்.

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
1	R. Soundharajan 3/168 Kanalayalayam Perumthozhuvu TIRUPUR	R. Soundar
2	P. Thangavel S/o Lakshman Kalyanam Perumthozhuvu Post Tiruppur	P. Thangavel

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
3	DOOR NO: 3/189 M. AjithKumar S/o murugesh Kandhampalayam perunthalvu	M. Ajith
4	DOOR NO: 3/163 L. Nafeesh S/o L. gaffoor Kathapalayam	L. Nafeesh
5	DOOR NO: 3/216 கோபிநாத் S/O சின்னசாமி கந்தாம்பாளையம்	
6	3/155 [illegible] S/o [illegible] [illegible]	
7	S. Gomathi W/o Senthilkumar D.No: 3/168, Kandhampalayam Perunthaluvu, Tiruppur.	S. Gomathi
8	S. Karthikeyan S/o, Senthilkumar D.No: 3/168A, Kandhampalayam perunthaluvu, Tiruppur	S. Kar
9	M. Selvaraj S/o Moliappa Goundar 3/140, Kandampalayam Padiyur, Tiruppur Po Pin - 638701	M. Selvaraj
10	S. Eswaramoorthy S/o. Samy Goundar, D.No: 3/168A, Kandhampalayam Perunthaluvu, Tiruppur	

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
	3/189, Kandhampalayam	
11	Perumtholuvu Tirupur	M. [illegible]
12	3/180 Vignesh Kumar Kandhampalayam, Perumtholuvu, Tirupur	Vignesh
13	Door No: 3/216 [illegible] S/o [illegible] [illegible]	[illegible]
14	Door No: 3/189 M. Selvi S/o Murugesh Kandhampalayam Perumtholuvu	M. [illegible]
15	RR [illegible] S/o [illegible] 11447 [illegible] [illegible]	P. R. [illegible]
16	C. Selvaraj S/o Chinnusamy D.No: 3/716, Kandhampalayam Perumtholuvu, village Tirupur (D.t)	C. Selvy
17	Sangavi Devi 3/180, Kandhampalayam, Perumtholuvu, Tirupur	M. Sangavi Devi
18	S. Kanamal S/o [illegible] 3/164 Kandhampalayam Perumtholuvu	[illegible]

19	மலைவாழ் பழங்குடியினர் 3/176 கந்தமம் பாளையம் பெருந்தொழு	பழங்குடியினர்
20	R. துரைசாமி s/o ராம்சாமி 3/176, கந்தாம்பாளையம் பெருந்தொழு, திருப்பூர்	R துரை

H.A

கிராமத்தில் அனைவரும் அமைதியும் ஒன்றும் வாழ்ந்து செல்லவேண்டும்.

13/10/2023

கிராம நீர்வாகு அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

பொதுமக்கள் வாக்குமூலம்

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் வசித்து வரும் பொதுமக்கள் ஆகிய நாங்கள் திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களுக்கு அளித்திடும் வாக்குமூலம். திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A, 538/2B, 539/2B ஆகிய நெ. காலைகளில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் சார்பில் மனு செய்துள்ளது தொடர்பாக இந்த வாக்குமூலத்தை அளிக்கிறோம் என்பதை நன்கு அறிவோம்.

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2P நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியானது தொட்டிபாளையம் சார்பதிவாளர் அலுவலக ஆவண எண்கள் 5670/2021, 3235/2018, 3236/2018, 3242/2018, 3243/2018 ஆகியவைகளின் படி பழனிச்சாமி மக்கள் திரு.ஜெகதீசன், திரு.மகேந்திரன், ஜெகதீசன் மனைவி திருமதி.ஞானசுந்தரி, மகேந்திரன் மனைவி திருமதி.புவனேஷ்வரி, நஞ்சப்பன் மனைவி திருமதி.சரோஜினி, பழனிச்சாமி மனைவி திருமதி.சிவகாமி ஆகியோருக்கு பாத்தியப்பட்டு அனுபவத்தில் இருந்து வருகிறது என்பதை நாங்கள் நன்கு அறிவோம். மேற்காண் புலங்களுக்குரிய கணினி சிட்டா எண் 2848, 2849, 2136 ஆகியவைகளில் மேற்படி நபர்களின் பெயர் தாக்கலில் உள்ளது எனவும் மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி நபர்களின் சம்மத கடிதம் பெறப்பட்டுள்ளதன் அடிப்படையில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் பெயரில் பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி மனு செய்யப்பட்டுள்ளது எனவும் அறிவோம். குவாரி குத்தகை உரிமம் வழங்கக் கோரும் புலங்களின் எல்லைகள் வரையறுக்கப்பட்டு, நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது எனவும் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மற்றும் கட்டுமானங்கள் எதுவுமில்லை எனவும் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் போன்றவைகள் எதுவுமில்லை எனவும் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை எனவும் உறுதி கூறுகிறோம்.

எனவே திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A, 538/2B, 539/2P நெ. காலைகளில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கிட எங்களுக்கு எவ்வித ஆட்சேபணையுமில்லை எனவும் வரும்காலத்திலும் இது தொடர்பாக எவ்வித ஆட்சேபணையும் எழுப்ப மாட்டோம் எனவும் உறுதி கூறுகிறோம்.

