SLIDE 1

Presentation to

State Level Expert Appraisal Committee (SEAC), Tamil Nadu

FOR OBTAINING TERMS OF REFERENCE (ToR) – "B1" Category

Individual Lease > 5 ha

SAND QUARRY

NATURE OF PROJECT

RESTORING THE FUNCTIONAL EFFICENCY OF THE CAUVERY RIVER

LEASE PERIOD – 2 YEARS

NON FOREST LAND/ **GOVERNMENT LAND**/ MINOR MINERAL / **NEW QUARRY**

Proposed Production Capacity = **4,80,000 m^3** of Sand

Proposed Depth = **2m Average (1m above bed level and 1m below bed level)**

PROJECT LOCATION			PROPONENT
Survey No	:	265/1 (PART)	**The Executive Engineer,** Water Resource Department, Mining and Monitoring Division, Thiruchirappalli District, Tamil Nadu State – 620 020
Extent	:	**24.00.0 ha**	
Village	:	Achamapuram	
Taluk	:	Manmangalam	
District	:	Karur	
State	:	Tamil Nadu	

Consultant : GEO EXPLORATION AND MINING SOLUTIONS, Salem, Tamil Nadu

SLIDE 2

INTRODUCTION

▪ OBJECTIVE:

Main objective of the project is maintain and **" Restore the ecology of the river by restoring the lost functional Efficiency / carrying capacity of the Cauvery River"**

▪ STATUTORY APPROVALS :

- Precise area communication letter received from the District Collector Rc.No.392/Mines/2021 Dated 19.01.2022
- Approved mining plan letter Rc.No.392/Mines/2021 Dated 29.04.2022

▪ SALIENT FEATURES :

- Total Number of Employees proposed = 38 Nos
- Total Cost of the project = Rs 85,10,000/-
- EMP Cost = Rs 1,50,000/-
- Co ordinates of the boundaries

Corner	Co ordinates (Latitude & Longitude)
1	10^0 58' 31.6713"N 78^0 10' 48.2644"
2	10^0 58' 37.4311"N 78^0 10' 53.5951"
3	10^0 58' 15.4851"N 78^0 11' 17.8825"
4	10^0 58' 09.7255"N 78^0 11' 12.5517"

SLIDE 3

ENVIRONMENTAL SETTINGS

S.No	Description	Particulars	Ariel Distance & Direction
1	Nearest National Highway	NH 81 – Tiruchirapalli - Karur	4.0 kms – South
2	State Highways	SH 74 – Karur – Dindigul	11.0 kms – South
3	Railway Station	Veerarakkiyam	4.0 kms – South West
4	Airport	Thiruchirappalli	60.0 kms – South East
5	Nearest Habitation	720 m –East	
6	Town	Karur	11.0 km – West
7	School	Government Primary School	1.0 m – North West
8	Government Hospital	Karur	11.0 km – West
9	Reserved Forest	•Kattalai R.F. – 1.04km – SW •Mayanur R.F. – 4.0km – SE •Nattam R.F. – 5.7km – E	
10	Defense Installation/Historical Monuments/ Archaeological	Nil within 10km Radius	
11	Nearby Water Bodies	The project area is falls in Cauvery River Canal - 520m - East Amaravathi River 1.3km – South West	

Sl.No	General Conditions	Distance & Direction
1	Interstate Boundary	Around 127 km – SW (Kerala State boundary)
2	Critically Polluted areas identified by the CPCB	Around 130 km – North West (SIDCO-Cluster Industrial Kurichi –Coimbatore)
3	Protected areas Notified under wildlife (Protection) Act,1972	Around 65 km – North West – Vellode Bird Sanctuary

