GOVERNMENT OF ANDHRA PRADESH
DEPARTMENT OF MINES AND GEOLOGY

From
S.K.V. Satyanarayana, M.Sc.,
Deputy Director of Mines and Geology,
3/5, Vidya Nagar,
Guntur.

To
Sri Gottimukkala Pavan Kumar Reddy,
S/o. G.Rami Reddy,
H.No.16-55/2,
Piduguralla Village & Mandal,
Guntur District – 522413.

Letter No. 2767/MP/LS(M)/DCP/2021, dated: 28.10.2021

Sir,

Sub:- Mines & Quarries – Mining Plan for Quarry Lease held by Sri Gottimukkala Pavan Kumar Reddy for Lime Stone (Minor), over an extent of 4.84 Hectares in Compartment No.102, Janapadu R.F, Guntur Division, Guntur District – Approved – Regarding.

Ref:- 1. Proceeding No.28594/P.RQP/01, dated 13.05.2016 of the Director of Mines and Geology, Hyderabad.
2. Letter No. EFS02/15029/7/2021-FCA-SEC-PCCF/FCA-3, dated 25.08.2021 of Prl. CCF, Guntur.
3. Memo No.6163/D7-1/2020, dated 05.10.2021 of the Director of Mines & Geology, Ibrahimpatnam.
4. Draft Mining Plan submitted on 20.09.2021 filed by Sri Gottimukkala Pavan Kumar Reddy.
5. This office Letter No.2767/MP/LS(M)/DCP/2021, dt:21.10.2021.
6. Letter dated 28.10.2021 along with 6 sets of fair Mining Plan from the Lessee / RQP.

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In exercise of the powers delegated to the Deputy Director of Mines and Geology, vide reference 1st cited and keeping in view of the memo issued by the Director of Mines & Geology, Ibrahimpatnam vide reference 3rd cited, I hereby approve the Mining Plan, for the period of Five (5) years in respect of Quarry Lease for Lime Stone (Minor), over an extent of 4.84 Hectares in Compartment No.102, Janapadu R.F, Guntur Division, Guntur District, held by Sri Gottimukkala Pavan Kumar Reddy under Rule 7A(i) and Rule 12 of Andhra Pradesh Minor Mineral Concession Rules, 1966 read with G.O.Ms.No.56, Industries and Commerce (Mines-II) Department, dated:30.04.2016. This approval is subject to the following conditions.

1. The proposals contained in the approved mining plan shall be applicable from the date of execution of the lease and for the mining activities to be carried out within the lease hold area as per the approved mining plan only.

2. This Mining Plan is approved without prejudice to any other laws applicable to the Quarry Lease area from time to time whether made by the Central Government, State Government or any other authority.

Contd...2

3. Approval of the Mining Plan does not in any way imply the approval of the Government in terms of any other provisions of the Mines and Minerals (Development and Regulation) Act, 1957 and amended act 2015 and the Mineral Concession Rules 1960 (Amended Rules 2016) and any other laws including the Forest Conservation Act, 1980.

4. The Mining Plan is approved subject to strictly adhering to the Relevant Regulations of MMR 1961 and obtaining prior permission from Director General Mines Safety whenever and where ever it is required.

5. The Lessee shall conduct quarrying operations during the proposed Mining Plan period in a systematic and scientific manner as per the under taken given by the lessee through Notarized Affidavit.

6. The applicant/ lessee shall safeguard the structures, public buildings, roads, railway line, electric line and water bodies exists if any as per regulations 109 & 127 of MMR, 1961.

Encl: A.M.P.

Yours faithfully,

S. I.V. S. Jayanarayan

Deputy Director of Mines & Geology,
Guntur.

Copy submitted to the Prl. Chief Conservator of Forests & Head of Forest Force, Aranya Bhvan, A.P., Nagarampalem, Guntur for favour of information.
Copy submitted to the Director of Mines and Geology, Ibrahimpatnam along with A.M.P.
Copy submitted to the Member of Secretary, Andhra Pradesh Pollution Control Board, Visakhapatnam along with AMP for information.
Copy to Sri N.V.S.P.L. Ravikanth, RQP, H.No.5-67-89, 5/20, Brodipet, Guntur for information.
Copy submitted to the Regional Controller of Mines, IBM, Sultan Bazar, Hyderabad along with A.M.P.
Copy submitted to the Director of Mines Safety, Gruhakalpa (Block-2), Nampally, Hyderabad for favour of information.
Copy to the Asst. Director of Mines and Geology, Dachepalli along with A.M.P.

MINING PLAN INCLUDING
PROGRESSIVE MINE CLOSURE PLAN
FOR
LIMESTONE (Minor)

Over an extent of 4.84 Ha
Compartment No. 102, Janapadu R.F,
Guntur Division, Andhra Pradesh State.

FOR THE FIVE YEARS PLANPERIOD

(Under Amended Rule 7 A and Rule 12(4) of APMMC Rule 1966& FCA.1980)

Category-B2,
Open cast Semi Mechanized Mine
Land Classification: Janapadu Reserve Forest Land

APPLICANT:

Sri Gottimukkala Pavan Kumar Reddy,
S/o G. Rami Reddy,
H.No. 16-55/2,
Piduguralla – 255413,
Guntur District. A.P.,

Prepared By

N.V.S.P.L. RAVIKANTH,M.Sc., (Geo)
RQP/ DMG / HYD / 105 / 13

Off: GEO MINING SERVICES,
1st lane lakshmipuram, Guntur-7

Mobile: 98482 32225
Email: geotechmining2003@gmail.com

CONSENT LETTER

Sri N.V.S.P.L. RAVIKANTH, R.Q.P (RQP/ DMG / HYD / 105 / 13) is appointed for preparation of the Mining Plan including Progressive Mine Closure Plan in respect of Limestone (Minor) over an extent of 4.84Ha in forest land Compartmenrt No. 102, Janapadu R.F, Guntur Division Andhra Pradesh State.

Deputy Director of Mines & Geology * Government of A.P. Guntur *

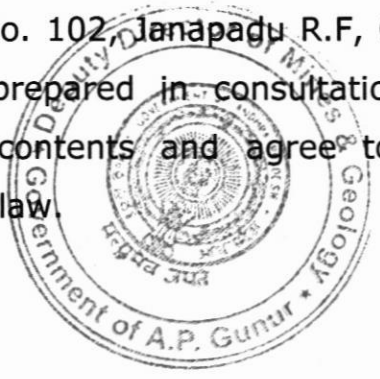
Date : 06-09-2021

Place : Guntur

Applicant

DECLARATION

Certified that the Mining Plan including Progressive Mine Closure Limestone (Minor) over an extent of 4.84Ha in forest land Compartmenrt No. 102, Janapadu R.F, Guntur Division and Andhra Pradesh State prepared in consultation with me and we have understood its contents and agree to implement the same in accordance with law.



Date : 06-09-2021

Place : Guntur

Applicant

CERTIFICATE

Certified that, "The information furnished in the Mining Plan including Progressive Mine Closure Plan for Limestone (Minor) over an extent of 4.84Ha in forest land Compartmenrt No. 102, Janapadu R.F, Guntur Division and Andhra Pradesh State., held by **Sri G. Pavan Kumar Reddy** is true and correct to the best of my knowledge".

Deputy Director of Mines & Geology
Government of A.P. Guntur

CORRECTNESS CERTIFIED

(N.V.S.P.L. RAVIKANTH)
RQP/DMG/HYD/105/13

Date : 06-09-2021

Place : Guntur **RQP**

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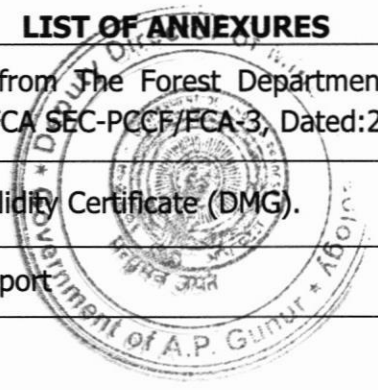
LIST OF ANNEXURES

I	Copy received from The Forest Department, Guntur vide Ref.no. EFSO2-15029/7/2021-FCA SEC-PCCF/FCA-3, Dated:25.08.2021.
II	Copy of RQP Validity Certificate (DMG).
III	Prefeasibility Report.



MINING PLAN
FOR
LIMESTONE (Minor)

This Mining Plan is Approved Subject to the Conditions Stipulations Indicated in the Mining Plan Approval Letter No. 2767/MP/LS(m)DC/2021 Dated: 28/10/2021

Over an extent of 4.84Ha.
Compartment No. 102, Janapadu R.F,
Guntur Division,
Andhra Pradesh State.

(FOR THE PLAN PERIOD First Five Years)
(Under Amended Rule 7 A (i) and Rule 12(4) of APMMC Rule 1966 and FCA-1980)

APLLICANT:

Sri Gottimukkala Pavan Kumar Reddy,
S/o G. Rami Reddy, H.No. 16-55/2
Piduguralla-522413, Guntur District,
Andhra Pradesh.

INTRODUCTION

Sri G. Pavan Kumar Reddy, has applied for grant of Quarry Lease for Limestone (Minor) over an extent of 4.84Ha in Forest land in Compartment No.102, Janapadu R.F., Guntur Division and Andhra Pradesh.

M/s Sri G. Pavan Kumar Reddy uploaded in the Ministry's web portal applied for Mining lease of Limestone (Minor) over an extent of 4.84Ha in Forest land in Compartment No.102, Janapadu R.F., Guntur Division and Andhra Pradesh.

After careful examination of the proposals of the user agency the Pri. Chief Conservator of Forests & Head of Forest Fore, Aranya Bhavan, Andhra Pradesh, K.M Munshi Road, Guntur is request to submit the approved mining plan for the quarry lease applied area of Limestone (Minor) over an extent of 4.84Ha In Compartment No.102, Janapadu R.F., Guntur Division and Andhra Pradesh, in favour of **Sri G. Pavan Kumar Reddy** subject proposal for taking further action in the matter vide letter number **Ref No. EFS02-15029/7/2021-FCA-SEC-PCCF/FCA-3, Dated: 25-08-2021.** (Copy enclosed as **Annexure – I**)

APPROVED
S.K.V. Satyanarayana
S.K.V. SATYANARAYANA
Deputy Director of Mines & Geology
GUNTUR

Sri G. Pavan Kumar Reddy has approached **Sri N.V.S.P.L.Ravikanth, Geologist** (RQP/DMG/HYD/105/13) **valid upto 19.07.2023** (a copy of RQP Certificate is enclosed as Annexure – II) for preparation of Mining Plan in the above mentioned area.

Accordingly this Mining Plan is prepared as per guidelines issued in Form – T in G.O.Ms. No. 56, Industries & Commerce (M.II) Department, dated 30.04.2016 under Amended Rule 7A of APMMC Rules '1966 and FCA-1980 & Progressive Mine Closure Plan under Rule 23 (B) of MCDR 1988 and for the 5 years plan period submitted to the Deputy Director of Mines & Geology, Guntur for approval.