நாங்கள் மேற்கூறியவையாவும் உண்மை என்றும், இத்தகவல்கள் உண்மைக்கு புறம்பானவை என பின்னர் தெரியவரும் பட்சத்தில் அரசு எடுக்கும் உரிமையியல் மற்றும் குற்றவியல் நடவடிக்கைகளுக்கு கட்டுப்பட்டு நடப்போம் எனவும் உறுதி கூறுகிறோம்.

//படிக்க கேட்டோம் சரிதான்//
//படித்து பார்த்தோம் சரிதான்//

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
1	தினேஷ்குமார் S/o. ஆனையப்பன் 3/214. கந்தாம்பாளையம் பெருந்துறை	தினேஷ்குமார்
2	3/158 ராமசாமி S/o முத்துசாமி வண்ணாரம் கந்தாம் பாளையம் பெருந்துறை	M. ராமசாமி
3	3/164 கந்தாம் Home S/o சிறையப்பகவுண்டர் பெருந்துறை.	S. Raja
4	Jayanthinathan, S/o Perumal, 3/202. Kandhampalayam Perundurai, Erode Dist.	ஜெயந்திநாதன்.
5	T. மற்றியம்மாள் W/o. ரங்கசாமிநாதன் பெருந்துறை, திருப்பூர்	T. Mariyammal
6	R ஜோதிமணி 3/176 மேட்டுப்பாளையம்	R ஜோதிமணி
7	3/180, Kandhampalyam. Padiyur post, Kangeyam, Tirupur - 638 701	Dinesh

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
8	R. Visalatchi W/o. Rajasamy Kandhampalayam Perumtholuvu, Tiruppur	R. விசாலாட்சி
9	Shruthi W/o: Soundararajan Kandhampalayam Perumtholuvu, Tiruppur	Shruthi
10	M. Vathiya D/o Nagarajan 31/189, Kandhampalayam Perumtholuvu village Tiruppur	M. [illegible]
11	R. Sangeetha W/o Ravi 3/193, Kandhampalayam Perumtholuvu, Tiruppur	R. சங்கீதா
12	[illegible]	[illegible]
13	P. Balasubramani S/o. Palanisamy 3/72, Kandipalayam Perumtholu, Tiruppur	P. Bala
14	Sangavai Devi Kandhampalayam, Perumtholuvu	Sangavai Devi
15	L. [illegible] S/o [illegible] 3/33, [illegible] [illegible], [illegible]	[illegible]

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
16	C. Selvaraj S/o Chinnusamy 3/214 Kandhampalayam Perumthalvu	
17	N. தேவராயப்பன் S/o நாச்சிமுத்து 3/45, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	தேவராயப்பன்
18	M. சின்னுசாமி @ முருகேஷ் 3/189 கந்தாம்பாளையம் பெரும்தொழுவு, திருப்பூர்	M. சின்னுசாமி
19	சாமியப்பன் 3/264, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	சாமியப்பன்
20	G. Govindhammal 3/216, Kandhampalayam Perumthaluvu, Tirupur	G. கோவிந்தம்மாள்
21	P. நாகராஜ் S/o பெரியசாமி வண்ணாந்தோட்டம், கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	P. நாகராஜ்
22	G. Rathinasamy S/o Govindasamy 1/210, Kandhampalayam, Perumthaluvu, Tirupur	G. Rathinasamy
23	ரவி S/o வெங்கடாசலம் கந்தாம்பாளையம் புதூர், 3/73 பெரும்தொழுவு	ரவி

ஒப்புதல் அளிப்பவர்
நிலையம் உள்வட்டம்,
திருப்பூர் தெற்கு வட்டம்.

வாக்குமூலம்.

ஈரோடு மாவட்டம், பெருந்துறை வட்டம், ஈங்கூர் கிராமம், வெட்டுக்காட்டு வலசு, கதவு எண் 11/32 என்ற முகவரியில் வசித்து வரும் பழனிச்சாமி மகன் திரு.ஜெகதீசன் ஆகிய நான் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் சார்பில் திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களுக்கு அளித்திடும் வாக்குமூலம். திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A, 538/2B, 539/2B ஆகிய நெ.காலைகளில் மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் விஸ்தீர்ணத்தில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரி மனு செய்துள்ளது தொடர்பாக இந்த வாக்குமூலத்தை அளிக்கிறேன் என்பதை நன்கு அறிவேன்.

