

BEFORE THE NATIONAL GREEN TRIBUNAL, PRINCIPAL  
BENCH, NEW DELHI

2895

ORIGINAL APPLICATION NO. 304 OF 2019

IN THE MATTER OF:

M. Haridasan

...Applicant

VERSUS

State of Kerala & Ors.

Respondent(s)

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FILED BY

  
MAHESH AGARWAL  
ADVOCATE FOR THE INTERVENOR/RESPONDENT-AVPL  
AGARWAL LAW ASSOCIATES  
19, BABAR ROAD, BENGALI MAKRET  
NEW DELHI - 110 001  
(M) 9910483627  
EMAIL: mail@aglaw.in

PLACE: NEW DELHI  
DATED: 05.12.2023

**ANNEXURE R-17**

**2896**

# **Building Stone Quarry Project**

**Re - Sy. Block No. 37, Re - Sy No. 554/1, 554/5 &  
554/6 of Nagaroor village (Kadavilla), Chirayinkeezh  
Taluk, Thiruvananthapuram District, Kerala**

Environmental Clearance (EC) Order No. 92-Q-2022 dated 16.08.2022

**Half Yearly Compliance Report (HYCR)  
for the Period April 2023 to September 2023**

Project Proponent

**adani**

**Adani Vizhinjam Port Private Ltd. (AVPPL)**

**November 2023**



Ports and  
Logistics

Ref: AVPPL/MoEF/2023-24/2712

Date: 21<sup>st</sup> November 2023

To,  
Ministry of Environment Forest and Climate Change (MoEF&CC),  
Regional Office (Southern Zone), Kendriya Sadan,  
IV<sup>th</sup> Floor, E&F Wings, 17<sup>th</sup> Main Road, II<sup>nd</sup> Block,  
Koramangala, Bangalore-560034  
[rosz.bng-mefcc@gov.in](mailto:rosz.bng-mefcc@gov.in)

**Subject:** • Submission of **Half Yearly Compliance Report (HYCR)** to Conditions of Environmental Clearance (EC) for the Period April 2023 to September 2023 - Reg.

**Reference:** EC for Building Stone Quarry in Re-Sy. Block No. 37, Re-Sy. No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavilla), Chirayinkeezh Taluk, Thiruvananthapuram District, Kerala; by M/s. Adani Vizhinjam Port Pvt. Ltd. vide **EC No. 92/Q/2022 dated 16.08.2022**

Dear Sir/Madam,

This is with reference to the Environmental Clearance (EC) Order No. 92/Q/2022 dated 16.08.2022 (vide reference cited) by the State Environmental Impact Assessment Authority (SEIAA), Kerala for the building stone quarry project in Re-Sy. Block No. 37, Re-Sy. No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavilla), Chirayinkeezh Taluk, Thiruvananthapuram District, Kerala; of M/s. Adani Vizhinjam Port Pvt. Ltd. (AVPPL).

The Half Yearly EC Compliance Report (HYCR) of the conditions stipulated in the cited reference for the period from **April 2023 to September 2023** is enclosed herewith for record and reference. You are requested to kindly acknowledge receipt of the same.

Thanking You.

Yours Sincerely,

Rajesh Jha  
MD & CEO – Authorized Signatory



Enclosed: As mentioned above

Copy to: State Environment Impact Assessment Authority (SEIAA), K.S.R.T.C Bus Terminal Complex, 4<sup>th</sup> Floor, Thampanoor, Thiruvananthapuram, Kerala

Adani Vizhinjam Port Pvt Ltd  
Port Operation Building,  
Mulloor,  
Thiruvananthapuram,  
Kerala-695521

Tel +91 471 2772 100  
Fax +91 471 2325 600  
[project.vizhinjam@adani.com](mailto:project.vizhinjam@adani.com)  
[www.adani.com](http://www.adani.com)  
CIN: U61200GJ2015PTC083954

Registered Office:  
Adani Corporate House, Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad-382421

Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) No. 92-Q-2022 dated 16.08.2022 for the Period April 2023 to September 2023		
S. No.	Conditions	Compliance Status as on September 30, 2023
<b>Specific Conditions</b>		
1	The proponent shall carry out quarrying as per the approved Mining Plan and the proponent should strictly follow the Kerala Minor Mineral Concession Rules 2015 and amendments thereby.	<p><b>Being Complied</b> Adani Vizhinjam Port Pvt. Ltd. (AVPPL) commenced operation on 14.07.2023. AVPPL will carry out quarrying as per the Approved Mining Plan (<b>Annexure 1</b>) and will strictly follow the Kerala Minor Mineral Concession Rules (KMMCR), 2015 and amendments.</p> <p>During the compliance period (April 2023 to September 2023), a total of 0.71950 Lakh Tons of building stones have been extracted and a total cumulative quantity of 0.71950 Lakh Tons of building stones have been extracted from inception of mining on 14.07.2023 till 30.09.2023.</p>
2	The EC shall be valid from the date of execution of permit/lease from the Department of Mining and Geology. The copy of the lease order should be provided to the SEIAA before commencing the mining activity.	<p><b>Complied</b> AVPPL executed Quarrying Lease Registration Agreement in Form H at Thiruvananthapuram Registrar Office with Department of Mining &amp; Geology (DMG) dated 31.05.2023 (enclosed as <b>Annexure 2</b>). A copy of the same was submitted to SEIAA vide letter No. AVPPL/SEIAA/2023-24/2501 dated 14.07.2023 (A copy of the letter and the lease order is enclosed as <b>Annexure 3</b>).</p>
3	Simultaneous blasting in Kadavila I and Kadavila II quarries must be avoided and Time schedule must be adopted for blasting.	<p><b>Being Complied</b> There is no simultaneous blasting in Kadavila-1 and Kadavila-2&amp;3 quarries being carried out. Both the sites are being coordinated for commencing the blasting operations. Below suitable time schedule is being followed which avoids simultaneous blasting at both the quarries:</p> <p><u>Morning Session:</u> Kadavilla-1 - 10:30 AM to 11:00 AM Kadavilla-2&amp;3 - 11:00 AM to 11:30 AM</p> <p><u>Afternoon Session:</u> Kadavilla-1 - 1:00 PM to 1:30 PM Kadavilla-2&amp;3 - 1:30 PM to 2:30 PM</p>

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		 <p style="text-align: center;"><b>Blasting Timings Board</b></p>
4	<p>Garland drain should be provided covering the entire project area along with intermittent silt traps and siltation pond of appropriate volume and outflow channel. The entire drain should be desilted periodically for preventing any obstruction to the drainage system.</p>	<p><b>Being Complied</b></p> <p>Presently the working area is adjacent to the Kadavilla-1 quarry and the water from Kadavilla-2&amp;3 quarry flows through the garland drainage of Kadavilla-1 and reaches the check dam at the bottom of Kadavilla-1 area.</p>  <p style="text-align: center;"><b>Check Dam at Kadavilla-1</b></p> <p>For the remaining mining area on the other side of the quarry which is proposed to be mined at a later stage, it is planned to construct garland</p>