Deputy Director of Mines & Geology * Government of A.P. Guntur *

1.0 GENERAL

1.1	**Name and Address of the Applicant**	**Sri Gottimukkala Pavan Kumar Reddy,** S/o G. Rami Reddy, H.No. 16-55/2 Piduguralla-522413, Guntur District, Andhra Pradesh.
1.2	**Status of the Applicant (Individual/ Private Company/ Firm)**	Individual
1.3	**Mineral (s) which are included in the Letter of Intent**	Limestone (Minor)
1.4	**Name and Details of person employed for preparing Mining Plan**	**N.V.S.P.L. RAVIKANTH,** RQP/ DMG / HYD / 105 / 13, House No. 5-67-89, 5/20 Brodipet, Guntur. Landline: 0863-2213225 Mobile: 98482 32225
1.5	**E-Mail & Website**	geotechmining2003@gmail.com
1.6	**RQP Registration No. & Validity**	RQP/ DMG / HYD / 105 / 13 (Valid Upto 19th July 2023)

2.0 Location and Accessibility

Lease Details:

1	Village	Janapadu
2	Mandal	Piduguralla
3	District	Guntur
4	State	Andhra Pradesh
5	Survey No.	Compartment No.102, Janapadu R.F., Guntur Division.
6	Extent	4.84Ha
7	Ownership of Occupancy	Reserve Forest
8	Geo Co-ordinates	The quarry lease area falls in the Survey of India. Toposheet No. E44T15 (Scale 1:5000) and is bounded

Geo Co-ordinates WGS-84 Datum

BP.NO'S	LATITUDE (N)	LONGITUDE (E)
M1	16.45423549	79.89346412
M2	16.45364386	79.89392088
M3	16.45346008	79.89355590
M4	16.45326712	79.89314175
M5	16.45264746	79.89282599
M6	16.45236917	79.89240043
M7	16.45210721	79.89200140

		M8	16.45230302	79.89147998	
		M9	16.45260561	79.89067535	
		M10	16.45283403	79.89006708	
		M11	16.45305915	79.89061759	
		M12	16.45328874	79.89118186	
		M13	16.45354501	79.89179048	
		M14	16.45376279	79.89231889	
		M15	16.45401171	79.89293185	
		S1	16.45432013	79.89348463	
		S2	16.45361431	79.89403058	
		S3	16.45339873	79.89360089	
		S4	16.45320973	79.89318029	
		S5	16.45259986	79.89288028	
		S6	16.45231779	79.89244907	
		S7	16.45202979	79.89201015	
		S8	16.45223936	79.89145247	
		S9	16.45254341	79.89064364	
		S10	16.45283075	79.88987858	
		S11	16.45312179	79.89058359	
		S12	16.45335352	79.89114839	
		S13	16.45360708	79.89176083	
		S14	16.45382844	79.89229868	
		S15	16.45407782	79.89289814	
		DA1	16.45391798	79.89297233	
		DA2	16.45400307	79.89326337	
		MJ1	16.45413352	79.89345579	
		MJ2	16.45412321	79.89319225	
9	Location of the area and approach	The quarry lease area is located due east of Janapadu Village located on Guntur – Piduguralla State Highway. The Village is located at a distance of 70.4Km due SE of Guntur town. The quarry lease area can be approached from Piduguralla - Janapadu Road. The location if the area is indicated in Key – Cum – Location Map.			

The DGPS Map certified by the District Forest Officer, Guntur in favor of **Sri G. Pavan Kumar Reddy**, is given as **Plate No. II**.

Google image of Quarry Lease area is shown below:

2.1 Period of Quarry lease = _____ years

3.0 Infrastructure and Communication

Availability of Water	The ground water level is 20-25 m Below Ground Level (BGL). The agricultural fields in the surrounds of the Quarry lease area are irrigated by the canal water and ground water by using Bore wells.
Availability of Electricity	Electricity is available in the surrounding villages.
Communication Network	Tele Communications facility is available at the Janapadu Village.
Road Network	The subject area can be approached by Piduguralla to Janapadu road is passing at a distance of 3km west from the lease area.
Nearest Rail Head	Piduguralla Railway Station is about 5.5km from the lease area.
Port Facility	Krishnapatnam Port is about 278km from the Site.
School	Primary School Education is available at Janapaduvillage. Higher Education is available at Piduguralla & Guntur.
Medical Facility	Registered Pvt. Medical Practitioner is available at Janapadu village. Doctors, Nursing Homes & Hospitals are available at Guntur Town.

Boundaries

North	Agriculture Lands
South	Janapadu R.F
East	Janapadu R.F
West	Barren Lands

Agriculture is important occupation of the local people. Further good potential exists for the employment of unskilled laborers in the existing Lime Stone (Minor) quarries and allied small/medium scale industries. The area is falling in the zone of semi-arid climatic conditions with an average annual rainfall around 1000 mm. The local day temperature varies from 25° C in November to 48° C in April & May months. The general wind direction reported is SW to NE and SE to NW.

Details of Approved Mining Plan, if any

No Mining plan was approved earlier. The Mining Plan is for assessment of the quarry activity, Reserve Estimation, Proposed Method of Mining, Environment Management Plan including Reclamation and Rehabilitation measures to be adopted.

Deputy Director of Mines & Geology * Government of A.P. Guntur *

PART – A

1.0 General Details of the applied area/ Mining Lease:

1	Topography	The Quarry lease area in Reserve Forest area applied area is foot of the hill part raised 37m above the ground level within the quarry lease area with topo relief of 35m. The minimum RL is 110m seen in SW Side of the lease area and maximum RL is 145m is found in east side of the lease area. Assumed Bench Mark (ABM) is fixed at BP-S10 it is level 108.616mts towards east. The ABM will not be disturbed and a concrete will be laid at ABM and will be protected from Mining operations.
2	Drainage	Sub-Dendritic Pattern in N-S
3	Vegetation	The quarry lease area is part of hilly terrain, with some shrubs and bushes where some soil exists. Area around the hill are cultivation lands
4	Climate	The quarry lease area is falling under semi-arid tropical zone. The area is having dry climate. The temperature recorded in this area is 25°C in winter and about 48°C in summer seasons. The wind direction is in SW to NE.
5	Rainfall	The average annual rainfall of the area is 1000 mm.
6	Soil Type	Brown Soils
7	Land use pattern	Hilly area with shrubs & bushes

The baseline is considered from the GPS reading in co-relation with Topo sheet contours, the levels were taken using total station of LEICA with 5 cm accuracy covering the total area.

2.0 GEOLOGY AND EXPLORATION

a) Regional Geology

Limestone, Shale and Quartzite of the Kurnool Super Group are exposed in the Palnad area, these are locally known as Palnad formations. The stratigraphic succession of the palnad series is as follows

Algonkean	Palnad Series	Nandyal Shale
		Koikuntla Limestone
		Panyam Quartzite's
		Owk Shale
		Narji Limestone
		Banganapalli Quartzite
		----------Thrust----------
		KADAPA SUPER GROUP

Kadapa Super Group Of the above sequence, the narji limestone, attained maximum thickness and spread over large area. It has extensively found between Piduguralla – Dachepally - Gurzala area. The owk shale and other younger formation are exposed only in Veldurthi & Durgi area.

b) Detailed description of geology of the lease applied area

The present lease applied area is hilly terrain hill raised from 37 M above the Ground level this area is covered by the Limestone (White Colour and high silica the applied area under the Janapadu Reserve Forest land it covered by Narji Limestone formation of Kurnool group exposed in this area is well bedded, gray to white in colour and of flaggy to massive nature. The trend of lime beds varying considerably in this area due to structural disturbance. Fine laminae of argillaceous and silt found in limestone of this area. There are two types of limestone seen in the area

1) Siliceous Limestone
2) Argillaceous Limestone

In this area siliceous limestone occupy in large area. Mostly composed of calcite with minor constituents of quartz, sericite, pyrite, anatase and goethite minerals.

Structurally, Palnad limestone hosts number of faults in different direction mainly of NNW - ESE, ENE - WSW, NNE - SSW trends. Vertical joints in limestone are trending in N- S, N 20° E- S 20° W, N 60°- 80° W- S 60°- 80° E, out of these joints some are open and some are filled with calcite and quartz veins.

Siliceous, flaggy limes tones are hard, compact and massive which are being mined for in this area for manufacture of Lime powder

a) Details of Quarry Lease Holder:

Sri Gottimukkala Pavan Kumar Reddy,
S/o G. Rami Reddy,
H.No. 16-55/2
Piduguralla-522413, Guntur District,
Andhra Pradesh.

b) Surface plan area on ~~1: 1000~~ or 1: 2000 scale

Topographical Survey

The baseline is considered from the GPS reading in co-relation with Toposheet contours, the levels were taken using DGPS with +/- 0.5mm accuracy covering the total area.

Assumed Bench Mark (ABM) is fixed at BP-S10 it is level 108.616mts towards east. The ABM will not be disturbed and a concrete will be laid at ABM and will be protected from Mining operations. The geo co-ordinates were fixed using the 12-channel handled GPS, GARMIN 78s.

MAP DATUM: WGS – 84.

Position Format	hddd – mm – ss.s
Map Datum	WGS – 84
Units	Metric
North Reference	Magnetic
Variance	001° W
Angle	Degrees

The features captured are drafted to prepare the surface Plan on 1: 2000 Scales.

c) Geological plan prepared on a scale ~~1:1000~~ or 1:2000.

The sketches provided by the applicant /Applicant are with the distances marked in links which are converted to mater scale and the points shown as boundary pillars are captured by the GPS for co-ordinates in WGS - 84 and the baseline /datum is located the plain land.

The geological features captured are drafted to prepare the Geological Plan on 1 : 2000 Scale.

d) Geological sections on natural scale at suitable interval across the lease applied area or applied area

Geological section is shown in **Plate – III**.

e) Broadly indicate the future problem of exploration with due justification taking into consideration the future tentative excavation program planned in First five years.

Year	No. of Boreholes (Core/RC/DTH)	Grid Interval	Total meterage	No. of pits, Dimensions and Volume	No. of Trenches, Dimensions and Volume
1st Year	N. A.	-	-	N. A.	N. A.
2nd Year	N. A.	-	-	N. A.	N. A.
3rd Year	N. A.	-	-	N. A.	N. A.
4th Year	N. A.	-	-	N. A.	N. A.
5th Year	N. A.	-	-	N. A.	N. A.

Not applicable to the Limestone (Minor) quarries as the lease applied area is located on part of hill 95m above the ground level.

f) Reserves and Resources as per UNFC. Detailed calculation of reserves shall be stated

The deposit up to RL 110M is considered as Proved Reserves (Plate-IV)

Methods of Estimation of Reserves

i. method of estimation of Reserves:

In this method reserves will be estimated considering the surface area of the mine multiplied by average depth of the reserves. In this area max RL is 145m and Minimum RL is 110m. Hence take the difference is 35m is proved reserves. As the terrain of the lease area is hilly, hence it is appropriate to consider sectional area method instead of arithmetic method as depth of the reserve is varying in the lease area.

The reserves are considered up to RL 110m. It is proved reserves (111). The Limestone (Minor) found to be normal in that area, the deposit is being worked out to a maximum depth of up to 110M RL only.

ii. Cross sectional method of estimation of Reserves:

Three Cross Sections (A-A1 to C-C1) are drawn perpendicular to the slope direction for profile purpose. The reserves were estimated in cross sectional method of estimation as given below.

Sectional Area,	x	`Section Influence,	=	Volume of Geological Reserve
(Width x Depth) (Sq.m.)		Length (m)		(Cu. m.)

Total *Geological Reserves (Proved)*

Total Geological Reserves (Limestone (Minor))								
S. No.	Section	Sectional Area	Influence	Volume	TF	Reserves (Tons)	Recovery 90% Tons	Waste 10% Tons
		Sq.M	M	Cu. M				
1	A - A1	1571	100	157,100	2.5	392750	353475	39275
	B - B1	2944	100	294,400	2.5	736000	662400	73600
	C - C1	1495	145	216,775	**2.5**	541938	487744	54194
Total Reserves				**668,275**		**1670688**	**1503619**	**167069**

Reserves Blocked under Benches (Limestone (Minor))								
S. No.	Section	Sectional Area	Influence	Volume	TF	Reserves (Tons)	Recovery 90% Tons	Waste 10% Tons
		Sq.M	M	Cu. M				
1	A - A1	153	100	15,300	2.5	38250	34425	3825
	B - B1	281	100	28,100	2.5	70250	63225	7025
	C - C1	26	145	3,770	**2.5**	9425	8483	943
Total Reserves				**47,170**		**117925**	**106133**	**11793**

Reserves Blocked under 7.5m Buffer Zone (Limestone (Minor))								
S. No.	Section	Sectional Area	Influence	Volume	TF	Reserves (Tons)	Recovery 90% Tons	Waste 10% Tons
		Sq.M	M	Cu. M				
1	A - A1	258	100	25,800	2.5	64500	58050	6450
	B - B1	311	100	31,100	2.5	77750	69975	7775
	C - C1	133	145	19,285	**2.5**	48213	43391	4821
Total Reserves				**76,185**		**190463**	**171416**	**19046**

Reserves Blocked under Forest Safety Zone (Limestone (Minor))								
S. No.	Section	Sectional Area	Influence	Volume	TF	Reserves (Tons)	Recovery 90% Tons	Waste 10% Tons
		Sq.M	M	Cu. M				
1	A - A1	299	100	29,900	2.5	74750	67275	7475
	B - B1	335	100	33,500	2.5	83750	75375	8375
	C - C1	136	145	19,720	**2.5**	49300	44370	4930
Total Reserves				**83,120**		**207800**	**187020**	**20780**

UNIT

M - Length
Sq.M - Square Meters (M × M)
Cu.M - Cubic Meters (Sq.M × M)
T - Tones (Cu.M × 2.5)

Considering the recovery of the Lime Stone (Minor) from the quarry is 90%, the 10% will be the generated in the form of sub grade during quarry operations, which will be stacked separately in stock yard for further sorting and sizing.