நான் ஈரோடு மாவட்டம், பெருந்துறை வட்டம், ஈங்கூர் கிராமம், வெட்டுக்காட்டு வலசு, கதவு எண் 11/32 என்ற முகவரியில் வசித்து வருகிறேன். திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 538/2A நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும், புல எண் 538/2B நெ. காலையில் பு.ஹெக். 0.92.25 ஏர்ஸ் (பு.ஏக்கர் 2.28) விஸ்தீர்ண பூமியும் மற்றும் புல எண் 539/2B நெ. காலையில் பு.ஹெக். 1.05.50 ஏர்ஸ் (பு.ஏக்கர் 2.60) விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 2.90.00 ஏர்ஸ் (பு.ஏக்கர் 7.16) விஸ்தீர்ண பூமியானது தொட்டிபாளையம் சார்பதிவாளர் அலுவலக ஆவண எண்கள் 5670/2021, 3235/2018, 3236/2018, 3242/2018, 3243/2018 ஆகியவைகளின் படி பழனிச்சாமி மக்கள் திரு.ஜெகதீசன், திரு.மகேந்திரன், ஜெகதீசன் மனைவி திருமதி.ஞானசுந்தரி, மகேந்திரன் மனைவி திருமதி.புவனேஷ்வரி, நஞ்சப்பன் மனைவி திருமதி.சரோஜினி, பழனிச்சாமி மனைவி திருமதி.சிவகாமி ஆகியோருக்கு பாத்தியப்பட்டு அனுபவத்தில் இருந்து வருகிறது. மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2848, 2849, 2136 ஆகியவைகளில் மேற்படி நபர்களின் பெயர் தாக்கலில் உள்ளது. மேற்காண் புலங்களில் சிறு .கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி நபர்களின் சம்மத கடிதம் பெறப்பட்டுள்ளதன் அடிப்படையில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் பெயரில் பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி மனு செய்துள்ளேன். குவாரி குத்தகை உரிமம் வழங்கக் கோரும் புலங்களின் எல்லைகள் வரையறுக்கப்பட்டு, நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது எனவும் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மற்றும் கட்டுமானங்கள் எதுவுமில்லை எனவும் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் போன்றவைகள் எதுவுமில்லை எனவும் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை எனவும் உறுதி கூறுகிறேன்.

எனவே திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் கிராமம், பெருந்தொழுவு கிராமம், புல எண் 538/2A, 538/2B, 539/2B ஆகிய நெ. காலைகளில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கிட வேண்டுமாறு பணிவுடன் கேட்டுக் கொள்கிறேன். நான் மேற்கூறியவையாவும் உண்மை என்றும், இத்தகவல்கள் உண்மைக்கு புறம்பானவை என பின்னர் தெரியவரும் பட்சத்தில் அரசு எடுக்கும் உரிமையியல் மற்றும் குற்றவியல் நடவடிக்கைகளுக்கு கட்டுப்பட்டு நடப்பேன் எனவும் உறுதிகூறுகிறேன்.

//படித்து பார்த்தேன் சரிதான்//

//என் முன்னால்//

P. Jagadeesan

Inspection Report- 4.51.0ha

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம்
15. பொன்காளிபாளையம் கிராமம், க.சி. எண்கள் 536, 537/1, 537/2, 537/3, ஆகிய கலைஞர்களுக்கு 500 மீ சுற்றளவில் புறம்போக்கு பின்னங்கிணர் ஏதுமில்லை மற்றும் 1 கி.மீ சுற்றளவில் கோப்புக் கலைஞர்கள் ஏதுமில்லை என்பதை தெரிவித்துக் கொள்கிறேன்.

11/10/2022

/அலுவலக உபயோகம் மட்டும்/

கிராம நிர்வாக அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

சார் ஆட்சியர் அலுவலகம்,
திருப்பூர்.

ந.க.எண்: 5353/2023/அ3

நாள்: 4 .10.2023

குறிப்பாணை

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரணகற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம்-பெருந்தொழுவு கிராமம் - புல எண். 536-ல் 0.47.0 ஹெக் பரப்பும், 537/1-ல் 1.27.5 பரப்பும்-537/2 ல் 1.39.5 பரப்பும்-537/3 ல் 1.37.0 பரப்பும் மொத்தம்-4.51.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் மனு செய்துள்ளது - விசாரணை அறிக்கை கோருதல் - தொடர்பாக.

பார்வை:1. உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை திருப்பூர் அவர்களின் கடித ந.க.669/கனிமம்/2023/, நாள்: 22.09.2023.

2. Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினரின் மனு, நாள்: 13.09.2023.

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திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம, பெருந்தொழுவு கிராமம், புல எண். 536-ல் 0.47.0 ஹெக் பரப்பும், 537/1-ல் 1.27.5 பரப்பும்-537/2 ல் 1.39.5 பரப்பும்-537/3 ல் 1.37.0 பரப்பும் மொத்தம்-4.51.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் பார்வை 2-ல் கண்டவாறு விண்ணப்பம் செய்துள்ளார். மேற்படி விண்ணப்பம் தொடர்பாக,

1.குத்தகை வழங்கக் கேட்கும் புலத்தின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைக் கற்கள் நடப்பட்டுள்ளதா?

2.குவாரி குத்தகை தொடர்பாக பொதுமக்கள் ஆட்சேபணை ஏதும் உள்ளதா என "ஏ1" விளம்பரம் மூலம் கண்டறிந்தும்,

3.குத்தகை வழங்க கேட்கும் புலத்திலிருந்து 300 மீ. சுற்றளவிற்குள் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள் மற்றும் கட்டுமானங்கள் ஏதும் உள்ளதா?