SLIDE 4

MAP SHOWING NEAREST PROTECTED AREA

SLIDE 4

MAP SHOWING NEAREST RESERVE FOREST

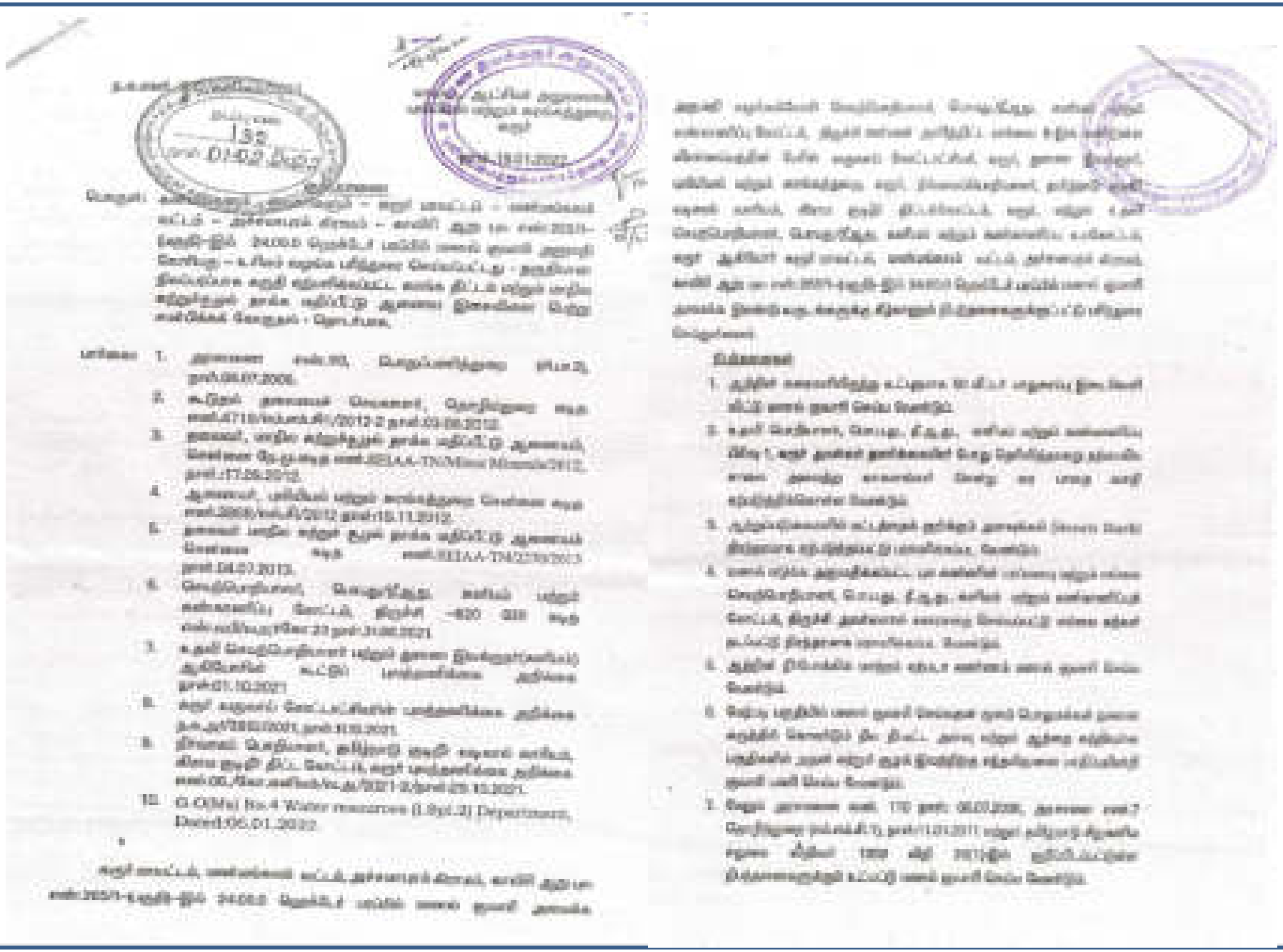
SLIDE 4

SALIENT FEATURES OF THE PROJECT

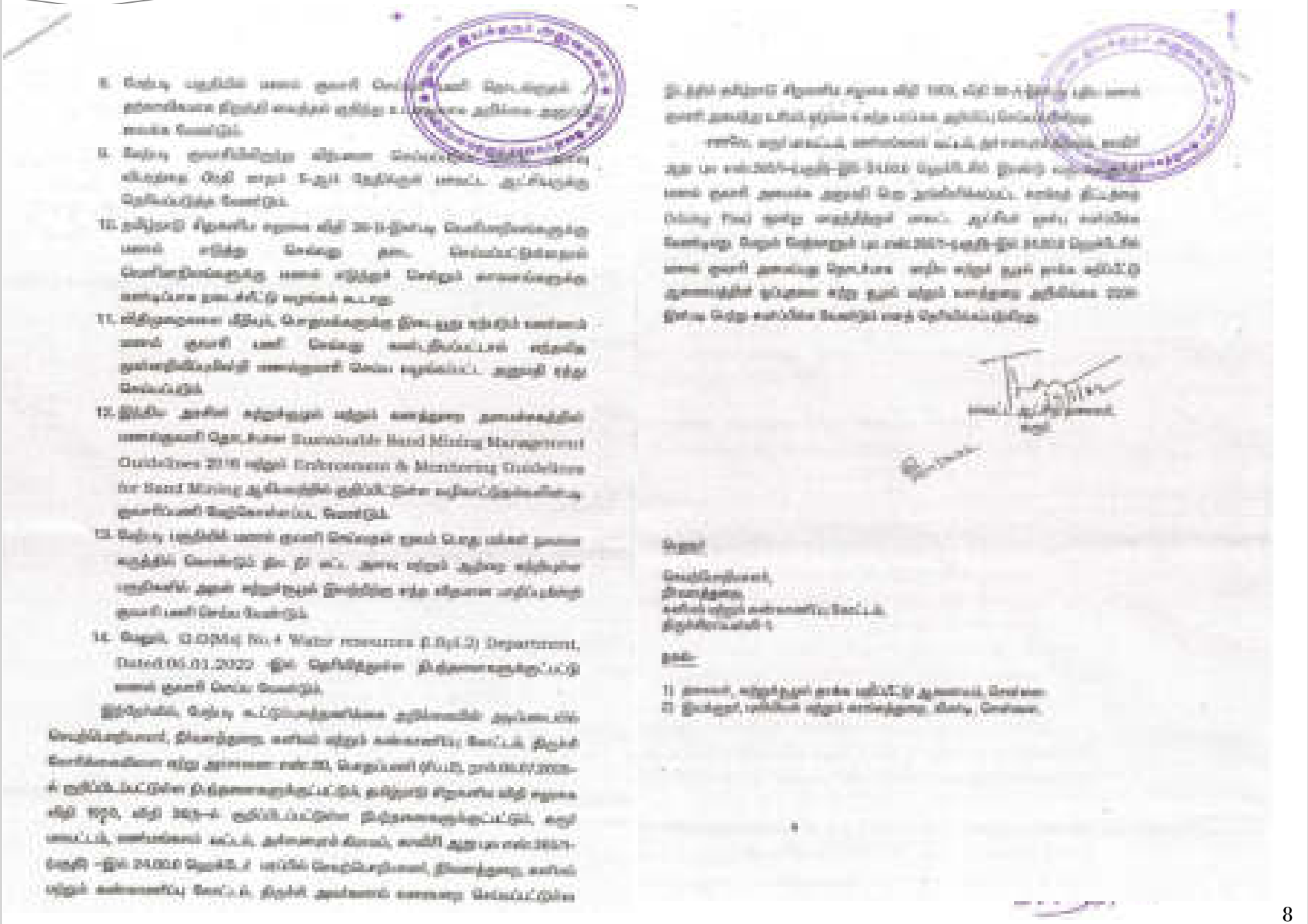
Name of the Quarry	Achamapuram Sand quarry project	
Highest Elevation	102.93m AMSL to 106.89m AMSL	
River Bed level within project site	102.1m AMSL on the upstream 101.1m AMSL on the downstream	
Proposed Depth of Mining	**2m average (1m Above river bed and 1m below river bed)**	
Proposal for this Mining Plan Period – 2 Years	4,80,000m^3 of Sand	
Method of Mining	Opencast Mechanized Mining Method	
Machinery proposed	Excavator with Bucket & bucket unit for excavation and loading (Rental Basis)	3 Nos
	Tippers (from quarry to nearby approved sand stock yard unit)	15 Nos (Hired Basis)
Proposed Manpower Deployment	38 Nos	
Total Cost	Project Cost	Rs. 85,10,000/-
	Environment Monitoring Cost	Rs. 1,50,000/-
	Total	Rs. 86,60,000/-

SLIDE 5

PRECISE AREA COMMUNICATION LETTER



SLIDE 5A



8. மேற்படி பதிவேடுகள் பராமரிக்கும் முறையில் [illegible] முறைமைகளை நிறுவுதல் மற்றும் [illegible] அமைக்க வேண்டும்.

9. மேற்படி குறைபாடுகளுக்கு விதிமுறை [illegible] விதிமுறைகள் 2017 மற்றும் 5-ஆம் இணைப்பில் பரைப்பட்ட அபராதம் விதிக்கப்பட வேண்டும்.