Mineable Reserves

Mineable reserves are calculated by deducting the reserves blocked under benches from the total geological reserves. Only proved reserves are considered for calculating the mineable reserves. The details of reserves blocked under benches & safety zone are given in table above:

Summary of Reserves: Total reserves 90% Tones (Proved)

A. Total Geological Reserves(m^3)	:	1,503,619
B. Reserves Blocked under Safety Slopes	:	106,133
C. Reserves Blocked under 7.5M Buffer Zone		171,416
D. Reserves Blocked under Forest Safety Zone		187,020
E. Mineable Reserves (A-(B+C+D)) (m^3)	:	**1,039,050**
Yearly production	:	**96,300**
Life of mine	:	**1,039,050/96,300 =11.89 Say 12 Years**

g) Feasibility report along with financial analysis per economic viability of the deposit

Enclosed as Annexure –IV

h) Mineral Reserves

1) Mode of mining recovery factor, Mining loses, processing loses etc
   Open cost Manual Method of mining with shallow drilling and Blasting.
2) **Cut off grade:** 90%
   Ultimate pit limit: 110M
3) **Mineral blocked due to presence of /maintenance of benches, barriers inter roads, electrical lines etc.,**

No deposit will be blocked under the 7.5 buffer zone as the quarries enclosing the subject area also will be slicing the hill simultaneously in depth (Present we will be proposed to develop the benches for safety parameters) the internal roads area temporary in nature the follow the suite of benches that will be formed. No electrical lines are passing over the subject area.

3.0 MINING

(i) Method of Mining (Open Cast other than fully Mechanized/Semi Mechanized)

The Lime Stone (Minor) in the quarry lease area is exposed on the surface with sheet. Hence, it is proposed to mine the sheet by semi-mechanized methods, by developing the benches of 6 height with 3 M bench width. With shallow drilling and breaking with rock breakers. The development of benches in the sheet rock will be maintained @ 63° safety slopes.

Therefore, mining operations are to be carried out in this area in 2 stages.

1) Development
2) Production

Stage - 1

The weathered material will be scraped out so that the underlying fresh mineral will be exposed for quarrying.

The mineral beds exposed will be subjected to drilling and rock breakers from mother rock.

Rock Splintering:

The loose material will be loosened with drilling the holes with jack hammers aided with compressor or using rock breakers to separate the mass.

Fragmentation the Mass:

For fragmentation of the mass from mother rock, the line drilling and breaking method are in use.

(ii)Production Proposed for the First Five Years

It is proposed to produce **481,500Tons** of Lime Stone (Minor) during next Five years plan period with an average annual production of **96,300Tons** from an area of **22,284M^2** Bench height 6m and depth 3m will be developed during the plan period in depth of previous year workings successively.

The sub grade that will be generated will be to the tune of 10% in the form of intercalated waste generated from the joint planes in the rock and dust generated during the drilling of holes.

permanent dumps will be generated as the waste rock will be crushed and sold as Lime Stone (Minor).

a) Stack Yard

Temporary stocks will be maintained on day to day basis, entire ROM will be cleared within days (i.e. 4 to 5 days).

b) Quarrying Programme for the next Five years

The Applicant proposes to take up quarrying operations in entire quarry lease area between the Con 127-114m to RL 110m. The excavation activity will be taken up in entire quarry lease area and advances South wards.

1st Year

In the year mining will be taken up along the Southwest part of the quarry lease area between the Con 114-118m TO RL 110m covering an area of 7,163M^2 a bench of 6m height and 3m width will be formed.

The mining advances east wards. A sectional area of 300M^2 will be excavated producing 108,750Tons of Lime Stone (Minor), generating 90% (97,875Tons) of Market Grade Lime Stone (Minor) and 10% (10,875Tons) of Sub Grade will be generated influence of 145m Section C-C1.

2nd Year

In the year mining will be taken up along the Southwest part of the quarry lease area between the Con 118-120m TO RL 110m covering an area of 5,466M^2 a bench of 6m height and 3m width will be formed.

The mining advances east wards. A sectional area of 300M^2 will be excavated producing 108,750Tons of Lime Stone (Minor), generating 90% (97,875Tons) of Market Grade Lime Stone (Minor) and 10% (10,875Tons) of Sub Grade will be generated influence of 145m Section C-C1.

3rd Year

In the year mining will be taken up along the Southeast part of the quarry lease area between the Con 120-123m TO RL 110m covering an area of 2,856M^2 a bench of 6m height and 3m width will be formed.

The mining advances east wards. A sectional area of 300M^2 will be excavated producing 108,750Tons of Lime Stone (Minor), generating 90% (97,875Tons) of Market Grade Lime Stone (Minor) and 10% (10,875Tons) of Sub Grade will be generated influence of 145m Section C-C1.

4th Year

In the year mining will be taken up along the Southeast part of the quarry lease area between the Con 122-124m TO RL 110m covering an area of 1,487M^2 a bench of 6m height and 3m width will be formed.

The mining advances east wards. A sectional area of 300M^2 will be excavated producing 108,750Tons of Lime Stone (Minor), generating 90% (97,875Tons) of Market Grade Lime Stone (Minor) and 10% (10,875Tons) of Sub Grade will be generated influence of 145m Section C-C1.

5th Year

In the year mining will be taken up along the west part of the quarry lease area between the Con 114-127m TO RL 110m covering an area of 5,312M^2 a bench of 6m height and 3m width will be formed.

The mining advances east wards. A sectional area of 400M^2 will be excavated producing 100,000Tons of Lime Stone (Minor), generating 90% (90,000Tons) of Market Grade Lime Stone (Minor) and 10% (10,000Tons) of Sub Grade will be generated influence of 100m Section B-B1.

The Production for five years table given below.

YEAR WISE PRODUCTION PLAN

Year	Sectional Area (m^2)	Section Influence (m)	Volume (m^3)	Bulk Density	Reserves (Tons)	Recovery 90%(T)	Waste 10% (T)	RLS
I Year	300	145	43500	2.5	108750	97875	10875	Con 114-118m To RL 110m
II Year	300	145	43500	2.5	108750	97875	10875	Con 118-120m To RL 110m
III Year	300	145	43500	2.5	108750	97875	10875	Con 120-122m To RL 110m
IV Year	300	145	43500	2.5	108750	97875	10875	Con 122-124m To RL 110m
V Year	400	100	40000	2.5	100000	90000	10000	Con 114-127m To RL 110m
Total			**214000**		**535000**	**481500**	**53500**	
Yearly Average			**42800**		**107000**	**96300**	**10700**	

Plate – IV shows the Year wise Working Plan & Sections of Quarry lease applied area.

a) Quantum of Excavation:

A total of 214,000M^3 /535,000Tons of Lime Stone (Minor) will be excavated during next Five years to retrieve 481,500(90%) Tons of Market Grade Lime Stone (Minor), there by generating 53,500(10%) Tons sub Grade.

b) Production Schedule

The production of Limestone (Minor) is continuous throughout year except during monsoon. That is 10 working months, 25 working days per month are considered. The average production of **96,300M^3** per year (**250 days @ 385.2Cum. per day**) can be easily achieved in a single shift with sufficient men and machinery.

c) Magazine Type and Capacity

The Applicant will engage a licensed blasting contractor for carrying out the drilling and blasting.

d) Stack Yard

Temporary stocks will be maintained on day to day basis, entire Material will be cleared within days (i.e. 4 to 5 days).

e) Handling of blocks within the quarry

Not applicable

f) Transportation of Material from quarry

The quarry materials will be transported to crushers.

4.0 MINE DRAINAGE

The general direction of ground water flow is towards SE. The areas of Guntur, Paland and Sattenapalle taluks form a part of the Krishna River Basin. The height of water table ranges from 10m above M.S.L. In the SE i.e., Adjacent to Bay of Bengal, up to as high as 200m in the upland areas in parts of Paland and Vinukonda taluks.

Mine lease is located a gently undulating terrain sloping from East to west. Ground water table is 45 – 50 m bgl in the surrounding areas. and max mining depth is 25m from the top of the surface. Hence ground water table will not have any impact due to the mining operations.

5.0 WASTE MANAGEMENT PLAN (SOLID & LIQUID)

Solid waste for the first five years

The year wise sub grade generation in next 5 years is as follows:

Year	Waste Generation
	Mineral Waste @ 10% (Tons)
1st Year	10,875
2nd Year	10,875
3rd Year	10,875
4th Year	10,875
5th Year	10,000
TOTAL	**53,500**
AVERAGE	**10,700**

Dump yard will be formed for the mineral waste material that also will be sold to industries. It is estimated that in the next five years a total of 53,500Tons of sub grade is expected to be generated with an average of 10,700Tons per annum.

Dumping Site Particulars

Dump yards will be located at South side of the quarry lease area with an area of 400m^2.

6.0 USE OF MINERAL AND MINERAL REJECT

- Soil can be utilized for reclamation of degraded area.
- Weathered rock if it is sufficiently soft and devoid of rock fragments can be utilized for roads, filling of road side ditches, formation of approach roads to quarries, construction works etc.

7.0 Processing of ROM (Run of mine) and Mineral Reject

The Limestone excavated in large sizes will be subjected to crushing and sizing to various sizes as suitable for construction and road formation.

8.0 Others

(a) Site Services

Temporary office, Rest Rooms, First Aid Room, Shelters, Water for drinking will be provided in the quarry premises on make shift arrangement.

(b) Employment Potential

Man Power at Quarry

S. No.	Category	No. of Persons
1.	Mines Manager	1
2	Geologist	1
2.	Mine Supervisor	1
3.	Skilled Workers	6
4.	Semi-Skilled Workers	6
5.	Un-skilled	11

(c) The details of machinery being utilized at quarry are as follows:-

S.No	Type of machine	No	Size/ capacity	Make	Motive power
1	Excavator	1	1.2 cu.m	TATA Hitachi-370	Diesel
2	Excavator	1	1 cu.m.	TATA Hitachi-300	Diesel
3	Tippers	1	25 tons	Ashok Leyland	Diesel
4	Compressor	1	-	VT-6	Diesel
5	Drilling Machines	1	-	JRD	Diesel
6	Jack Hammers	6	-	-	-
8	Water Tankers	1	5000 Ltr.	-	Diesel
9	Pick-up/Jeep	1	4X4	M&M	Diesel
10	Generator	1	-	Cummins	Diesel

(d) Safety Gears:

✓ Pre-Employment Health Check-up for all New Employees

✓ Periodical Health Check-up for all Employees

✓ First Aid Box at Site, with trained First Aiders

✓ Providing Sufficient and Fit-To-Wear PPE (like Helmets, Mask, Safety Shoes etc.) for all Employees, working in the Quarrying Activity

PART - B
PROGRSSIVE MINE CLOSURE PLAN

1.0 ENVIRONMENTAL BASE LINE INFORMATION

i) Existing Land Use Pattern

The applied lease area is surrounded by Janapadu R.F Hilly area comprising Limestone (Minor) of Good quality. The surrounding areas of the hill are covered with agricultural lands.

The local plantation is limited to domestic trees like Neem, Mango, and Eucalyptus. The lease area is containing a very little top soil that needs preservation.

ii) Water Regime

The applied lease area operations extend upto 20-25m belowground level. The water that is due to rains settles below the mine area. In most of the cases the quarries do not operate during rainy seasons. This is due to accumulation of water and not good for Safety.

iii) Human Settlements

In this applied lease area surrounded by 6 Villages below 5 km Radius. The nearest village Janapadu is situated 3.00km due west of the lease area. This village living population is around 11,318 (approx). Agriculture and Quarry workers are important professions of the people living in the village besides involving themselves in quarrying activity.

iv) Public Buildings, Places & Monuments

No public buildings, important places and monuments are seen in and around the quarry lease area. The Applicant will adopt the safety measures while conducting the quarry operations as per the Regulations of Metalliferrous Mines Regulation 1961.

v) Sanctuaries and eco-sensitive areas

No Sanctuaries and eco-sensitive areas are seen in and around the applied area.

vi) Flora and Fauna

The whole area is occupied by scattered sparse vegetation of thorny trees and small bushes. In the quarry lease area, no wild animals are witnessed as per the statements collected from the local population, since 50years.