4.குவாரி குத்தகை உரிமம் வழங்கக் கோரும் நிலத்தின் மீதான உரிமை (Surface right) விண்ணப்பதாரருக்கு உள்ளதா? Google Map மற்றும் Minning Plan (திட்ட அறிக்கை) போன்ற விபரங்களுடன்,

கிராம கணக்குகளின் நகல் மற்றும் பிரசித்தம் செய்யப்பட்ட ஏ1 நோட்டீஸ் ஆகியவற்றுடன் குவாரி உரிமம் வழங்குவது தொடர்பான குறிப்பான பரிந்துரையுடன் அறிக்கை அனுப்பி வைக்குமாறு பல்லடம் வட்டாட்சியர் கேட்டுக்கொள்ளப்படுகிறார்.

ஒம்/-ஸ்ருதஞ்ஜெய் நாராயணன்,
சார் ஆட்சியர்,
திருப்பூர்.

பெறுநர்:
வட்டாட்சியர்,
திருப்பூர் தெற்கு

//உண்மை நகல்/உத்திரவுப்படி//

நேர்முக உதவியாளர்

4/10/2023

4/10/23

662 A

677 A

பொதுமக்கள் வாக்குமூலம்

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் வசித்து வரும் பொதுமக்கள் ஆகிய நாங்கள் திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களுக்கு அளித்திடும் வாக்குமூலம். திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 536, 537/1, 537/2 மற்றும் 537/3 ஆகிய நெ. காலைகளில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் சார்பில் மனு செய்துள்ளது தொடர்பாக இந்த வாக்குமூலத்தை அளிக்கிறோம் என்பதை நன்கு அறிவோம்.

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 536 நெ. காலையில் பு.ஹெக். 0.47.0 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 1.16) பூமியும், புல எண் 537/1 நெ. காலையில் பு.ஹெக். 1.27.5 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.15) பூமியும், புல எண் 537/2 நெ. காலையில் பு.ஹெக். 1.39.50 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.44½) பூமியும் மற்றும் புல எண் 537/3 நெ. காலையில் பு.ஹெக். 1.37.00 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.38) பூமியும் என ஆக மொத்தம் பு.ஹெக். 4.51.0 ஏர்ஸ் விஸ்தீர்ண பூமியானது தொட்டிபாளையம் சார்பதிவாளர் அலுவலக ஆவண எண்கள் 3235/2018, 3236/2018, 3241/2018, 3242/2018, 3243/2018, 4514/2019, 4516/2019, ஆகியவைகளின் படி திரு.பழனிச்சாமி, மேற்படி பழனிச்சாமி மக்கள் திரு.ஜெகதீசன், திரு.மகேந்திரன், ஜெகதீசன் மனைவி திருமதி.ஞானசுந்தரி, மகேந்திரன் மனைவி திருமதி.புவனேஷ்வரி ஆகியோருக்கு பாத்தியப்பட்டு அனுபவத்தில் இருந்து வருகிறது என்பதை நாங்கள் நன்கு அறிவோம். மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2138, 2136 ஆகியவைகளில் மேற்படி நபர்களின் பெயர் தாக்கலில் உள்ளது எனவும் மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி நபர்களின் சம்மத கடிதம் பெறப்பட்டுள்ளதன் அடிப்படையில் தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தின் பெயரில் பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி மனு செய்யப்பட்டுள்ளது எனவும் அறிவோம். குவாரி குத்தகை உரிமம் வழங்கக் கோரும் புலங்களின் எல்லைகள் வரையறுக்கப்பட்டு, நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது எனவும் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மற்றும் கட்டுமானங்கள் எதுவுமில்லை எனவும் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் போன்றவைகள் எதுவுமில்லை எனவும் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை எனவும் உறுதி கூறுகிறோம்.

எனவே திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல எண் 536, 537/1, 537/2 மற்றும் 537/3 நெ. காலைகளில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கிட எங்களுக்கு எவ்வித ஆட்சேபணையுமில்லை எனவும் வரும்காலத்திலும் இது தொடர்பாக எவ்வித ஆட்சேபணையும் எழுப்ப மாட்டோம் எனவும் உறுதி கூறுகிறோம்.

நில வருவாய் ஆய்வாளர் அலுவலகம்,
தெற்கு அவினாசிபாளையம்.
நாள்: 11.10.2023.

"அ1 " விளம்பர அறிவிப்பு

திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 536 நெ. காலையில் பு.ஹெக். 0.47.00 ஏர்ஸ் விஸ்தீர்ண பூமியும், புல எண் 537/1 நெ. காலையில் பு.ஹெக். 1.27.50 ஏர்ஸ் விஸ்தீர்ண பூமியும், புல எண் 537/2 நெ. காலையில் பு.ஹெக். 1.39.50 ஏர்ஸ் விஸ்தீர்ண பூமியும் 537/3 நெ. காலையில் பு.ஹெக். 1.37.00 ஏர்ஸ் விஸ்தீர்ண பூமியும் என ஆக மொத்தம் பு.ஹெக். 4.51.00 ஏர்ஸ் விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க 10 ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்க கோரி தி/வா.V.K.P Engineers India (P) Ltd என்ற நிறுவனத்தார் விண்ணப்பம் செய்துள்ளனர். இந்நேர்வில் மேற்காண் மனுவின் மீது நடவடிக்கை மேற்கொண்டு குவாரி உரிமம் வழங்க உரிய முன்மொழிவுகள் தயார் செய்யப்படவுள்ளது. மேற்காண் புலங்களில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்கும் குவாரி உரிமம் வழங்கிட பொதுமக்களுக்கு ஆட்சேபணை ஏதுமிருப்பின் தெற்கு அவினாசிபாளையம் உள்வட்ட நிலவருவாய் ஆய்வாளரிடமோ அல்லது திருப்பூர் தெற்கு வட்டாட்சியரிடமோ பதினைந்து தினங்களுக்குள் எழுத்து மூலமாக தெரிவிக்கும் படி கேட்டுக் கொள்ளப்படுகிறது. குறித்த காலக்கெடுவிற்குள் ஆட்சேபணைகள் ஏதும் வரப்பெறாத பட்சத்தில், சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க உரிமம் வழங்கிட உரிய நடவடிக்கைகள் மேற்கொள்ளப்படும் என்பது இதன்மூலம் தெரிவித்துக் கொள்ளப்படுகிறது.