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		drain, retaining wall all along the boundary and check dam of 12.5 m length and retaining wall.
5	The proponent should adhere to the affidavit regarding the drilling and blasting parameters that Blasting (NONEL) will be done only with drill hole of 32mm diameter and depth 1.5m loaded with a maximum of 375 gm of explosive in each hole of the array with a burden of 1.5m and spacing of 1m.	<p><b>Complied</b></p> <p>Mining is being conducted using Non-Electric Detonator (NONEL) method of controlled blasting only; to minimize the air blast, fly rock and ground vibration.</p> <p>Blasting (NONEL) is being done with drill hole of 32 mm diameter and depth 1.5m loaded with a maximum of 375 gm of explosive in each hole of the array with a burden of 1.5m and spacing of 1m.</p>
6	A vibration impact study on various built structures within 200m from the project boundary shall be conducted by engaging a National Institute such as National Institute of Rock Mechanics and their recommendations must be implemented. A copy of the study report should be made available to Dept. of Mining and Geology for their record and future reference.	<p><b>Being Complied</b></p> <p>AVPPL are in the process of engaging Dr. Shastri who is the nationally reputed former Head of Department and Professor of Mining Engineering at National Institute of Technology (NIT) Surathkal, Karnataka and presently at Gandhi Institute of Technology and Management (GITAM) University, Visakhapatnam, to conduct a vibration impact study on various built structures within 200 m from the project boundary and submit the study report. A copy of the report will be submitted to the Dept. of Mining and Geology and as a part of the HYCR once completed.</p>
7	Impact of vibration due to blasting on the nearest houses and built structures should be monitored in terms of Peak Particle Velocity and amplitude for a maximum charge per delay and included in the Half Yearly Compliance Report.	<p><b>Being Complied</b></p> <p>AVPPL are in the process of engaging Dr. Shastri who is the nationally reputed former Head of Department and Professor of Mining Engineering at National Institute of Technology (NIT) Surathkal, Karnataka and presently at Gandhi Institute of Technology and Management (GITAM) University, Visakhapatnam, to conduct a vibration impact study on various built structures within 200m from the project boundary and submit the study report. A copy of the report will be submitted to the Dept. of Mining and Geology and as a part of the HYCR once completed.</p>

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8	Retaining wall of appropriate height should be provided at the overburden dumping site	<p><b>Not Applicable</b></p> <p>All the overburden from Kadavilla-2&amp;3 is being used to backfill the completed worked area in Kadavilla-1 and therefore there is no overburden dumping site.</p>
9	CER Plan should be implemented within the first 18 months and it should be operated and maintained till the mine closure plan is implemented	<p><b>Being Complied</b></p> <p>AVPPL are in the process of implementing the CER plan with expense heads under specific activities as mentioned in the EC. Status of the same is provided below:</p> <p>Water Supply (Thannikonam and Kadavilla): AVPPL are supply drinking water to the local people in Thannikonam and Kadavilla villages. Work was awarded to a local contractor to supply water through tankers.</p>  <p style="text-align: center;"><b>Photographs of Water Distribution</b></p> <p>A Water Purifier has been installed at the project site for access to drinking water for the local people, truck drivers, staff, etc.</p>

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		 <p style="text-align: center;"><b>Water Purifier</b></p> <p>Maintenance of Roads (From Thannikonam Village to Kadavilla Junction): AVPPL had written a letter to the Nagaroor Grama Panchayath for approval to form the road and the Panchayath have responded in their Minutes dated 11.04.2023 stating that AVPPL will maintain the road at their own expense and an Assistant Engineer Local Self Government Department (Nagaroor Grama Panchayath) has been assigned to supervise the work (A copy of the Meeting Minutes is enclosed as <b>Annexure 4</b>). AVPPL is in the process of engaging a contractor to start work for development of fresh bitumen road.</p> <p>Medical Checkup: Medical health checkup is being planned by April 2024.</p> <p>Additionally, AVPPL had distributed Onam Gift Kit as a part of CER initiative to BPL families surrounding Kadavilla project area in Nagaroor panchayat. The Onam Gift Kit (which included various groceries and provisions) were sourced from VIZ Mart (an initiative supported by Adani foundation) and the same were distributed on 24.08.2023.</p>

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		 <p style="text-align: center;"><b>Distribution of Onam Gift Kits</b></p>
10	Planting of trees for the development of green belt should be done prior to the commencement of mining and green belt should be nurtured and maintained during the entire project period.	<p><b>Being Complied</b></p> <p>A natural greenbelt already exists and is present in the area. Since the safety zone is rocky in nature, plantation cannot be carried out. Planting of trees for development of greenbelt shall be done in the post-monsoon season and shall be maintained during the entire project.</p>
11	Temporary wall should be provided wherever green belt cannot be developed due to the presence of barren rock.	<p><b>Complied</b></p> <p>A barbed wire fencing with mesh has been developed as a temporary wall wherever greenbelt cannot be developed along the periphery of the lease boundary.</p>  <p style="text-align: center;"><b>Temporary Wall Construction</b></p>
12	Temporary wall should be provided at the boundary	<p><b>Complied</b></p>