2.0 Environmental Impact Assessment

(a) Landscape changes

During the next 5years **22,284m²** of the quarry lease applied area will be reduced by 6m. The applied area quarrying will alter the shape of the land with a large sliced pit.

(b) Air Quality in Environment

Air quality will not be disturbed in the lease area, as quarrying is very limited. Highest air pollution due to dust is caused during drilling, excavation, loading operations and during transportation. The dust is not siliceous, and is not harmful. The noxious gases will generate due to diesel based vehicles.

However as a precautionary measure the workers of the quarry wear a protective nose mask. The only silver lining in this pollutant's quality is that this does not contain reparable size of dust as defined under Mines Act-1952. That is the reason that there are no cases of any lung diseases to the persons working.

AIR QUALITY

Road - Regular repair (every 6 months) and Grading -Regular water sprinkling on haulage roads during dry conditions

Trucks -Avoid overloading of trucks and unnecessary idling of vehicles Movement Trucks to be covered with tarpaulin/plastic Enforcing speed limit <25kmph)

Plantation -Green belt development and avenue plantation

Air quality is good but at quarries it is filled with dust, due to drilling, loading, haulage on the road, etc., but it will be within the permissible limits by adopting the following:

- The dust rising due to drilling will be controlled by covering the drill rods with cloth;
- Dust suppression on haul road with sprinkling of water with chemical additives.
- To provide dust masks for the workmen to prevent inhaling dust laden air
- The speed limits of the trucks will be dictated and overloading of trucks is totally avoided which will prevent 50% of dust rising on roads.

(c) Water Quality

Operations of Lime Stone (Minor) quarries in general do not contribute to the water pollution much. This is due to the reason one being the material is geologically Sedimentary in origin. Rather it tries to travel through the cleave planes or the joints. The site specific reason for low water pollution is that, the floor exposed is impervious whereas the direction perpendicular to the floor is pervious. Thus there will not be any direct contamination.

No water course is passing through the lease area. No adverse effect is anticipated on the water regime in the area due to quarrying of Lime Stone (Minor). The standard for water quality is given below.

IS 10 500 – 1944

S. No.	Characteristic	Desirable Limit	Maximum Permissible Limit
1	Color	5	25
2	Odor& Taste	Un Objectionable	
3	Turbidity	5 NTU	10 NTU
4	pH Value	6.5 to 8.5	No Relaxation
5	TDS	500 mg/l	2000 mg/l
6	Total Hardness	300 mg/l	600 mg/l

(d) Noise Levels

Noise will be due to transportation of Lime Stone (Minor). However, the probable noise level will be within the permissible limits and will not cause harm. The vehicles will be properly maintained.

The noise levels for various activities are

1. Tipper Empty 88 to 91 dB(A)
   Tipper Loaded 95 to103 dB (A)
2. Poclain 90 to 96 dB(A)

The haulage, machinery and the drilling of drill holes generate noise. However, the probable noise level will be within the permissible limits and will not cause harm by adopting the following control measures.

- The machinery will be maintained properly to reduce the noise
- The company will provide protective noise reducing gear like earmuffs/ earplugs.
- Developing greenbelt along approach roads.

(e) Vibration Levels

It is to propose to use low explosives and less quantity to minimize the effects so that the vibration generated will be feeble with 8 HZ.

(f) Water Regime

The lease area is Hill area. The usable Lime Stone (Minor) quarry operations extend upto15m from ground level. The water that is due to rains settles below the quarry. In most of the cases the quarries do not operate during rainy seasons. This is due to accumulation of water. The rain water will be pumped out to the nearby seasonal stream or will be used for dust suppression in the quarry.

(g) Acid Mine Drainage

Not Applicable

(h) Surface subsidence

Not Applicable

(i) Socio Economic Environment

The main occupation of villagers is agriculture, Quarry Workers and sheep raring. The quarrying activity in this area improved the socio-economic status of the local people by creation of employment and paying taxes to gram panchayat.

(j) Occupation Health and Safety

The applied lease area does not involve any hazardous methods. The quarrying is simple and open cast mining method. In this, the possibilities of small injuries are anticipated. The Applicant is providing First Aid facilities at quarry site and temporary Office room.

This also consists of issuing PPE (Personal Protective Equipments) to all the persons working, and those that are needed for the site-specific operations. The following PPE are proposed to be distributed.

- Helmets once in every year as needed under Mines Act
- Safety shoes to all the employees twice a year as per the same statute.
- Nose masks once in two months (Actually these are the cotton thin towels)
- Other step to improve safety conditions is to inculcate the safety culture among the persons working.

(k) Historical Monuments

No historical monuments are located in and around the lease area.

(I) Bio-Diversity

Agriculture

The applied lease area is an operating mine and is away from agricultural lands. Therefore, there is no adverse effect on agriculture.

Forest

The applied lease area is under forest zone. The area located in Janapadu Reserve Forest area the forest Department is given the permission for mining. The present Mining plan prepared based on the Forest Guidelines and Mines and Geology guilines.

Vegetation

No impact will happen to the Mankind, Flora and Fauna by the Quarry operations, except sound pollution and dust which will be under control and within the permissible limits.

3.0 Progressive reclamation plan

Not proposed, because of reserves available.

4.0 Mined Out Land

Land Use Pattern of the lease area during the next five years will be as follows.

The land that is undisturbed will be broken in the successive conceptual periods.

The Life of the quarry is anticipated to be 12year as of present.

LAND USE

The on-going mining and the downstream activities have covered the lease hold for about 4.84Ha as detailed given below:

		AREA in sqm.	AREA in Hc.
SURFACE PLAN	MINED OUT AREA	0	0
	ROAD	0	0
	UNMINED AREA	33673	3.3673
	BUFFER ZONE	7027	0.7027
	FOREST SAFETY ZONE	7700	0.77
	TOTAL AREA	**48400**	**4.84**
END OF THE PLAN PERIOD	MINED OUT AREA	22284	2.2284
	ROAD (With in the Pits)	(1000)	(0.1)
	UNMINED AREA	11389	1.1389
	BUFFER ZONE	7027	0.7027
	FOREST SAFETY ZONE (Utilized for Plantation)	7700	0.77
	TOTAL AREA	**48400**	**4.84**
END OF THE CONCEPTUAL PERIOD	MINED OUT AREA	33673	3.3673
	ROAD (With in the Pits)	(2000)	(0.2)
	UNMINED AREA	0	0
	BUFFER ZONE	7027	0.7027
	FOREST SAFETY ZONE (Utilized for Plantation)	7700	0.77
	TOTAL AREA	**48400**	**4.84**

Proposed for reclamation of land affected by quarrying activity during and at the end of mining

No reclamation is envisaged in the first five years. This point will be dealt only after the extracting of Limestone (Minor) up to ground level.

Plantation Program

The applied lease area is not suitable for plantation as entire area is hilly terrain. However it is proposed to plant a few trees along the approach road or nearby village. The details of proposed plantation are shown below.

Details of Year wise Plantation Plan

Year	Planned Plantation	Location of Plantation	Type of Plants	Remarks
1st Year	300	In village or road sides	Neem, Eucalyptus,	50% of survival is envisaged.
2nd Year	300		Neem, Eucalyptus,	
3rd Year	300		Neem, Eucalyptus,	
4th Year	300		Neem, Eucalyptus,	
5th Year	300		Neem, Eucalyptus,	
Total	**1500**			

Thus, it is envisaged that around 300 plants will be planted and taken care of in one year. Thus, the area available along the approach roads will be planted for First Five years.

There are no notable species in the area. However, trees like Neem and Eucalyptus are found in and around. Therefore, these three species are planned for plantation. Maintenance of these plants that are grown along the approach road will be taken care by the quarry management. The plants that will be grown in the village will be taken care by the management, in coordination with the panchayat members.

5.0 Top soil Management

The applied lease area contains Lime Stone (Minor) old working pits up to 0.2 to 0.5m below the ground level majority of the top soil are removed mining top soil is utilized for the formation of Roads. And round the bund formation for prevent of water percolation.

6.0 Tailing Dam Management

Not Applicable at this stage as it is progressive mine.

7.0 Disaster Management and Risk Assessment

Quarrying shall be carried out as per MMR 1961 & Rules and regulations applicable the project in charge is having a mobile communication for quick intimation of information if need arises.

A vehicle is kept all the time at the quarry site for conveyance. Weekly Safety drills are given better results for awareness of the Mine team.

At quarry level, first aid will be provided and person(s) shall be shifted to nearby hospital at Guntur which is having all basic amenities if in Serious Conditions.

8.0 Care and Maintenance during temporary discontinuance

The quarry workers are taken on contract basis on need based orders; the workers always get Employment / Contract in similar quarries existing around.

Time Scheduling for Abandonment

As the applied area will be active after first five years also, proposal of abandonment is not envisaged in first 5years period. However wire fence will be provided all along the quarry pit.

The time schedule is for abandonment

S.No	Activity	1	2	3	4	5	6	7	8
1.	Re-handling of waste dumps for back filling the pits	Nil							
2.	Stabilization of dumps	Nil							
3.	Plantation on dumps	Nil							
4.	Construction of barbed wire fence around the quarry pits	Rs. 209,800 ←							→

9.0 Financial Assurance: As per Rule G.O.Ms.No.53 of 7A(ii) of amended APMMC rules 1966, date: 27-02-2019.

Financial assurance can be submitted in the form of a bank guarantee from a Nationalized Scheduled Bank at the rates equivalent to rates prescribed in Rule7A(ii) of **APMMC** Rules, 1966 for next 5-years period expiring at the end of validity of the document will have to be submitted Demand Draft Rs**. 50,000-00 in favor of Assistant Director of Mines and Geology, Guntur**, Submitted to the Assistant Director of Mines and Geology, Guntur. D.D. or Valid Bank

Guaranty Copy enclosed or submitted at the time of approval or at the time granting, the proposed mining operations are by semi mechanized method of Quarrying; hence the cost of reclamation & rehabilitation is calculated as per the Chapter 9 in model Form-T shall be rupees Fifty Thousand (50,000/-) for the quarry lease granted below 5 hectares and rupees Ten thousand per hectare or part thereof for the quarry lease granted 5 hectares and above.

FOREST APPLIED AREA LAND USE for COMPONENT WISE BREAKUP

	S. No.	Particulars of land use	Area (ha)
Forest area proposed to be utilized during entire lease period	I	Mining area	3.99 ha (including 0.04 ha for temporary storage sheds and Roads)
	II	Safety Zone Area	0.77 ha
	III	Dumping Area	0.04 ha
	IV	Magazine Area	0.04 ha
		Sub total	**4.84**
Forest area proposed to be utilized during end of the Plan period (5 years)	I	Mined out area	1st Year : 0.7163 ha 2nd Year: 0.5466 ha 3rd Year: 0.2856 ha 4th Year: 0.1487 ha 5th Year: 0.5312 ha **Total: 2.2284ha** (including 0.04 ha for temporary storage sheds and Roads)
	II	Safety Zone Area	0.77 ha
	III	Dumping Area	0.04 ha
	IV	Magazine Area	0.04 ha
	V	Unmined Area	1.7616
		Sub-total	**4.84**
End of the conceptual period	I	Mined out area	3.99 ha (including 0.04 ha for temporary storage sheds and Roads)
	II	Safety Zone Area	0.77 ha
	III	Dumping Area	0.04 ha
	IV	Magazine Area	0.04 ha
		Sub-total	**4.84**

10.0 Financial Assurance Performa

The details of the area put use and calculations there off for financial assurance are given in the Performa as given by the plate no VI.