11.10.23

நில வருவாய் ஆய்வாளர்
தெற்கு அவினாசிபாளையம் உள்வட்டம்,
திருப்பூர் தெற்கு வட்டம்.

பெறுநர்
கிராம நிர்வாக அலுவலர்,
பெருந்தொழுவு கிராமம்.

(கிராமத்தில் அறிவிப்பினை விளம்பரம் செய்து அதன் விபரத்தினை மீள சமர்ப்பிக்குமாறு பணிக்கப்படுகிறது.)

தகவல் தெரிந்து கொண்டோம்.

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
1	C Selvy S/o Chinnasamy D.no : 3/211 Kandhiyan Perunthozuvu, Tiruppur	C. Selvy
2	3/158, Ramasamy, S/o muthusamy Vannakattu Kanalampalayam perunthozuvu, TIRUPUR	M. [illegible]

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
3	Dr. No: A R. [illegible] Old Door No 1/447 [illegible] [illegible]	P. R. [illegible]
4	N. [illegible] W/O [illegible] [illegible] [illegible]	N. [illegible]
5	B- [illegible] W/O [illegible] [illegible] [illegible]	B. Bakiyalakshmi
6	P. SOUNDARARAJAN 3/158 Kandampalayam Perumthalavu, TIRUPUR	R. Saundar
7	Sangavai Devi 3/180, Kandhampalayam, Perumthaluvu Tirupur	M. Sangavai Devi
8	Vignesh Kumar 3/180, Kandhampalayam, Perumthaluvu, Tirupur	Vignesh Kumar
9	P. [illegible] 3/164, [illegible] [illegible] [illegible]	[illegible]
10	S. Thanjay 3/164 Kandhampalayam Perumthaluvu Post Tirupur	S. Thanjay

வ.எண்	பெயர் மற்றும் முகவரி	கையொப்பம்
11	DOOR NO: 3/216 சின்னசாமி S/O சேமலையப்பன் கந்தாம்பாளையம்	சின்னசாமி
12	DOOR NO: 3/189 M. Selvi S/o Murugesh Kandhampalayam Perumtholuvu	M. செல்வி
13	DOOR. NO: 3/43 L. Logajyothi Kandhampalayam Perumtholuvu	L. லோகஜோதி
14	E. Senthilkumar S/o Eswaramoorthy D/no: 3/168, Kandhampalayam Perumtholuvu, Tiruppur	E. செந்தில்குமார்
15	கண்ணம்மாள் க/பெ. சேமலையப்ப கவுண்டர் 3/45, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	கண்ணம்மாள்
16	S. Tamiyanthi. W/o, M. Selvaraj D.no: 3/140, Kandhampalayam Padiyur, Tiruppur.	S. தமயந்தி
17	R. VISALATCHI W/o M. Ramasamy Kandampalayam Perumtholuvu, TIRUPUR	R. விசாலாட்சி
18	SHRUTHI W/o SOUNDARARAJAN Kandampalayam Perumtholuvu, TIRUPUR	Shruthi

19	N. சேஷைஐப்பன் S/o நாச்சிமுத்து D.No: 3/45, கந்தாம்பாளையம் பெருந்தொழுவு, திருப்பூர்	N. சேஷைஐப்பன்
20	P நாகராஜ் S/o பழனிசாமி D.No 3/145 கந்தாம்பாளையம் பெருந்தொழுவு	P நாகராஜ்

மு.அ

கிராமத்தில் அனைவரும் அமைதியும் சாந்தமும் வாழ்ந்து வருகிறோம் தெரிவிக்கப்பட்டது.

13/10/2023.

கிராம நிர்வாக அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

வட்டாட்சியர் அலுவலகம்,
திருப்பூர் தெற்கு.

ந.க.எண்.3642/2023/அ1; நாள்:09.10.2023.

குறிப்பாணை

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல.எண்.536-ல் 0.47.0 ஹெக் பரப்பும், 537/1-இல் 1.27.5 பரப்பும் -537/2இல் 1.39.5 பரப்பும், 537/3-இல் 1.37.0 பரப்பும் மொத்தம் 4.51.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் மனு அளித்தது - அறிக்கை கோருதல் தொடர்பாக.