10. தமிழ்நாடு சிறுகனிம சலுகை விதி 36-(1)-இன்படி செயல்படுவதற்கு பரைப் எடுத்து செல்வது தடை. செய்யப்பட்டுள்ள செயல்பாடுகளுக்கு பரைப் எடுத்துச் செல்லும் வாகனங்களுக்கு வரையறுக்க முடியாத அபராதம் விதிக்க கடமாறு.

11. விதிமுறைகளை மீறியும், பொதுமக்களுக்கு இடையூறு ஏற்படும் வகையில் பரைப் ஏலம் செல்வது கண்டறியப்பட்டால் எடுக்கப்பட்ட குவாரிகளிலிருந்து பரைப்பொருள் செல்ல வழங்கப்பட்ட அனுமதி ரத்து செய்யப்படும்.

12. இம்மனு தவறான கற்றறிந்தவர் மற்றும் வரைமுறை அமைச்சகத்தில் பரைப்பொருள் பெறுதல் Sustainable Sand Mining Management Guidelines 2018 மற்றும் Enforcement & Monitoring Guidelines for Sand Mining ஆகியவைகளில் குறிப்பிட்டுள்ள வழிகாட்டுதல்களை முழுமையாக பின்பற்றி செயல்படுத்தப்படுகிறது, கவனிக்கப்பட்டது.

13. மேற்படி பதிவேடுகள் பராமரிக்கும் முறையில் செயல்படுத்தப் பொது மக்கள் தகவல் வழங்கிய செயல்பாடுகளை இரட்டை [illegible] அதன் மற்றும் ஆய்வு [illegible] மாவட்டங்களில் அதன் மற்றும் [illegible] எந்த விதமான பாதிப்பும் ஏற்படாமல் பரைப் பராமரிக்கப்பட்டு வருகிறது.

14. மேலும், G.O(Ms) No.4 Water resources (L.Dpl.2) Department, Dated:06.01.2020 -இல் தெரிவித்துள்ள திருத்தங்களுக்குட்பட்டு பரைப் ஏலம் செல்வது கவனிக்கப்பட்டது.

இதுநிலையில், மேற்படி கட்டுப்பாடுகளுக்கு அறிவுரையில் அரசாணை எண் செயல்படுத்தப்பட்டு, திருவாரூர், வரவேற்பு மற்றும் கண்காணிப்பு கோட்டம், திருச்சி கோட்டங்களிலுள்ள மற்று அரசாணை எண்.80, வேளாண்மை (மீ.வ.2), நாள்.06.07.2020-க் குறிப்பிடப்பட்டுள்ள திருத்தங்களுக்குட்பட்டு, தமிழ்நாடு சிறுகனிம விதி சலுகை விதி 1959, விதி 36(5)-க் குறிப்பிடப்பட்டுள்ள திருத்தங்களுக்குட்பட்டு, கரூர் மாவட்டம், வரவேற்பு கட்டம், தான்தோன்றி கிராமம், காவிரி ஆறு புல எண்.265/1-யிலுள்ள 24.00.0 ஹெக்டேர் பரப்பில் செயல்படுத்தப்பட்டு, திருவாரூர், வரவேற்பு மற்றும் கண்காணிப்பு கோட்டம், திருச்சி அலகினால் வரையறை செய்யப்பட்டுள்ள

திருத்தம் தமிழ்நாடு சிறுகனிம சலுகை விதி 1959, விதி 36-(1)-இன்படி மாவட்ட ஆட்சியர் அவர்கள் முன்னிலையில் நடைபெற்ற உரிமம் ஏலம் பட்டியல் அறிவிப்பு செய்யப்பட்டுள்ளது.

மேலும், கரூர் மாவட்டம், வரவேற்பு கட்டம், தான்தோன்றி கிராமம், காவிரி ஆறு புல எண்.265/1-யிலுள்ள 24.00.0 ஹெக்டேர் பரப்பில் [illegible] Ordinary Pass மூலம் கனிம வளத்துறையால் மாவட்ட ஆட்சியர் முன்பு வைக்கப்பட்ட கோரிக்கை மனுவில் குறிப்பிட்டுள்ளபடி, மேற்படி மேற்கொள்ள புல எண்.265/1-யிலுள்ள 24.00.0 ஹெக்டேர் பரப்பில் மாவட்ட ஆட்சியர் அவர்கள் தலைமையில் நடைபெற்ற [illegible] ஏலத்தில் கலந்து கொண்ட [illegible] ஏலதாரர்களின் [illegible] ஏலத்தொகை [illegible] மாவட்ட ஆட்சியர் அவர்கள் [illegible] மேற்கொள்ள கோரிக்கை வைத்து தெரிவிக்கப்பட்டுள்ளது.

மாவட்ட ஆட்சியர் அவர்கள்,
கரூர்.

மேலும்,

செயல்படுத்துவதற்கு,
திருவாரூர்,
வரவேற்பு மற்றும் கண்காணிப்பு கோட்டம்,
திருச்சிராப்பள்ளி-1.

நகல்:

1) அரசுச் செயலாளர், சுற்றுச்சூழல் காக்க மற்றும் அரசாணைப், சென்னை-
2) இயக்குநர், பள்ளிகள் மற்றும் காவல்துறை, விரைவு, சென்னை.

SLIDE 5B

MINING PLAN APPROVAL LETTER

From

Dr.P.Jayapal, M.Sc.,
Deputy Director,
Geology and Mining,
Collectorate,
Karur District.

The Executive Engineer,
WRD,
Mining and Monitoring Division,
Trichy.

Ex.No.352/Mines/2021, Dated:29.04.2022

Sir,

Sub: Mines and Minerals – Minor Mineral - Sand quarry - Karur District – Manmangalam Taluk – Achamapuram Village – Cauvery River Poramboke Land in S.F.No.265/1(Part) over an extent of 24.00.0 hectares – Application for grant of permission for quarrying sand by the Executive Engineer, Trichy - precise area communicated - Mining Plan submitted for approval - approved - Regarding

Ref: 1. The Executive Engineer, Public Works Department, WRD, Mining and Monitoring Division, Trichy letter Rc.no3/a.g1/Ear.23, Dated:31.08.2021.

2. Order of the Hon'ble Supreme Court of India in I.A.Nos.13-13/2011 in SLP (C) No.19528-19529/2009, dt: 27.02.2012.

3. The Chairman, State Level Environment Impact Assessment Authority, Tamil Nadu U.O.Lr.No.SEIAA-TN/Minor Minerals/2012, Dated: 17.09.2012.