S.No.	Head	Forest area required for the entire lease period (in Ha.)	Forest area required during the 5 year plan period (in Ha.)	Total area remain unutilized during first 5 years (in Ha.)	Net area considered for calculation (area utilized during first 5 years) (in Ha.)
1	2	3	4	5 (3-4)	7
1	Area under Mining	3.99 (including 0.04 ha for temporary storage sheds)	2.2284 (including 0.04 ha for temporary storage sheds)	1.7616	2.2284
2	Overburden / Dump	0.04	0.04	00	0.04
3	Mineral Storage	-	0	0	0
4	Roads	-	-	-	-
5	Railways	-	-	-	-
6	Tailing Pond	-	-	-	-
7	Beneficiation Plant	-	-	-	-
8	Mineral Separation Plant	-	-	-	-
9	Magazine Area	0.04	0.04	00	0.04
10	Forest Safety Zone	0.77	0.77	00	0.77
		4.78	3.0784	1.7616	3.0784

11.0 Certificate

Certified that the above mentioned will be taken care in the Mine Closure Plan for Limestone (Minor) Over an extent of 4.84Ha in Forest land in Compartment No.102, Janapadu R.F., Guntur Division, Janapadu village, Medikondur Mandal, Guntur District and Andhra Pradesh State.

All statutory organizations, courts etc. have been taken into consideration and wherever any specific permission is required, the Applicant will approach the concerned authorities.

All the measures proposed in this closure plan will be implemented in a time bound manner as proposed.

12.0 PLANS & SECTIONS

The plans, sketches are enclosed separately.

CORRECTNESS CERTIFIED
(N.V.S.P.L. RAVIKANTH)
RQP/DMG/HYD/105/13

APPLICANT

RQP

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Deputy Director of Mines & Geology * Government of A.P. Guntur *

This Mining Plan is Approved Subject to the Conditions Stipulations Indicated in the Mining Plan Approval Letter
No: 2767/MP/LS(M)DGP/2021
Dated: 29/10/2021

APPROVED
S.K.V. SATYANARAYANA
Deputy Director of Mines & Geology
GUNTUR

GOVERNMENT OF ANDHRA PRADESH
FOREST DEPARTMENT

From
Sri N. Prateep Kumar, IFS.,
Prl. Chief Conservator of Forests &
Head of Forest Force,
Andhra Pradesh, 'Aranya Bhavan'
Nagarampalem, Guntur – 522 004.

To
The Director of Mines & Geology,
5th floor, Sri Anjaneya Towers,
Ibrahimpatnam, Krishna District,
Andhra Pradesh.

Ref.no.EFS02-15029/7/2021-FCA SEC-PCCF/FCA-3, Dated:25.08.2021.

Sub:- APFD – F (C) Act, 1980 – Diversion of 4.84 ha of forest land in compartment no.102, Janapadu RF, Guntur Division for quarry lease for limestone (Minor) filed by Sri G. Pavan Kumar Reddy – Request to furnish approved mining plan – Reg

Ref:-
1. DMG, Ibrahimpatnam, A.P., letter no.6163/D7-1/2020, dated: 22.12.2020.
2. MoEF & CC, IRO Vijayawada, F.No. 4-APC092/2018-CHN/46 Date 29.07.2021 communicating the Minutes of the meeting held on 08.07.2021.

With reference to the letter 1st cited, the Director of Mines and Geology, A.P., Ibrahimpatnam is requested to peruse the minutes communicated by the IRO, Vijayawada in the reference 2nd cited. As per the decision taken during the meeting held on 08.07.2021, Approved Mining Plan at the initial stage of processing the mining proposals is required.

In this context, the authenticated DGPS surveyed sketch of proposed forest area with Geo-coordinates duly indicating land use plan for mining, safety zone, approach road in respect of the subject proposal is sent herewith. Necessary instructions are being issued to the above User Agency to furnish the Draft Mining Plan based on the above precise area arrived after conducting DGPS survey to the Director of Mines and Geology, A.P., Ibrahimpatnam for necessary action. **The DMG, A.P., Ibrahimpatnam / the representative authorized by him, may approach the Divisional Forest Officer, Guntur for entry into Forests to inspect the precise forest area proposed for mining purpose.**

The Director of Mines and Geology, A.P., Ibrahimpatnam is requested to take necessary action to furnish the approved mining plan by getting draft mining plan from User Agency in respect of the above subject proposal as per the decision taken during the meeting held on 08.07.2021 for taking further action in the matter.

Yours faithfully
Sd/- N. Prateep Kumar
Prl. Chief Conservator of Forests &
Head of Forest Force

Encl:- As above

Copy to Sri Gottimukkala Pavan Kumar Reddy, S/o G. Rami Reddy, H.no. 16-55/2, Piduguralla -522413, Guntur District. It is requested to furnish the Draft Mining Plan to the Director of Mines and Geology, A.P., Ibrahimpatnam for taking further necessary action as per rules under Forest (Conservation) Rules, 2003 and under the provisions of guidelines on Forest (Conservation) Act, 1980.

Copy to the Conservator of Forests, Guntur for information and necessary action.

Copy to the Divisional Forest Officer, Guntur for information and necessary action. **Duly following the Acts and Rules. He may allow the officials of mining department to inspect the proposed forest area so as to enable the mining department to take decision to approve the draft mining plan furnished by the above user agency.**

//t.c.b.o//

Superintendent
26/8/2021

26/8/2021

ANNEXURE -II

DEPARTMENT OF MINES AND GEOLOGY. GOVT. OF A.P.

CERTIFICATE OF REGISTRATION AS QUALIFIED PERSON TO PREPARE MINING PLAN

UNEDER RULE 14(2) OF GRANITE CONSERVATION AND DEVELOPMENT RULES 1999

*****

Sri ***N.V.S.P.L. RAVIKANTH,*** S/O ***RADHA KRISHNA MURTHY,*** House NO.5-67-89, 5/20, Brodipet, Guntur having given evidence of his qualification and experience is hereby granted recognition under rule 14(2) of Granite Conservation and Development Rules, 1999 as Qualified Person to prepare Mining Plan.

Registration Number is : **RQP/DMG/HYD/105/13**

This Recognition is valid for a period of 10 years ending upto **19-07-2023**

Place: Hyderabad

Date: 20- 07-2013

DIRECTOR OF MINES AND GEOLOGY

ANNEXURE - III

FEASIBILITY REPORT

For

LIME STONE (MINOR)

Sri Gottimukkala Pavan Kumar Reddy,
S/o G. Rami Reddy, H.No. 16-55/2
Piduguralla-522413, Guntur District,
Andhra Pradesh.

The deposit is economically viable for exploitation of Lime Stone (Minor) to a Height of 37m above the ground level and proved depth 110m. The demand for Lime Stone (Minor) is consistently increasing year by year. The Feasibility Study of this deposit is discussed in the following paragraphs.

1) General Quarry Description:

The quarry lease area is located due east of Janapadu Village located on Guntur – Piduguralla State Highway. The Village is located at a distance of 70.4Km due SE of Guntur town. The quarry lease area can be approached from Piduguralla - Janapadu Road. The location of the area is indicated by Key–Cum–location Map (Plate- 1).

2) Exploration:

a) Quarry Opening: Benches of each 6M height will be excavated. The presence of Lime Stone (Minor) is proved surrounding Lime Stone (Minor) quarries up to110m depth below ground level as Proved resources.

b) Core Boreholes: Core bore hole drilling is not required.

3) Reserve Assessment:

a) Sampling: A trial pit is made in the western side of the quarry lease area and samples are collected by the lessee for ascertaining the quality for utilization for Lime Stone (Minor).

b) Chemical Analysis: Not Required

c) Recovery of Ore: About 90% of the Lime Stone (Minor) is saleable.

d) Cut-Off grade: Not applicable.

e) Tonnage Factor Assessment: The tonnage factor is calculated based on the measurement of known volume of material and then weighment is done. The tonnage factor is assessed for Lime Stone (Minor) as 2.5Tons/m^3.

ANNEXURE - III

4) Production Schedule:

Quarry Capacity, ROM: In this plan period the proposed average annual rate of production is about 96,300Tons. The life of the Quarry at the proposed rate of production is calculated to be about 12years for Lime Stone (Minor).

5) Quarrying Method:

The Lime Stone (Minor) in the quarry lease area are exposed on the surface. Hence, it is proposed to quarry the Lime Stone (Minor) by open cast, Semi mechanized method, by developing a bench of 6m height. The development of benches in the sheet rock will be maintained @ 63° safety slopes.

6) Beneficiation:

No beneficiation is required for Lime Stone (Minor) excepting sizing of Lime Stone (Minor) to the requirement of user agency.

7) Marketing:

The average sale price of Lime Stone (Minor) is Rs. 180 to 200Per Ton. The lessee intends to sell the ore for road construction purpose.

8) Infrastructure:

The location of Quarry is well connected with good infrastructure as State Highway Connecting Piduguralla Road is 5.5km away from the Quarry and also adequate availability of skilled manpower for Quarry operations.

9) Environmental Requirements:

Proper planning of approach roads with green belt management and water sprinkling of haul roads will achieve hygienic Quarry. Closure and Reclamation program shall be strictly implemented after exhaustion of Lime Stone (Minor) in the quarry.

10) Legal Parameters and Others:

The Quarry lease area is granted in principle for a period of ___ years and granted over in Forest.Land. The Quarry is a fresh lease. The Quarry will provide employment for local labor of about 25 members. The Quarry authorities/owner has to strictly adhere to future forthcoming any new rules and regulations. The area is not situated in tribal area and any national parks are not situated in the surrounding area.

ANNEXURE - III

11) Economic Evaluation:

For the excavation of ROM from this area and for separation of the saleable ore from ROM and Transportation to the lime industries about RS140 will be Cost per Ton of Limestone (Minor) production including royalty and other taxes. The transportation expenditures from mine to the consumer industry will be born by buyers.

Average sale prices of the Ore = Rs. 180-200/- per ton

Average cost of production = Rs140-00 per ton

Profit per 1 ton of production = Rs40-60/-

So the mine is technically and economically a viable operation

Deputy Director of Mines & Geology Government of A.P.

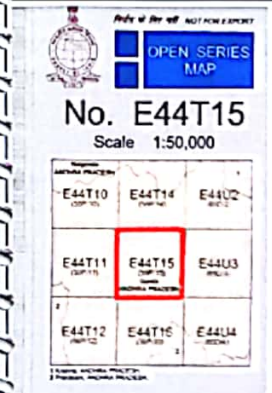
CORRECTNESS CERTIFIED

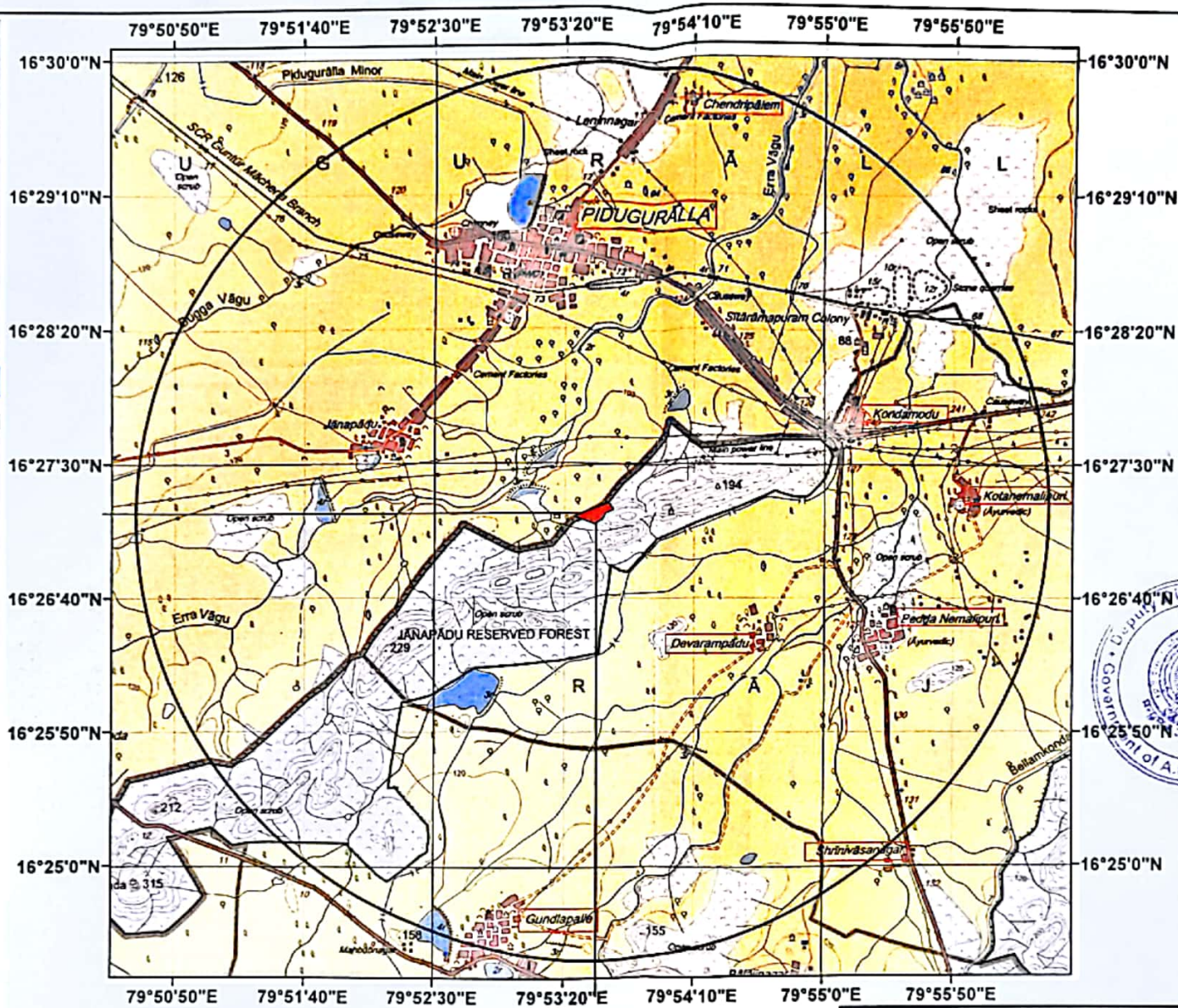
(N.V.S.P.L. RAVIKANTH)