பார்வை: திருப்பூர் சார் ஆட்சியர் அவர்கள் கடித ந.க.5353/2023/அ3, நாள்:04.10.2023.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல.எண்.536-ல் 0.47.0 ஹெக் பரப்பும், 537/1-இல் 1.27.5 பரப்பும்-537/2-இல் 1.39.5 பரப்பும், 537/3-இல் 1.37.0 பரப்பும் மொத்தம் 4.51.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி **Tvl.V.K.P.Engineers Ind (p) Ltd** நிறுவனத்தினர் மனு அளித்தது. பார்வையில் காணும் கடிதம் வாயிலாக அறிக்கை கோரப்பட்டுள்ளது தொடர்பாக.

1.குத்தகை வழங்கக் கேட்கும் புலத்தின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைக் கற்கள் நடப்பட்டுள்ளதா?

2.குவாரி குத்தகை தொடர்பாக பொதுமக்கள் ஆட்சேபணை ஏதும் உள்ளதா என "ஏ-1" விளம்பரம் மூலம் கண்டறிந்தும், மேலும்

3.குத்தகை வழங்க கேட்கும் புலத்திலிருந்து 300 மீட்டர் சுற்றளவிற்குள் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள் மற்றும் கட்டுமானங்கள் ஏதும் உள்ளதா? மேலும்,

4.குவாரி குத்தகை உரிமம் வழங்கக் கோரும் நிலத்தின் மீதான உரிமை (Surface right) விண்ணப்பதாரருக்கு உள்ளதா? Google Map மற்றும் Minning Plan (திட்ட அறிக்கை) போன்ற விபரங்களுடன்,

கிராம கணக்குகளின் நகல் மற்றும் பிரசித்தம் செய்யப்பட்ட ஏ1 நோட்டீஸ் ஆகியவற்றுடன் குவாரி உரிமம் வழங்குவது தொடர்பான குறிப்பான பரிந்துரையுடன் அறிக்கையினை சமர்ப்பிக்குமாறு தெற்கு அவினாசிபாளையம் நில வருவாய் ஆய்வாளர் கேட்டுக்கொள்ளப்படுகிறார்.

இணைப்பு - மேற்கண்டவாறு

வட்டாட்சியர்,
திருப்பூர் தெற்கு.

பெறுநர்:
நில வருவாய் ஆய்வாளர்,
தெற்கு அவினாசிபாளையம்.

அனுப்புநர்

திரு.கெகரிசங்கர்.எம்.எஸ்.சி.எம்.பில்.,
வட்டாட்சியர்,
திருப்பூர் தெற்கு.

பெறுநர்:

சார் ஆட்சியர்,
திருப்பூர்.

ந.க.எண்.3642/2023/அ1, நாள்: .02.2024.

அம்மையீர்,

பொருள்: கனிமங்களும் சுரங்கங்களும் - சிறுகனிமம் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - திருப்பூர் மாவட்டம் - திருப்பூர் தெற்கு வட்டம் - பெருந்தொழுவு கிராமம் - புல.எண்.536-ல் 0.47.0 ஹெக் பரப்பும், 537/1-இல் 1.27.5 பரப்பும் -537/2இல் 1.39.5 பரப்பும், 537/3-இல் 1.37.0 பரப்பும் மொத்தம் 4.51.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி Tvl.V.K.P.Engineers Ind (p) Ltd நிறுவனத்தினர் மனு அளித்தது - அறிக்கை அனுப்புதல் - தொடர்பாக.

பொருள்:
1. தி/வா. Tvl.VKP.Engineers Ind.(p) Ltd நிறுவனத்தின் விண்ணப்பம்
2. திருப்பூர் சார் ஆட்சியர் அவர்களின் ந.க.எண்.5353/2023/அ3, நாள்:04.10.2023.
3. திருப்பூர் தெற்கு வட்டாட்சியர் அவர்களின் ந.க.எண்.3642/2023/அ1, நாள்:09.10.2023.
4. தெற்கு அவினாசிபாளையம் நில வருவாய் ஆய்வாளர் அயிக்கை, நாள்:09.11.2023, இவ்வலுவலக நாள்:02.01.2023.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், பெருந்தொழுவு கிராமம், புல.எண்.536-ல் 0.47.0 ஹெக் பரப்பும், 537/1-இல் 1.27.5 பரப்பும்-537/2-இல் 1.39.5 பரப்பும், 537/3-இல் 1.37.0 பரப்பும் ஆக மொத்தம் 4.51.0 ஹெக் பரப்பு பட்டா நிலப்பரப்பில் சிறு கனிம விதிகளுக்கு உட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டி எடுக்க 10 வருடங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கக் கோரி **Tvl.V.K.P.Engineers Ind (p) Ltd** நிறுவனத்தார் விண்ணப்பம் அளித்துள்ளதின் பேரில் பார்வை 4-இல் காணும் நில வருவாய் ஆய்வாளர் சமர்ப்பித்துள்ள அறிக்கையின் அடிப்படையில் புலத்தணிக்கை மற்றும் விசாரணை மேற்கொண்டு எனதறிக்கையினை கீழ்கண்டுள்ளவாறு சமர்ப்பித்துக்கொள்கிறேன்.

திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமத்தில் சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க குவாரி குத்தகை உரிமம் வழங்க கோரும் புல எண்கள் மற்றும் உரிமையாளர்கள் குறித்த விபரம் பின்வருமாறு.