4. The Commissioner of Geology and Mining, Chennai letter Rc.No 5868/LC/2013, dt: 19.11.2013.

5. The District Collector, Karur Precise Area letter Rc.No.392/Mines/2021, Dated: 19.01.2022.

6. Mining Plan submitted by the Executive Engineer, WRD, Mining and Monitoring Division, Trichy letter Rc.no3/a.g1/Ear.23/Ve-ua, Dated:07.04.2022

****

The Executive Engineer, PWD(WRD), Mines and Monitoring Division, Trichy -20 in the reference 1st cited has requested for grant of permission for a new sand quarry, over an extent of 24.00.0 hects of Government Poramboke land (Cauvery river) in S.F.No.265/1(Part) in Achamapuram Village, Manmangalam Taluk, Karur District.

2) In the reference 6th cited, the Executive Engineer, Public Works Department, WRD, Mining and Monitoring Division, Trichy has submitted three copies of Mining Plan, for approval to the proposed sand quarry over an extent of 24.00.0 hects., of Government Poramboke land (Cauvery River) in S.F.No.265/1(Part) of Achamapuram Village, Manmangalam Taluk, Karur District. The Mining Plan has been prepared by Recognised qualified person Thiru.Shikhar Ahmed, Reg RQP/MAS/183/2004/A. The Mining Plan was prepared as per the guidelines given by Commissioner of Geology and Mining, Chennai - 32, vide reference 4th cited. The Mining Plan has been examined and the origin of area applied for etc., are as below: -

1	The details of area applied for	S.F.No.265/1(Part) Achamapuram Village, Manmangalam Taluk, Karur District	
2	Name of the Panchayat	Achamapuram	
3	Topo Sheet No.	58 J/ 01	
4	Boundaries Corners	Co-Ordinates	
		Latitude	Longitude
	1	10°58'31.6713"N	78°10'48.2644"E
	2	10°58'37.4311"N	78°10'53.5951"E
	3	10°58'15.4851"N	78°11'17.8823"E
	4	10°58'09.7355"N	78°11'12.0017"E

The Geological and minable reserves are detailed in Table -02 and 03 of Part A. The estimated minable reserves are 4,80,000 cbm for two years. The Environmental Management Plan and Mine Closure Plan are detailed in serial Nos. 12 of Part B. It is proposed that the above quantity of sand will be quarried within two-year period using

SLIDE 5C

MINING PLAN APPROVAL LETTER

machineries like excavators and tippers for the proposed sand quarry. There is no Wild Life sanctuary within 10 Km from the project site under Wild Life Protection Act 1972. The Mining Plan has been examined and it contains all the conditions stipulated in the rules.

As per the guidelines/ instructions issued by the Commissioner of Geology and Mining, Chennai -32 vide letter Rc.No.5868/LC/2012, dated 19.11.2012, 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 imply 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, 1986, Explosives Act, 1884 (Central Act IV of 1884) draft 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 or Government of India or State Government.

(iv) Quarrying shall be done as per the approved Mining Plan and that the mining plan is approved without prejudice to any other order/Notification/ 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.

(v) If anything is found to be concealed as required by the Mines Act/MCRP & CC Notifications in the contents of the Mining Plan and the proposed for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.

Encl: Two copies of Approved Mining Plan.

Deputy Director,
Geology and Mining,
Karur.

Copy submitted to:

1) The Director of Geology and Mining, Chennai-32
2) The District Collector, Karur.
3) The Chairman, State Level Environmental Impact Assessment Authority, Tamil Nadu, 3rd Floor, Panagal Maligai, Saidapet, Chennai-15.

SLIDE 5D

500m RADIUS CLUSTER CERTIFICATE

From

Dr.P.Jayapal, M.Sc., Ph.D.,
Deputy Director,
Geology and Mining,
Collectorate,
Karur District.

To

- The Executive Engineer,
WRD,
Mining and Monitoring Division,
Trichy

Rc.Pr.392/Mines/2021, Dated:10.05.2021

Sir,

Sub: Mines and Minerals – Minor Mineral – Sand quarry – Karur District – Manmangalam Taluk – Achumanpunam Village – Cauvery River Poramboke Land in S.F.No.263/1(Part) over an extent of 24.00.0 hectare – request for grant of permission for quarrying sand by the Executive Engineer, Public Works Department (WRD) Mining and Monitoring Division, Trichy-20 – Mining Plan submitted and approved – requested for the details of existing/proposed/abandoned quarries situated within 500 mts radial distance – furnished – Reg.

Ref: 1. The Executive Engineer, Public Works Department, WRD, Mining and Monitoring Division, Trichy letter No.ad4/aug1/Rec.03, Dated:31.08.2021.

2. Proposal Area Communication Notice Rc.No.392/Mines/2021, Dated: 19.01.2022.

3. Mining Plan submitted by the Executive Engineer, WRD, Mining and Monitoring Division, Trichy letter No.ad4/aug1/Rec.03/10-sm, Dated:07.04.2022

4. The Executive Engineer, WRD, Mining and Monitoring Division, Trichy letter No.DR/DO.1/F.23/116-M, Dated:20.04.2022.

5. The Deputy Director, Geology and Mining, Karur letter Rc. 392/Mines/2021, dated: 29.04.2022.

I invite kind attention to the references cited.

2. The Executive Engineer, PWD/WRD, Mining and Monitoring Division, Trichy-20 in the reference 1st cited has requested for grant of permission for a new sand quarry over an extent of 24.00.0 hectare, in S.F.No.263/1(Part) of Government poramboke land in Achumanpunam Village, Manmangalam Taluk, Karur District. The District Collector, Karur has issued proposal area communication to the Executive Engineer, WRD, Mining and Monitoring Division, Trichy-20 for the applied area and directed to submit the approved mining plan and to obtain Environmental Clearance from the SEIAA -Tamil Nadu, Chennai-15 vide reference 2nd cited.

3. Accordingly, the Executive Engineer in the reference 3rd cited had submitted Mining Plan and it was approved by the Deputy Director, Geology and Mining, Karur vide reference 5th cited.

4. The Executive Engineer in the reference 4th cited has informed that the SEIAA has instructed to present the certificate stating that no sand quarries have been situated within 500 mts radius from the proposed new sand quarry by the Geology and Mining Department and certified that no quarries have been situated within 500 mts radius of the proposed sand quarry and requested to issue the above certificate to get the SEIAA approval.