RQP/DMG/HYD/105/13

RQP

(N.V.S.P.L. RAVIKANTH)





Geo Co-ordinates WGS-84 Datum

BP.NO'S	LATITUDE (N)	LONGITUDE (E)
M1	16.45423549	79.89346412
M2	16.45364386	79.89392088
M3	16.45346008	79.89355590
M4	16.45326712	79.89314175
M5	16.45264746	79.89282599
M6	16.45236917	79.89240043
M7	16.45210721	79.89200140
M8	16.45230302	79.89147998
M9	16.45260561	79.89067535
M10	16.45283403	79.89006708
M11	16.45305915	79.89061759
M12	16.45328874	79.89118186
M13	16.45354501	79.89179048
M14	16.45376279	79.89231889
M15	16.45401171	79.89293185
S1	16.45432013	79.89348463
S2	16.45361431	79.89403058
S3	16.45339873	79.89360089
S4	16.45320973	79.89318029
S5	16.45259986	79.89288028
S6	16.45231779	79.89244907
S7	16.45202979	79.89201015
S8	16.45223936	79.89145247
S9	16.45254341	79.89064364
S10	16.45283075	79.88987858
S11	16.45312179	79.89058359
S12	16.45335352	79.89114839
S13	16.45360708	79.89176083
S14	16.45382844	79.89229868
S15	16.45407782	79.89289814
DA1	16.45391798	79.89297233
DA2	16.45400307	79.89326337
MJ1	16.45413352	79.89345579
MJ2	16.45412321	79.89319225

Deputy Director of Mines, Government of A.P., Guntur

PLATE- I

CORRECTNESS CERTIFIED.
(N.V.S.P.L. RAVIKANTH)
RQP/DNS/IND/105/13
R.Q.P

APPLICANT

KEY CUM LOCATION PLAN FOR LIMESTONE (Minor)

Sri G. Pavan Kumar Reddy

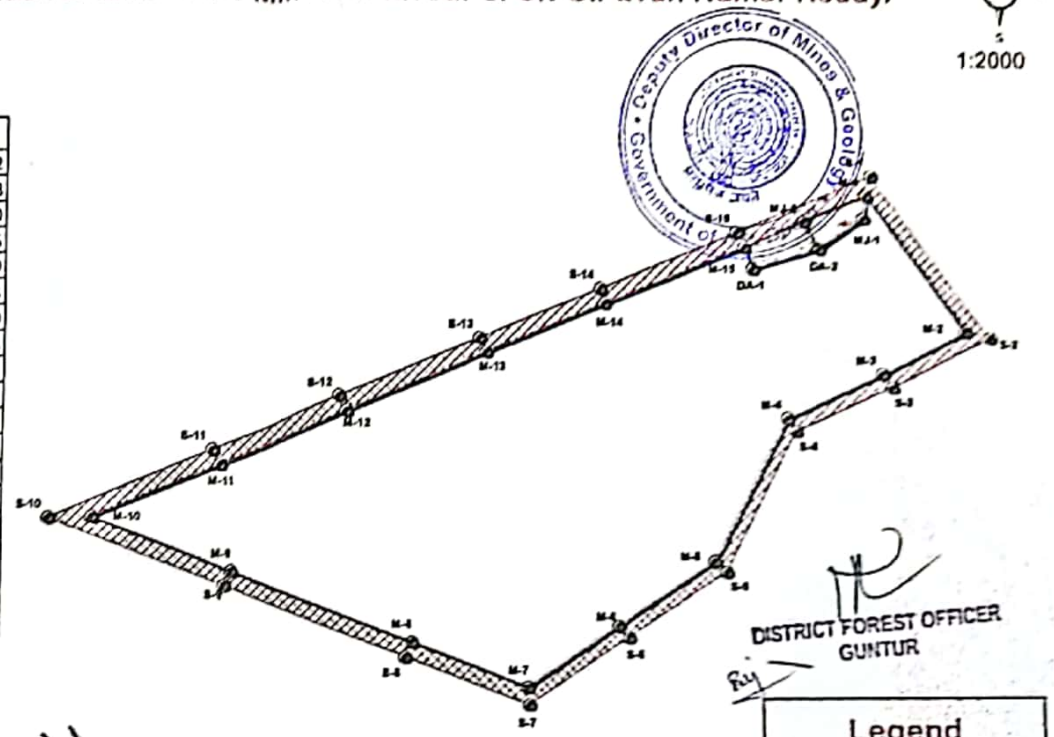
Over An Extent of 4.84Hects of Forest Land in Compartment No. 102

Janapadu R.F, Guntur Division,
Andra Pradesh State.

TOPO SHEET NO. 56 P15 (E44T15)

Map Showing the Diversion of Forest Land in Comp-No-102 of Janapadu RF, Gundlapalli Boat,Guntur Range, Guntur Division for grant of quarry lease for Limestone Minor in favour of Sri G.Pavan Kumar Reddy.

Sno	Name	Northing	Easting	Elevation	Latitude	Longitude
1	M-1	1819504.562	381874.950	110.481	16.45423549	79.89346412
2	M-2	1819438.639	381923.357	133.499	16.45364386	79.89392088
3	M-3	1819418.719	381884.279	139.653	16.45346008	79.89355590
4	M-4	1819397.613	381839.946	145.511	16.45326712	79.89314175
5	M-5	1819329.240	381805.859	143.184	16.45264746	79.89282599
6	M-6	1819298.700	381760.256	130.923	16.45236917	79.89240043
7	M-7	1819269.951	381717.495	118.795	16.45210721	79.89200140
8	M-8	1819291.920	381661.944	114.803	16.45230302	79.89147998
9	M-9	1819325.869	381576.222	110.940	16.45260561	79.89067535
10	M-10	1819351.497	381511.420	109.183	16.45283403	79.89006708
11	M-11	1819376.081	381570.331	110.152	16.45305915	79.89061759
12	M-12	1819401.152	381630.713	112.579	16.45328874	79.89118186
13	M-13	1819429.148	381695.848	110.464	16.45354501	79.89179048
14	M-14	1819452.934	381752.395	110.442	16.45376279	79.89231889
15	M-15	1819480.115	381817.982	110.498	16.45401171	79.89293185
16	S-1	1819513.914	381877.191	110.213	16.45432013	79.89348463
17	S-2	1819435.506	381935.051	136.499	16.45361431	79.89403058
18	S-3	1819411.905	381889.046	145.656	16.45339873	79.89360089
19	S-4	1819391.241	381844.026	149.976	16.45320973	79.89318029
20	S-5	1819323.943	381811.627	142.479	16.45259986	79.89288028
21	S-6	1819292.987	381765.418	128.590	16.45231779	79.89244907
22	S-7	1819261.380	381718.382	118.699	16.45202979	79.89201015
23	S-8	1819284.894	381658.969	114.831	16.45223936	79.89145247
24	S-9	1819319.006	381572.799	110.851	16.45254341	79.89064364
25	S-10	1819351.244	381491.293	108.616	16.45283075	79.88987858
26	S-11	1819323.080	381566.740	109.472	16.45312179	79.89058359
27	S-12	1819408.338	381627.180	110.318	16.45335352	79.89114839
28	S-13	1819436.033	381692.720	110.098	16.45360708	79.89176083
29	S-14	1819460.209	381750.277	110.166	16.45382844	79.89229868
30	S-15	1819487.449	381814.429	110.362	16.45407782	79.89289814
31	DA-1	1819469.721	381822.252	111.260	16.45391798	79.89297233
32	DA-2	1819478.965	381853.377	111.191	16.45400307	79.89326337
33	MJ-1	1819493.285	381873.999	111.107	16.45413352	79.89345579
34	MJ-2	1819492.298	381845.857	110.473	16.45412321	79.89319225

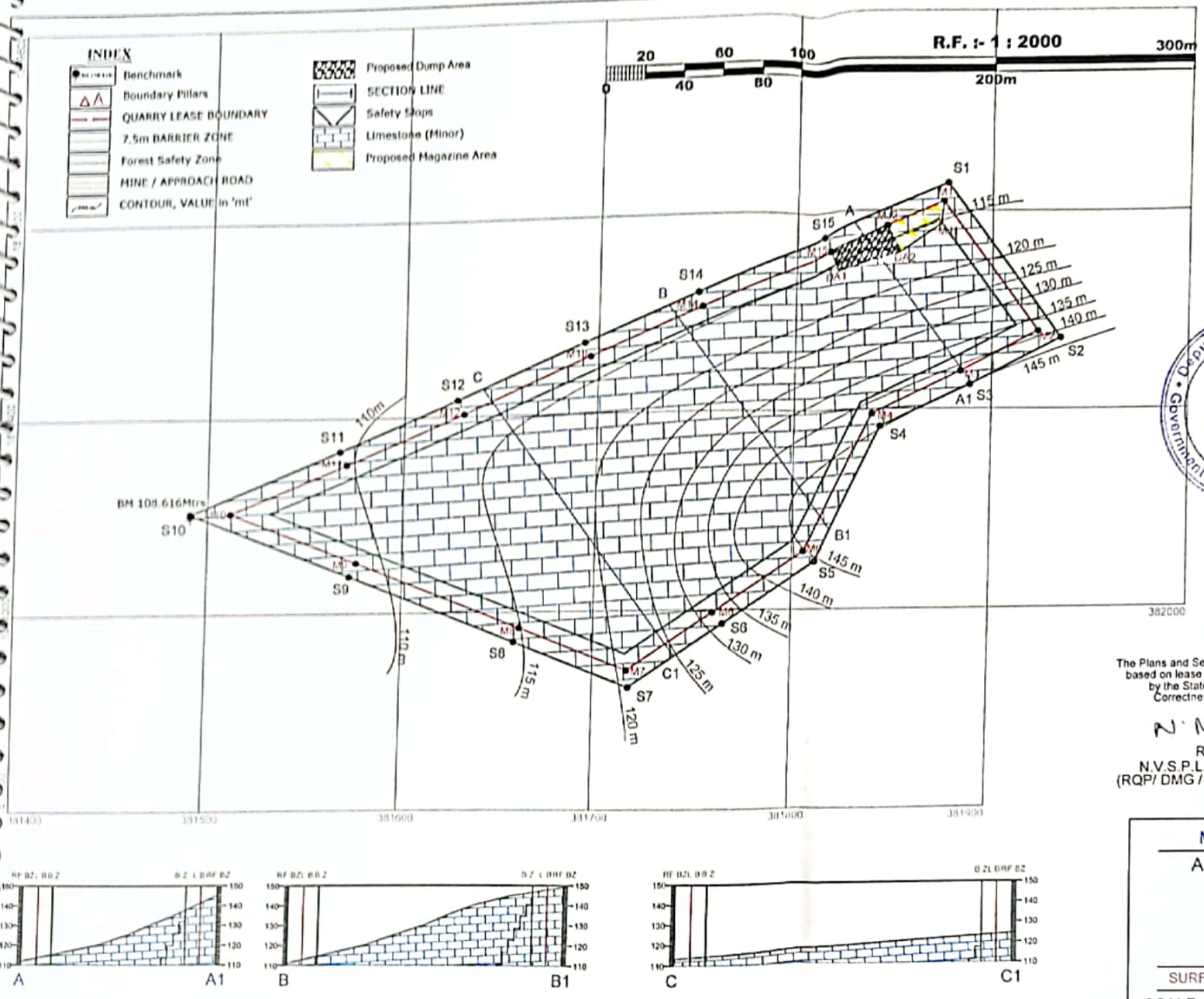


S no	Name	Area(Ha)
1	Mining Area	3.99
2	Safety Zone Area	0.77
3	Dumping Area	0.04
4	Magazine Area	0.04
Total Area		4.84

Forest Range Officer
Guntur

C. Mallikarjuna Babu
FOREST RANGE OFFICER
(GIS), O/o. Prl.CCF (HoFF),
Aranya Bhavan, Guntur.

The DGPS/GNSS/ETS data is only verified,the absolute locations of Points shall be verified by the concerned field officers.