வ.எண்.	உரிமையாளர் பெயர் மற்றும் முகவரி (திருவாளர்கள்)	ஆவண எண் (தொட்டிபாளையம் சார் பதிவாளர் அலுவலகம்)	புல எண்கள்	பரப்பளவு (ஏக்கர்)
1.	ஜெகதீசன், த/பெ.வி.கே.பழனிச்சாமி, வெட்டுக்காட்டவலசு, ஈங்கூர், பெந்துறை வட்டம்	3235/2018 21/08/2018	537/1 537/3	0.78 ¾ 0.84 ½
2.	வி.கே.பழனிச்சாமி, வெட்டுக்காட்டவலசு, ஈங்கூர், பெந்துறை வட்டம்	3241/2018 21.08.2018	536 537/2	0.38 ½ 1.14 ¾
3.	புவனேஷ்வரி, த/பெ.பி.மகேந்திரன், வெட்டுக்காட்டவலசு, ஈங்கூர், பெந்துறை வட்டம்	4514/2019 30.09.2019	536 537/2	0.38 ½ 1.14 ¾
4	ஞானசுந்தரி, த/பெ.பி. ஜெகதீசன், வெட்டுக்காட்டவலசு, ஈங்கூர், பெந்துறை வட்டம்	4516/2019 30.09.2019	536 537/2	0.38 ½ 1.14 ¾
5.	ஞானசுந்தரி, த/பெ.பி. ஜெகதீசன், வெட்டுக்காட்டவலசு, ஈங்கூர், பெந்துறை வட்டம்	3243/2018 21.08.2018	537/1 537/3	0.78 ¾ 0.84 ½
6.	புவனேஷ்வரி, த/பெ.பி.மகேந்திரன், வெட்டுக்காட்டவலசு, ஈங்கூர், பெந்துறை வட்டம்	3242/2018 21.08.2018	537/1 537/3	0.78 ¾ 0.84 ½
7.	மகேந்திரன், த/பெ.வி.கே.பழனிச்சாமி, வெட்டுக்காட்டவலசு, ஈங்கூர், பெந்துறை வட்டம்	3236/2018, 21.08.2018	537/1 537/3	0.78 ¾ 0.84 ½

மேற்காண் புலங்களுக்குரிய கனிணி சிட்டா எண் 2138 மற்றும் 2136 ஆகியவைகளில் மேற்காண் உரிமையாளர்களின் பெயர்கள் தாக்கலில் உள்ளது.

மேற்காண் புலங்களில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க மேற்படி உரிமையாளர்கள் சம்மத கடிதம் அளித்துள்ளனர் எனவும், அதனடிப்படையில் திரு.ஜெகதீசன் என்பவர் புல எண் 536 -இல் பு.ஹெக். 0.47.0 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 1.16) பூமியும், புல எண் 537/1 -இல் பு.ஹெக். 1.27.5 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.15) பூமியும், புல எண் 537/2 -இல் பு.ஹெக். 1.39.50 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.44½) பூமியும் மற்றும் புல எண் 537/3 -இல் பு.ஹெக். 1.37.00 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.38) பூமியும் என ஆக மொத்தம் பு.ஹெக். 4.51.0 ஏர்ஸ் விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு குவாரி குத்தகை உரிமம் வழங்க கோரி மனுதாரர் மனு செய்துள்ளார்.

மேற்படி குவாரி குத்தகை உரிமம் வழங்க கோரும் பிரஸ்தாப புலங்களானது பெருந்தொழுவு கிராமம், மஜரா கந்தாம்பாளையம் பகுதியில் அமைந்துள்ளது. மேற்காண் புலங்களில் குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக கிராமத்தில் கடந்த 11.10.2023 அன்று "அ1" விளம்பரம் பிரசுரம் செய்யப்பட்டது. அதன் பேரில் குவாரி குத்தகை உரிமம் தொடர்பாக ஆட்சேபணைகள் ஏதும் நாளது வரை வரப்பெறவில்லை.

மேற்படி தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 536, 537/1, 537/2 மற்றும் 537/3 ஆகிய புலங்களில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது தொடர்பாக ஆட்சேபணை என பொதுமக்கள் வாக்குமூலம் எதுவுமில்லை அளித்துள்ளனர்.

மனுதாரர் கோரிக்கையின் அடிப்படையில் தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண்கள் 536, 537/1, 537/2 மற்றும் 537/3 ஆகிய புலங்களில் கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்குவது பிரஸ்தாப புலங்கள் புலத்தணிக்கை செய்யப்பட்டதில் கீழ்கண்டவாறு உள்ளது.

1. குவாரி குத்தகை உரிமம் வழங்கக் கோரும் பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டுள்ளது. புலங்களின் நான்கு புற எல்லை கற்கள் நடப்பட்டுள்ளது.

2. பிரஸ்தாப புலங்களின் 300 மீட்டர் சுற்றளவில் கிராம நத்தம், அங்கீகரிக்கப்பட்ட குடியிருப்பு மனைகள், மயானம், வழிபாட்டுதலங்கள் மற்றும் கட்டுமானங்கள் எதுவுமில்லை.

3. பிரஸ்தாப புலங்களின் 500 மீட்டர் சுற்றளவில் புராதான சின்னங்கள் எதுவுமில்லை மேலும்,

4. பிரஸ்தாப புலங்களின் ஒரு கிலோ மீட்டர் சுற்றளவில் பாதுகாக்கப்பட்ட வனப்பகுதிகள் எதுவுமில்லை.