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	adjacent to the Temple and Thrisoolam structure.	<p>A barbed wire fencing with mesh has been developed as a temporary wall along the lease boundary between the quarry and the Temple and Thrisoolam structure.</p>  <p style="text-align: center;"><b>Barbed Wire Between Quarry and Temple</b></p>
13	Compensatory afforestation should be initiated before the commencement of mining in available land as tree planting is not feasible along some portion of the buffer zone.	<p><b>Not Applicable</b></p> <p>There are no trees cut for clearing of land for commencement of mining operations. If during the project, there are any trees cut, suitable compensatory afforestation will be done at a feasible location as identified with seedlings 5 times of the loss of trees that has occurred following the planting measures as suggested.</p>
14	Transportation of mined material should not be done during the peak hours in the forenoon (8.30am to 10.30am) and afternoon (3.30pm to 5pm).	<p><b>Being Complied</b></p> <p>Measures have been taken to avoid transportation of mined material during the peak hours. From the Quarry site and Vizhinjam port site, all vehicles are stopped between 8.30 am to 10.30 am and 3.30 pm to 5.00 pm. In transit during the peak hours, the trucks will stop in any safe area.</p>
15	Mining activities including loading of mined materials should not be carried out between sun set and sunrise.	<p><b>Being Complied</b></p> <p>Mining activities including loading of mined materials are being carried out during the prescribed timings only.</p>
16	Adequate number of toilets and waste management facility should be provided at the site.	<p><b>Complied</b></p> <p>e-Toilet/Bio-toilet has been installed for the sanitation requirements of workers at the</p>

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		<p>Kadavilla-1 site which is approachable from the present quarry location as well.</p>  <p><b>Photograph of Bio-Toilet at Site</b></p> <p>Waste management bins have been placed around the quarry site at strategic locations for collection of wet and dry waste.</p>  <p><b>Photograph of Waste Bins at Site</b></p>
17	Haulage road should be maintained well with frequent sprinkling	<p><b>Being Complied</b></p> <p>Regular water sprinkling through water tankers is being carried out on haulage roads. Mobile Water Sprinklers are modified with good sprinkling</p>

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		<p>capacities and are available to sprinkle water till the loading faces, parking areas, etc., and separate pipe is provided from the mobile tanker to spray all over the areas where the tanker is unable to reach.</p>  <p style="text-align: center;"><b>Photograph of Water Sprinkling</b></p>
18	The proponent should adhere to the affidavit stating that all the assurances given during the Public Consultation process will be complied with including the drinking water supply.	<p><b>Being Complied</b> AVPPL is supplying drinking water to the local people in the vicinity of the project site. Work was awarded to a local contractor to supply water through tankers.</p> <p>AVPPL will implement CER activities in the surrounding areas of the quarry site and adhere to the affidavit that stated that all the assurances given during the Public Consultation process will be complied with, including the drinking water supply. Refer Specific Condition Point No. 9.</p>
19	As per OM no F.No.22-65/2017-IA.III dated 30th September 2020, under Corporate Environmental Responsibility (CER) the project Proponent shall prepare an Environment Management Plan (EMP) as directed by SEAC during	<p><b>Being Complied</b> The EMP was prepared during the Environmental Impact Assessment (EIA) stage which was appraised by SEAC and approved. AVPPL submitted a copy of the approved EMP for information and implementation support to the Office of the Nagaroor Grama Panchayat, Chemmarathamukku, Nagaroor vide Letter No.</p>