5. Hence, the details of existing, proposed and abandoned quarries located within 500 meters radius from subject sand quarry is furnished as follows -

a) Details of existing quarries

S. No.	Name of the Owner	Village & Taluk	S.F. No	Extent (ha/acres)	Minerals	Remarks
			— Nil —			

b) Details of proposed quarries

S. No.	Name of the Owner	Village & Taluk	S.F. No	Extent (ha/acres)	Mineral	Remarks
1	The Executive Engineer, (PWD/WRD), Mining and Monitoring Division, Trichy	Achumanpunam, Manmangalam	263/1(Part)	24.00.0	Sand	—
			— Nil —			

c) Details of expired and abandoned quarries

S. No.	Name of the Owner	Village & Taluk	S.F. No	Extent (ha/acres)	Minerals	Remarks
			— Nil —			

This letter is issued for the purpose of obtaining environmental clearance from the SEIAA-TN, Chennai-15 only.

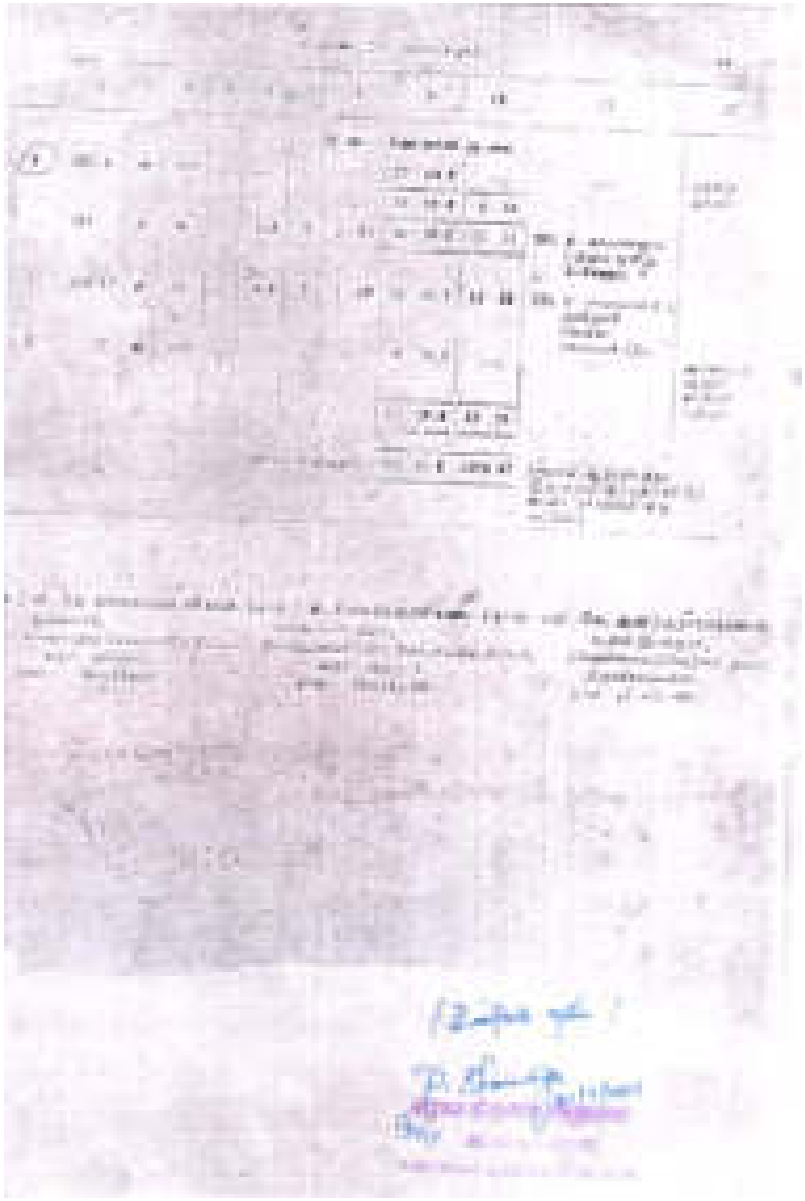
Deputy Director,
Geology and Mining,
Karur