SCALE : 1:2000

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S14	16.45382844	79.89229868
S15	16.45407782	79.89289814
DA1	16.45391798	79.89297233
DA2	16.45400307	79.89326337
MJ1	16.45413352	79.89345579
MJ2	16.45412321	79.89319225

Deputy Director of Mines & Geology
Government of A.P. Guntur

APPLICANT

The Plans and Sections are prepared based on lease map authenticated by the State Government Correctness Certificate

RQP
N.V.S.P.L.RAVIKANTH
(RQP/ DMG / HYD / 105 / 13)

PLATE -III

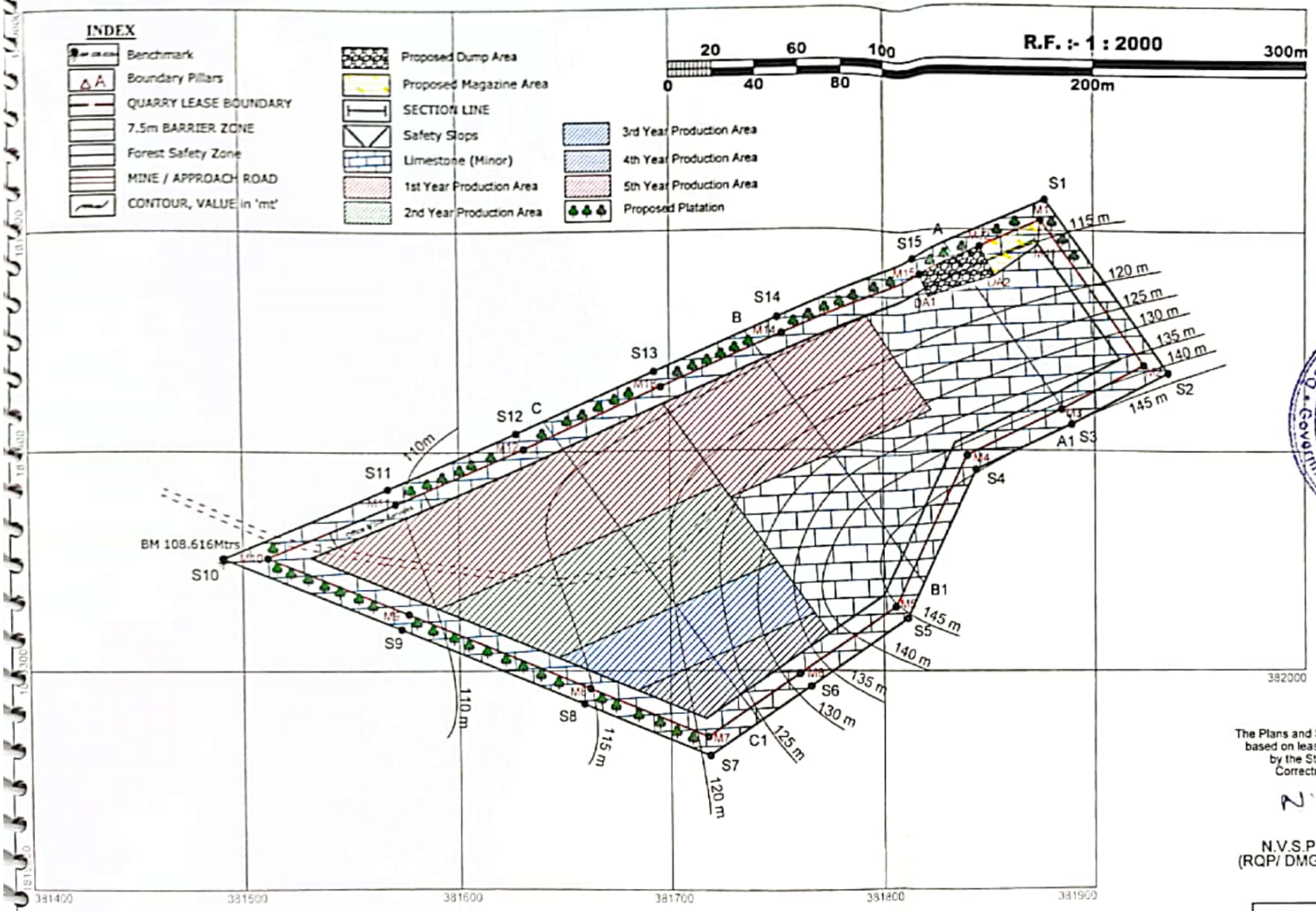
MINING PLAN FOR LIMESTONE (Minor)

APPLICANT - Sri G. Pavan Kumar Reddy
Compartment No. 102, Janapadu R.F,
Guntur Division,
Andhra Pradesh.

EXTENT OF 4.84 Hect.

SURFACE CUM GEOLOGICAL PLAN & CROSS SECTIONS

SCALE: 1:2000 CONTOUR INTERVAL : 5m.



SCALE : 1:2000

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M9	16.45260561	79.89067535
M10	16.45283403	79.89006708
M11	16.45305915	79.89061759
M12	16.45328874	79.89118186
M13	16.45354501	79.89179043
M14	16.45376279	79.89231889
M15	16.45401171	79.89293185
S1	16.45432013	79.89348463
S2	16.45361431	79.89403058
S3	16.45339873	79.89360089
S4	16.45320973	79.89318029
S5	16.45259986	79.89288028
S6	16.45231779	79.89244907
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S8	16.45223936	79.89145247
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S12	16.45335352	79.89114839
S13	16.45360708	79.89176083
S14	16.45382844	79.89229868
S15	16.45407782	79.89289814
DA1	16.45391798	79.89297233
DA2	16.45400307	79.89326337
MJ1	16.45413352	79.89345579
MJ2	16.45412321	79.89319225

Deputy Director of Mines & Geology Government of A.P. Guntur

APPLICANT

The Plans and Sections are prepared based on lease map authenticated by the State Government Correctness Certificate

RQP
N.V.S.P.L.RAVIKANTH
(RQP/ DMG / HYD / 105 / 13)

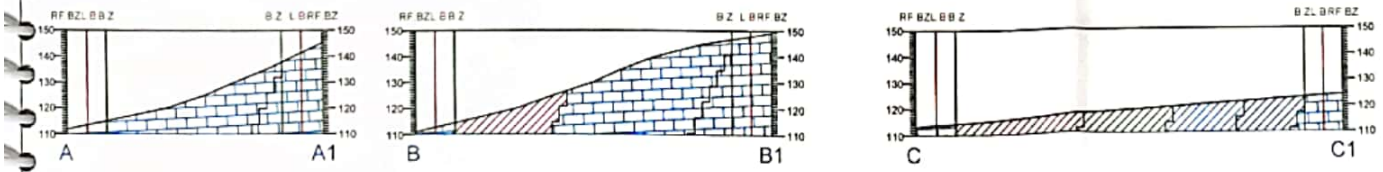


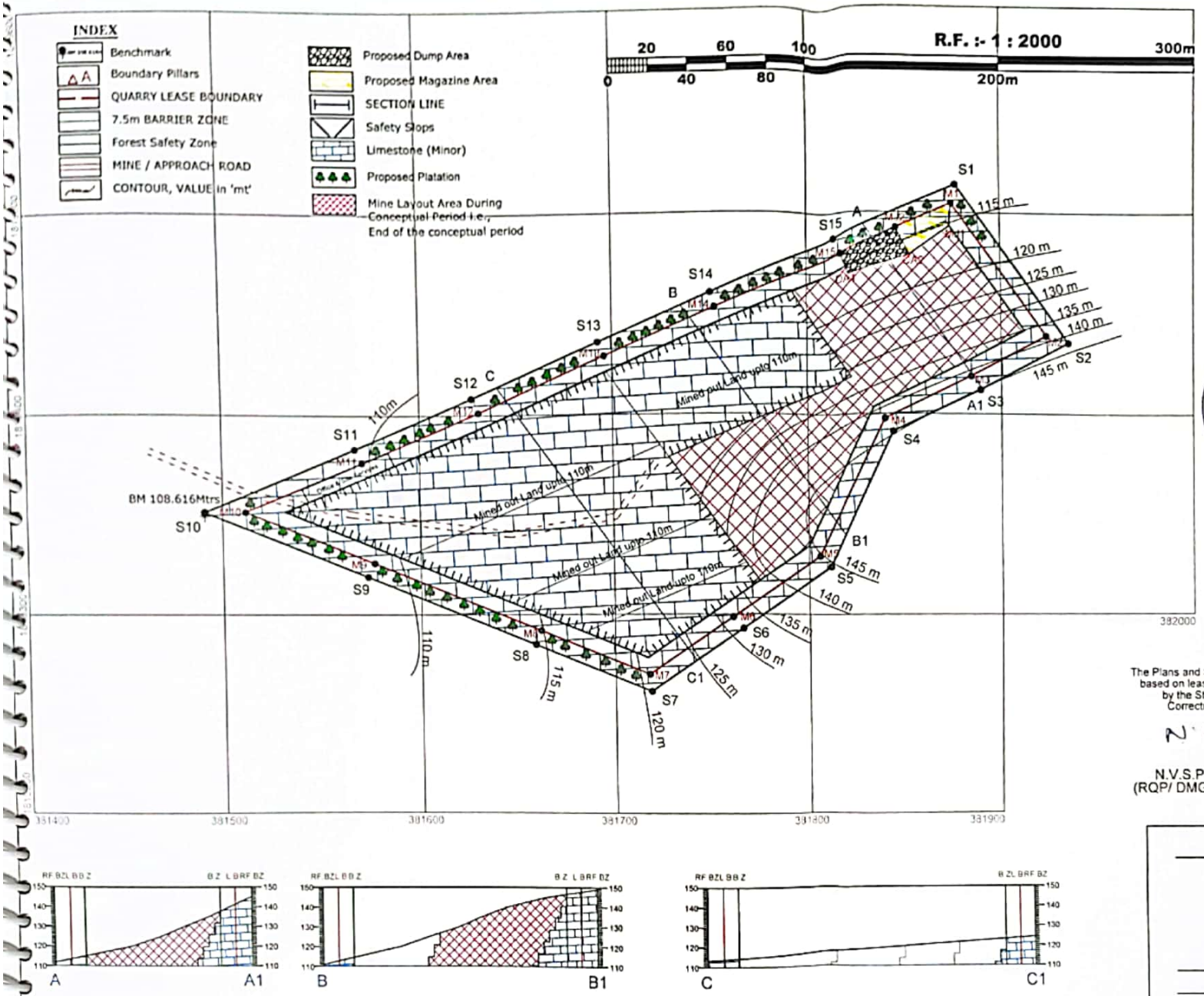
PLATE -IV

MINING PLAN FOR LIMESTONE (Minor)

APPLICANT - Sri G. Pavan Kumar Reddy
Compartment No. 102, Janapadu R.F,
Guntur Division,
Andhra Pradesh.
EXTENT OF 4.84 Hect.