5. பிரஸ்தாப புலங்களின் வழியாக உயர் மற்றும் தாழ்வழுத்த மின்கம்பி தொடர்கள் செல்வதில்லை.

6. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

7. நில ஆர்ஜிதம், பூமிதானம், நில உச்சவரம்பு, நிலமெடுப்பு போனற்ற இனங்ளில் கவரப்படுவதில்லை.

8. பிரஸ்தாப புலங்களானது சாகுபடி ஏதும் செய்யப்படாமல் தரிசாக அமைந்துள்ளதுடன் மேற்காண் பூமியில் கட்டிடங்கள், விலையுயர்ந்த மரங்கள் போன்றவைகள் எதுவுமில்லை.

எனவே இந்நேர்வில் தி/வா V.K.P Engineers India (P) Ltd நிறுவனத்தாருக்கு, திருப்பூர் தெற்கு வட்டம், தெற்கு அவினாசிபாளையம் உள்வட்டம், பெருந்தொழுவு கிராமம், புல எண் 536 -இல் பு.ஹெக். 0.47.0 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 1.16) பூமியும், புல எண் 537/1 -இல் பு.ஹெக். 1.27.5 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.15) பூமியும், புல எண் 537/2 -இல் பு.ஹெக். 1.39.50 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.44 ½) பூமியும் மற்றும் புல எண் 537/3 -இல் பு.ஹெக். 1.37.00 ஏர்ஸ் விஸ்தீர்ண (பு.ஏக்கர் 3.38) பூமியும் என ஆக மொத்தம் பு.ஹெக். 4.51.00 ஏர்ஸ் (பு.ஏக்கர் 11.14) விஸ்தீர்ண பூமியில் சிறு கனிம விதிகளுக்குட்பட்டு சாதாரண கிராவல் மண் வெட்டியெடுக்க பத்து ஆண்டு காலத்திற்கு குவாரி குத்தகை உரிமம் வழங்கலாம் எனப் பரிந்துரை செய்து இத்துடன் நில வருவாய் ஆய்வாளர் அறிக்கை, கிராம நிர்வாக அலுவலர் அறிக்கை, அ1 விளம்பர அறிவிப்பு, மனுதாரர் மற்றும் பொதுமக்கள் வாக்குமூலம், கிராமக்கணக்கு நகல்கள், தொடர்புடைய ஆவணங்களை இணைத்தனுப்பியுள்ளேன் என்பதையும் பணிவுடன் தெரிவித்துக் கொள்கிறேன்.

இணைப்பு-மேற்கண்டவாறு,

தங்கள் உண்மையுள்ள

வட்டாட்சியர்,
திருப்பூர் தெற்கு.

15/04/24

T.T. ரோடு மாவட்டம், பெருந்துறை வட்டம்,
T.N.பாளையம் கிராமம், கிதவு எண் 11/32 என்ற
முகவரியில் வசித்து வரும், (வேட்) வைதிருந்த வேலப்ப-
கவுண்டர் மகன் திரு. V.K. பழனிசாமி (1) V.K.பழனி
மகன் திரு P. நாகதீசன் (2) V.K.பழனிசாமி மகன்
திரு. P. மகேந்திரன் (3) P. நாகதீசன் மனைவி -
திருமதி. ஞானசுந்தரி (4) P. மகேந்திரன் மனைவி
திருமதி M. புவனேஸ்வரி (5) ஆகியோர் கூட்டாக
திருப்பூர் மாவட்டம், திருப்பூர் தெற்கு வட்டம்,
10. பெருந்தொழுவு கிராமம் க.ச 536 தெ.நிலையில்
4.நஞ்சை 0.47.0 - ஹெக்டேர்முள்ள பூமியும்,
மன்றும் க.ச. 537/1 தெ.நிலையில் 4.நஞ்சை 1.27.5
ஹெக்டேர்முள்ள பூமியும், க.ச. 537/2 தெ.நிலையில்
4.நஞ்சை 1.39.5 ஹெக்டேர்முள்ள பூமியும், மன்று
க.ச. 537/3 தெ. நிலையில் 4.நஞ்சை 1.37.0
ஹெக்டேர்முள்ள பூமியும், ஆக மொத்தம் 4.நஞ்சை
4.51.0. ஹெக்டேர்முள்ள பூமிகளானது, திருப்பூர்
தொட்டிலாளம் நிலப்பதிவாளர் அலுவலக கிரைய
பத்திர எண்கள் 4514/2019, 4516/2019, 3241/2018
3235/2018, 3236/2018, 3242/2018 ஆகியவைகளின் மூலம்
கூறிய கிராம பட்டா எண்கள் 2136, 2138-ன் மூலம்
பாத்தியப்பட்டதாகும் என்பதை கீழ்கண் நேரம் தெரிவித்து
கொள்கிறேன்.

12/11/2020

கிராம நிர்வாக அலுவலர்
பிறப்பு.இறப்பு பதிவாளர்
17. பெருந்தொழுவு கிராமம்
திருப்பூர் வட்டம்

அலுவலக உபயோகம் மட்டும்

674 A
688 A