No Other Proposed and Existing quarries within 500m radius from the project site

SLIDE 6

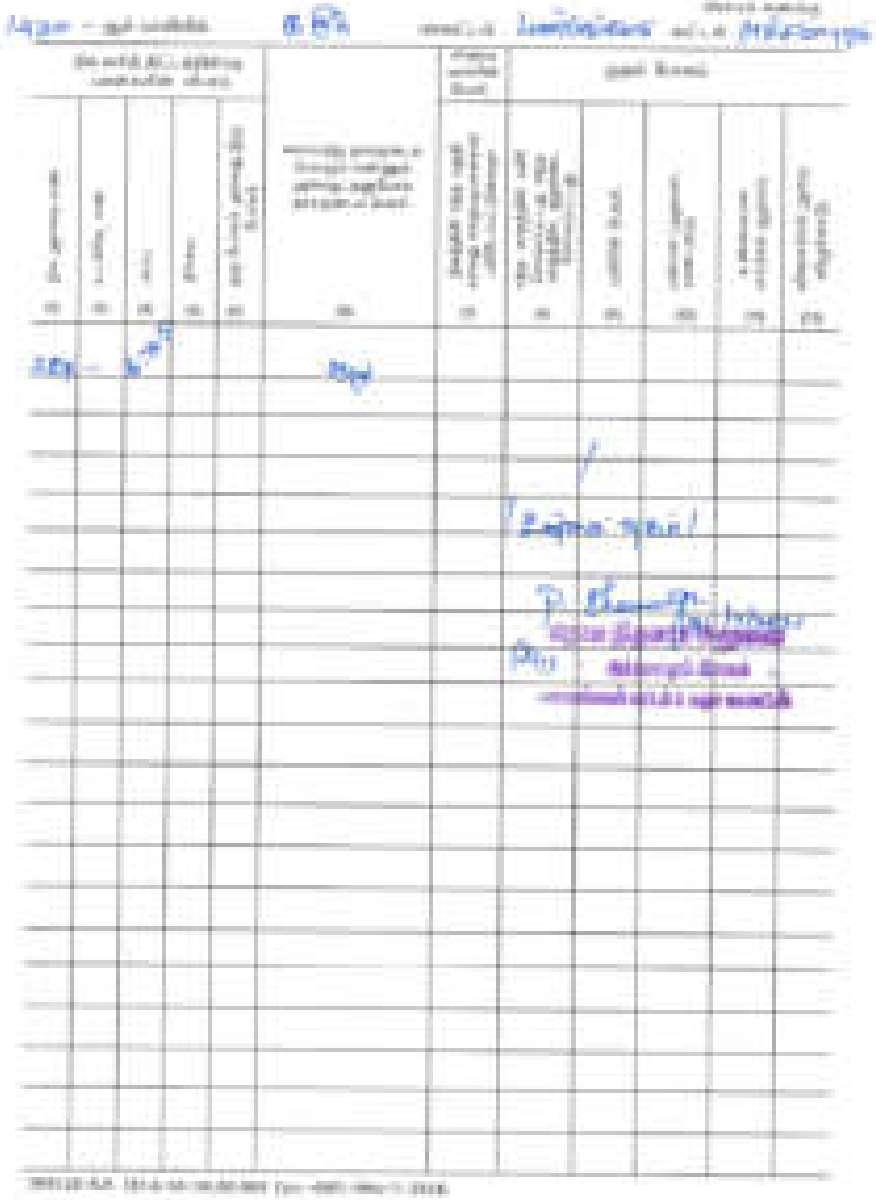
LAND DOCUMENT

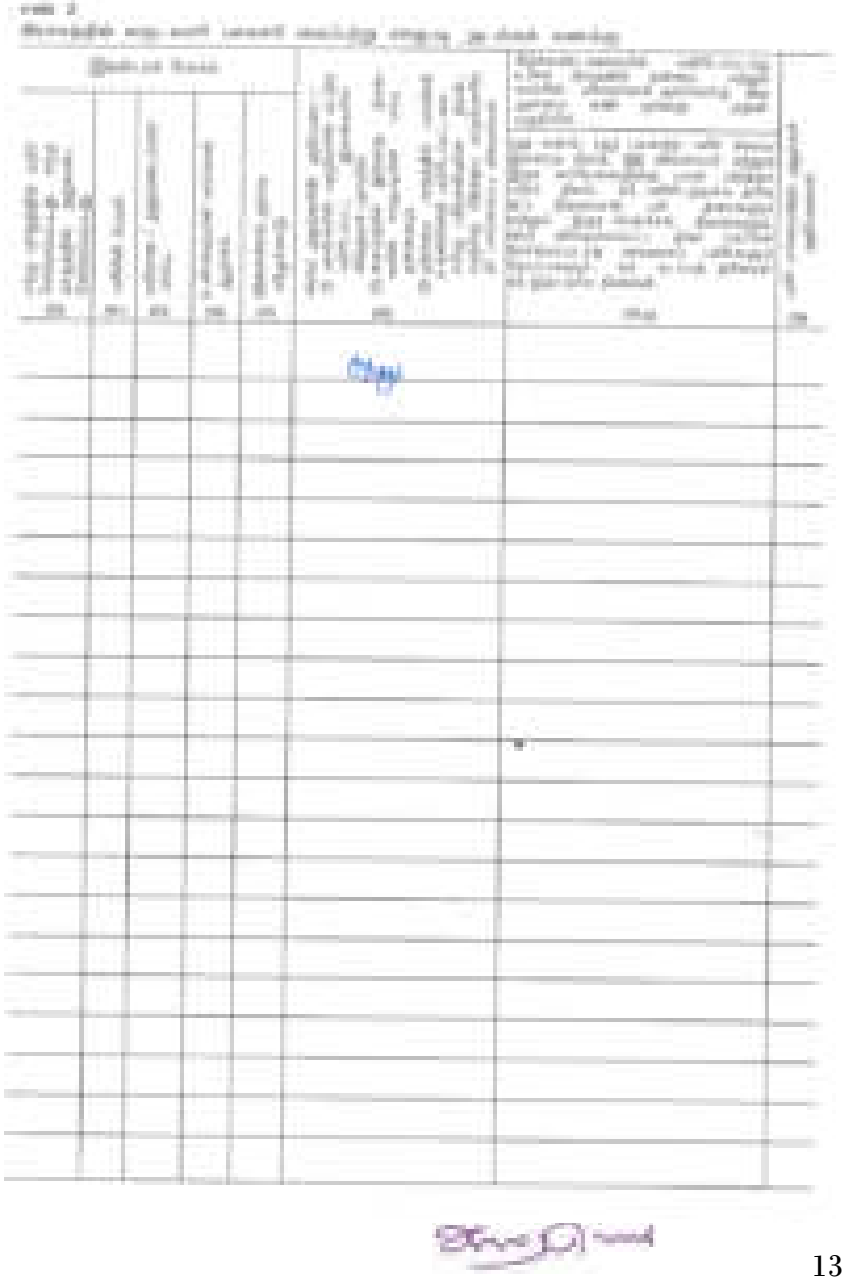
A - REGISTER



SLIDE 6A

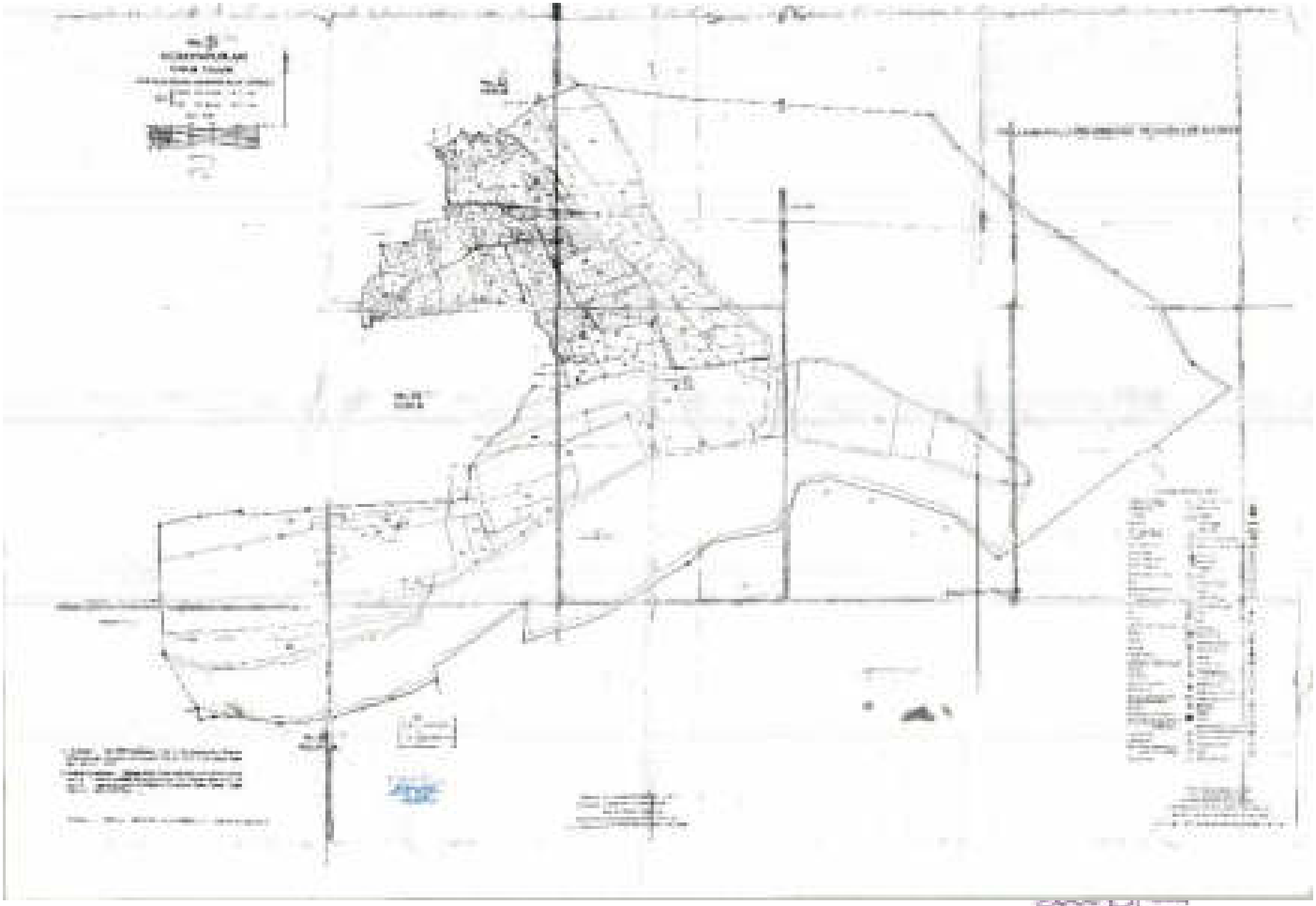
ADANGAL





SLIDE 7

VILLAGE MAP



SLIDE 8

GOOGLE IMAGERY OF PROJECT SITE

SLIDE 8A

GOOGLE IMAGERY – 1Km RADIUS

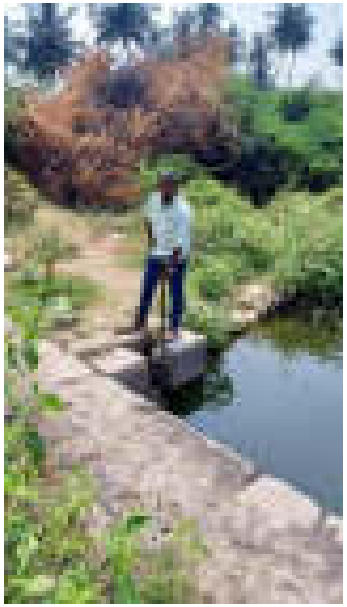
Nearest Habitation = 720m East

SLIDE 9

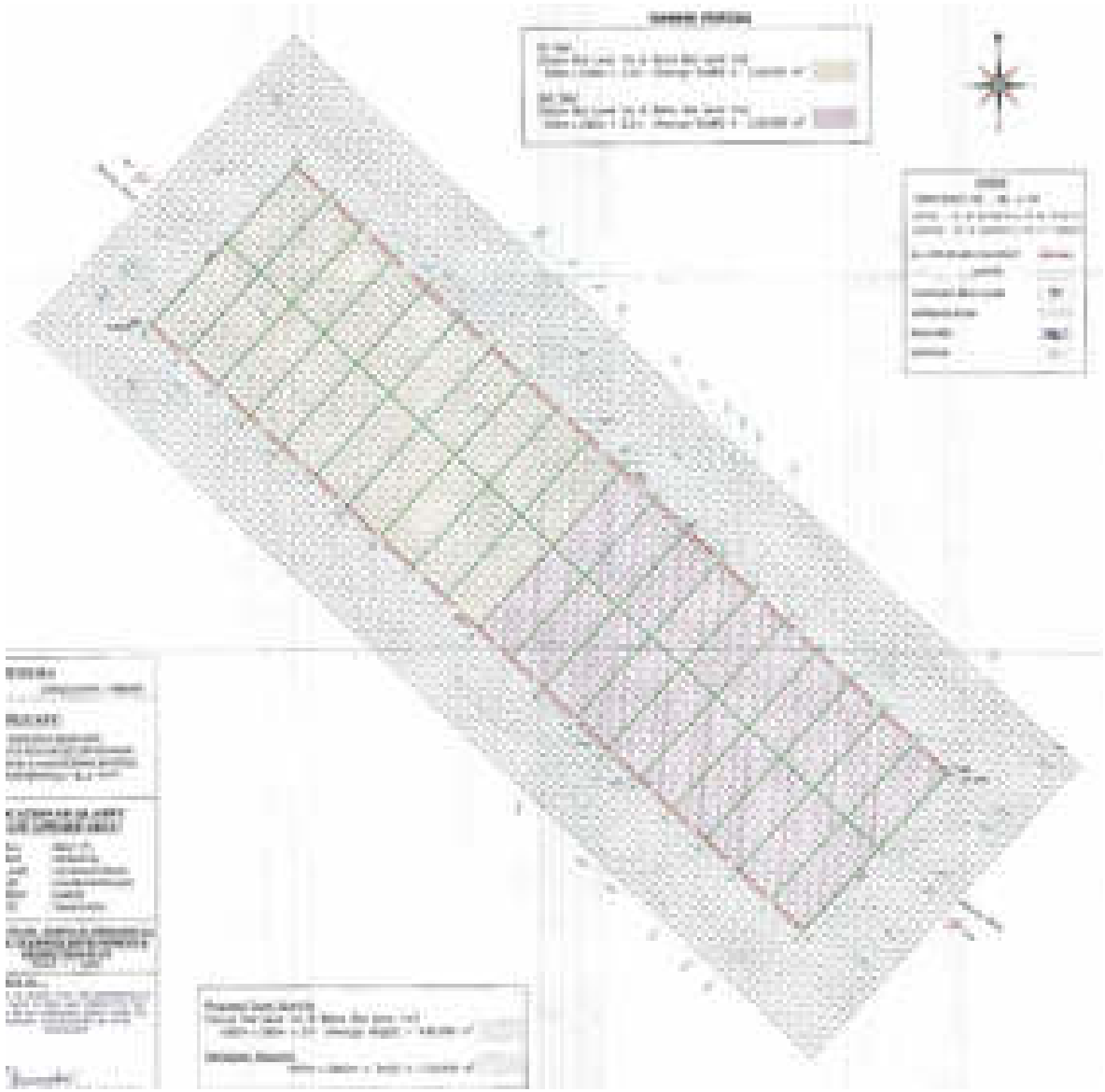
PROJECT SITE PHOTOGRAPHS

SLIDE 9A

DGPS SURVEY PHOTOGRAPHS



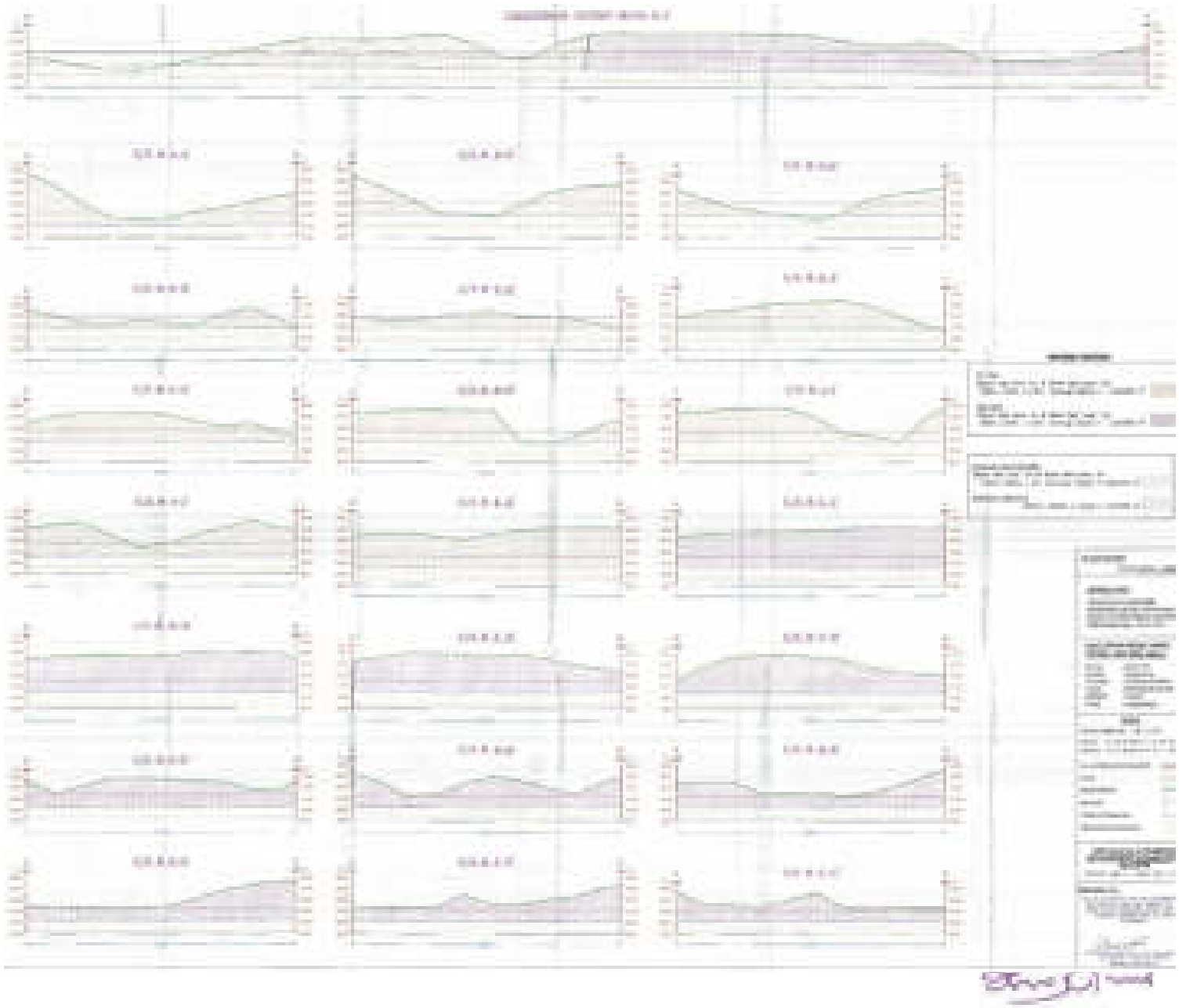
SLIDE 10



TOPOGRAPHY AND YEAR WISE PRODUCTION PLAN

SLIDE 10A

TOPOGRAPHY AND YEAR WISE PRODUCTION SECTIONS



SLIDE 11

RESOURCES, RESERVES AND PRODUCTION DETAILS

Geological Resources of Sand in m^3	7,20,000m^3
Mineable Reserves of Sand in m^3	4,80,000m^3

Proposed Production for Two years

Years	Sand in m^3
I	2,40,000
II	2,40,000

Depth – 2m average (1m above river bed level & 1m below river bed level)

MINE CLOSURE PLAN