WORKING PLAN & CROSS SECTIONS

SCALE: 1:2000 CONTOUR INTERVAL : 5m.



Geo Co-ordinates WGS-84 Datum		
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M5	16.45264746	79.89282599
M6	16.45236917	79.89240043
M7	16.45210721	79.89200140
M8	16.45230302	79.89147998
M9	16.45260561	79.89067535
M10	16.45283403	79.89006708
M11	16.45305915	79.89061759
M12	16.45328874	79.89118186
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S7	16.45202979	79.89201015
S8	16.45223936	79.89145247
S9	16.45254341	79.89064364
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S11	16.45312179	79.89058359
S12	16.45335352	79.89114839
S13	16.45360708	79.89176083
S14	16.45382844	79.89229868
S15	16.45407782	79.89289814
DA1	16.45391798	79.89297233
DA2	16.45400307	79.89326337
MU1	16.45413152	79.89345579
MU2	16.45412321	79.89319225

Deputy Director of Mines & Geology Government of A.P. Guntur

APPLICANT

The Plans and Sections are prepared based on lease map authenticated by the State Government Correctness Certificate

RQP
N.V.S.P.L.RAVIKANTH
(RQP/ DMG / HYD / 105 / 13)

PLATE - V

MINING PLAN FOR LIMESTONE (Minor)

APPLICANT - Sri G. Pavan Kumar Reddy
Compartment No. 102, Janapadu R.F,
Guntur Division,
Andhra Pradesh.
EXTENT OF 4.84 Hect.

CONCEPTUAL PLAN & CROSS SECTIONS

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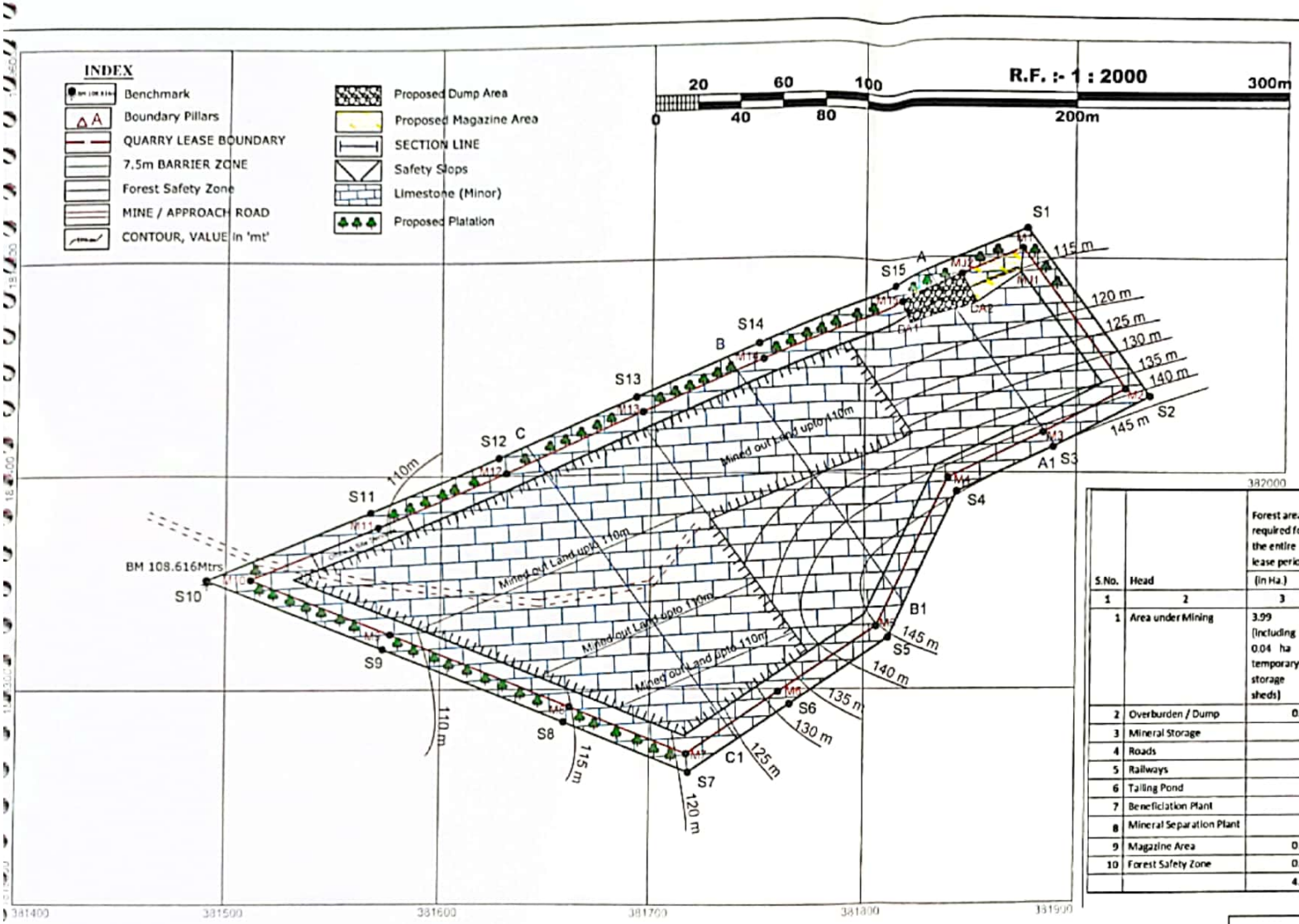


S.No.	Head	Forest area required for the entire lease period (in Ha.)	Forest area required during the 5 year plan period (in Ha.)	Total area remain unutilized during first 5 years (in Ha.)	Net area considered for calculation (area utilized during first 5 years) (in Ha.)
1	2	3	4	5 (3-4)	7
1	Area under Mining	3.99 (including 0.04 ha for temporary storage sheds)	2.2284 (including 0.04 ha for temporary storage sheds)	1.7616	2.2284
2	Overburden / Dump	0.04	0.04	00	0.04
3	Mineral Storage	-	0	0	0
4	Roads	-	-	-	-
5	Railways	-	-	-	-
6	Tailing Pond	-	-	-	-
7	Beneficiation Plant	-	-	-	-
8	Mineral Separation Plant	-	-	-	-
9	Magazine Area	0.04	0.04	00	0.04
10	Forest Safety Zone	0.77	0.77	00	0.77
		4.78	3.0784	1.7616	3.0784

PLATE -VI

The Plans and Sections are prepared based on lease map authenticated by the State Government Correctness Certificate

RQP
N.V.S.P.L.RAVIKANTH
(RQP/ DMG / HYD / 105 / 13)

APPLICANT

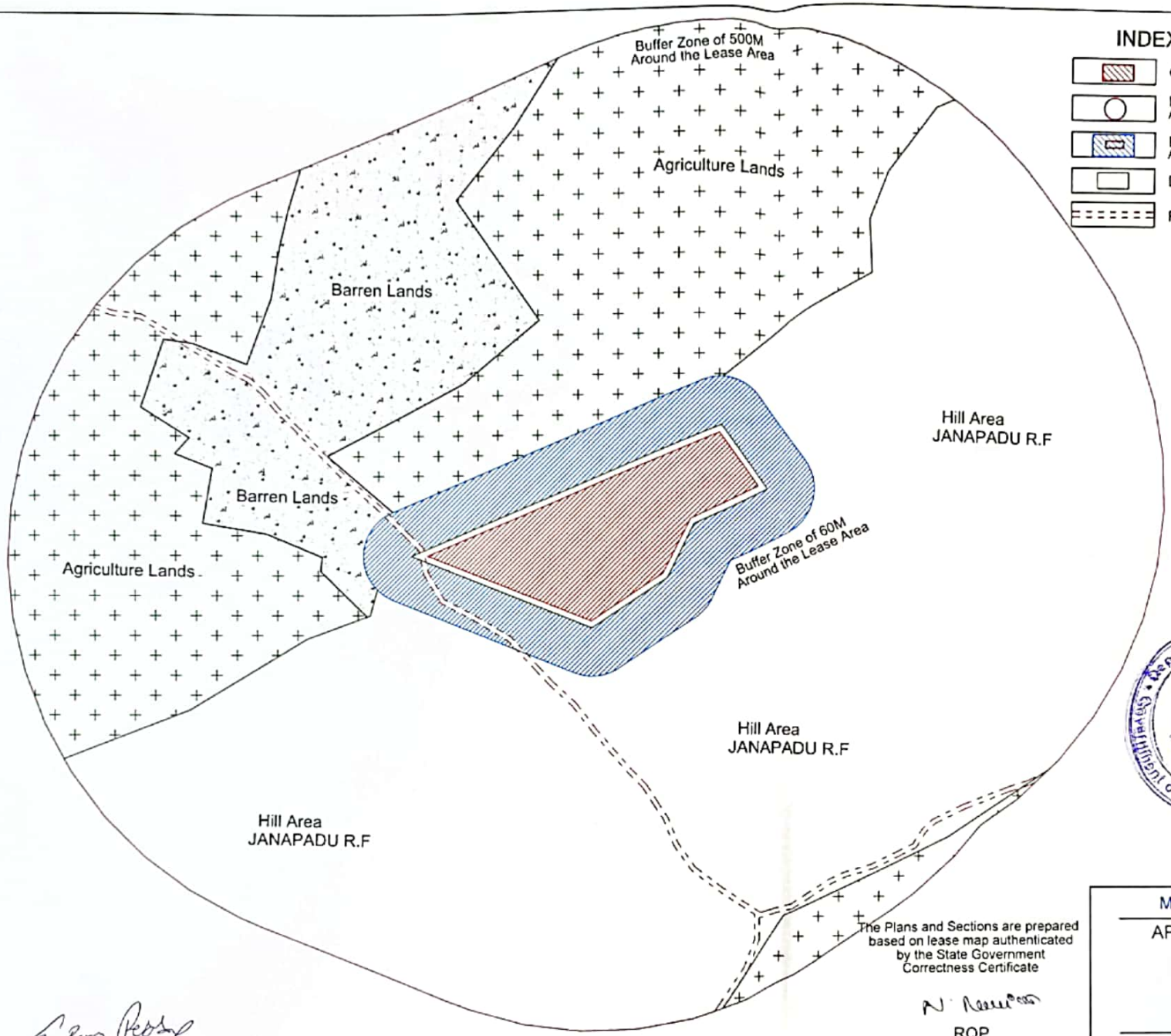
MINING PLAN FOR LIMESTONE (Minor)

APPLICANT - Sri G. Pavan Kumar Reddy
Compartment No. 102, Janapadu R.F,
Guntur Division,
Andhra Pradesh.

EXTENT OF 4.84 Hect.

FINANCIAL ASSURANCE PLAN

SCALE: 1:2000 CONTOUR INTERVAL : 5m.



INDEX

- Quarry Lease Area
- Buffer Zone of 500M Around the Lease Area
- Buffer Zone of 60M Around the Lease Area
- Lease Area Around the R.F Buffer Zone
- Road

WIND DIRECTION

N

GOOGLE EARTH IMAGE

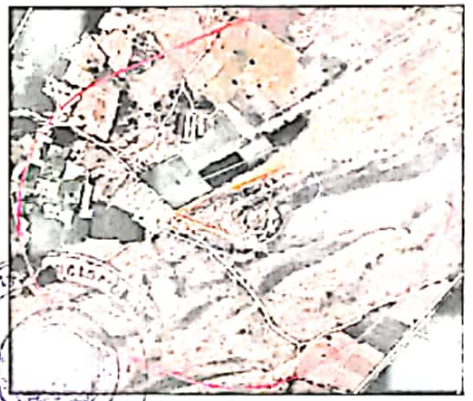


PLATE -VII

The Plans and Sections are prepared based on lease map authenticated by the State Government Correctness Certificate

RQP
N.V.S.P.L.RAVIKANTH
(RQP/ DMG / HYD / 105 / 13)

APPLICANT

MINING PLAN FOR LIMESTONE (Minor)

APPLICANT - Sri G. Pavan Kumar Reddy
Compartment No. 102, Janapadu R.F,
Guntur Division,
Andhra Pradesh.

EXTENT OF 4.84 Hect.

CONCEPTUAL PLAN & CROSS SECTIONS

SCALE: 1:5000