At present the area is river bed with undulating ups and downs, there is no mined out land. The quarried out land will facilitate the functional free flow of the river an increase it carrying capacity. After completion of quarry operation, the quarried out pit naturally replenished during ensuring rainy season

SLIDE 12

If the proponent or any other person (with name specified) have been already carried out the mining activity in the proposed mining lease area. Then, whether the proponent has furnished the following details from AD/DD Mines.

PARTICULARS	DETAILS
What was the period of the operation of the earlier mines with last work permit issued by the AD/DD Mines?	Not applicable
Quantity of minerals mined out and approved and actual depth of mining.	Not applicable
If EC and CTO already obtained and its compliance report from competent authority	Not applicable

SLIDE 13

SITE SPECIFIC ENVIRONMENTAL IMPACTS

TYPE OF IMPACT	CAUSES OF IMPACT
Impact on Land and Soil	By overall mining activity like excavation, Sand removal, mineral excavation and solid waste generation
Impact on Air Quality	Fugitive dust, gaseous emissions and generation of particulate matter of various source like movement of HEMM and Tippers
Impact on Surface Water, Ground Water and Hydrogeology	Run-off / wash off during storm from excavated surface or dumps leading accumulation of sediments
Impact on Noise Levels and Ground Vibration	Only due to movement of HEMM No drilling and blasting involved
Impact on ecology (Flora & Fauna)	Clearance of vegetation and loss of Habitat
Impact on Socio-economic environment (population & settlement)	Economic growth, employment opportunities (direct & indirect)
Cumulative Quarry Impact on all Environmental Attributes	By overall mining activity, surface run-off, economic growth.

SLIDE 14

CORPORATE ENVIRONMENT RESPONSIBILITY

CER will be carried out as per MoEF & CC Notification Dated: 30/09/2020 as a part of Environment Management Plan

REQUEST TO HONOURABLE SEIAA/SEAC

The main aim of the project is **Restore the ecology of the river by restoring the lost functional Efficiency / carrying capacity of the Cauvery River"**

The proposed quarry project falls under "B1" category as per MoEF & CC Guidelines. And magnitude of impacts has to be studied considering all the activities along with the Standard ToR Prescribed by MoEF & CC.

Hence, we request you to kindly recommend for issue of **TERMS OF REFERENCE (ToR)**.

THANK YOU