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	<p>appraisal, covering the issues to address the environmental problems in the project region, indicating both physical and financial targets year wise. The EMP shall be implemented in consultation with local self Govt. Institutions. The indicated cost for CER shall be 2% of the project cost depending upon the nature of activities proposed. The follow up action on implementation of CER shall be included in the Half Yearly Compliance Report which will be subjected to field inspection at regular intervals. A copy of the approved EMP shall be made available to the concerned Panchayat for information and implementation support.</p>	<p>AVPPL/NGP/2022-23/2452 dated 01.06.2023 (A copy of the letter is enclosed as <b>Annexure 5</b>).</p> <p>As per the EC received, Rs. 16.00 Lakhs for Environmental Monitoring and Pollution Control Measures and Rs. 31.10 Lakhs for CER Activities related to concerns raised during the Public Consultation in physical terms must be spent. AVPPL are in the process of implementing the CER plan with expense heads under specific activities as mentioned in the EC.</p> <p>As on the end of the compliance period (i.e., 30.09.2023) Rs. 6.64 Lakhs for Environmental Monitoring and Pollution Control Measures and Rs. 3.13 Lakhs has been spent towards CER.</p>
20	<p>In the wake of occurrence of large scale landslides in the state, as per the information provided by the Department of Mining &amp; Geology, it is directed to use only NONEL (Non Electrical) technology for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wildlife.</p>	<p><b>Complied</b></p> <p>Mining is being conducted using Non-Electric Detonator (NONEL) method of controlled blasting only; to minimize the air blast, fly rock and ground vibration. There is no incident of fly rock been recorded.</p>
21	<p>As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16<sup>th</sup> January 2020 issued by MoEF&amp;CC, in</p>	<p><b>Will be Complied</b></p> <p>AVPPL shall undertake plantation as per Progressive Mine Closure Plan, which is included in the Approved Mining Plan (<b>Annexure 1</b>) as per</p>

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	obedience to the directions of the Hon'ble Supreme Court the Project Proponent shall, undertake re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.	KMMCR, 2015. AVPPL shall also undertake re-grassing in any other area which may have been disturbed due to mining activities to restore the land to a condition fit for growth of suitable flora.
22	The violation of EC condition may lead to cancellation of EC and action under The Environment (Protection) Act 1986.	<b>Noted</b>
General Conditions		
1	The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.	<b>Complied</b> AVPPL had submitted an Affidavit to SEIAA (indicating the number and date of Environmental Clearance proceedings) stating that all the conditions stipulated in the EC shall be scrupulously followed vide reference 2; letter AVPPL/SEIAA/2022-23/2090 dated 31.08.2022 (A copy of the letter and affidavit is enclosed as <b>Annexure 6</b> ).
2	All the statutory clearances should be obtained, as applicable, by the project proponent from the respective competent authorities including that for blasting and storage of explosives. Copies of all statutory clearances shall be submitted along with First Half Yearly Compliance Report.	<b>Complied</b> AVPPL have obtained all applicable statutory clearances from the respective competent authorities. The following clearances have been obtained: <ul style="list-style-type: none"> <li>Approved Mining Plan by District Geologist, Thiruvananthapuram vide Letter No. 2304/DOT/ML/18 dated 14.01.2019 (<b>Annexure 1</b>).</li> </ul>

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		<ul style="list-style-type: none"> <li>• No Objection Certificate (NoC) from Thiruvananthapuram District Collector vide Letter No. B7-17779/2018 dated 24.02.2022 for Govt. land (<b>Annexure 7</b>).</li> <li>• Directorate of Mining and Geology, Govt. of Kerala, Thiruvananthapuram has issued a Letter of Intent (LOI) vide Letter No. DMG/2879/2022-M3 dated 25.10.2022 (<b>Annexure 8</b>).</li> <li>• CTO has been obtained from Kerala State Pollution Control Board (KSPCB) vide Consent No.: PCB/TV/ICO/10005087/2022 dated 15.06.2022 valid up to 31.05.2025 (<b>Annexure 9</b>).</li> <li>• Proceedings of Execution of Quarrying Lease Deed from DMG vide Letter No. DMG/2879/2022-M3 dated 25.04.2023 and Lease Order Sanctioned from DMG vide Order No. 30/2023-24/2879/M3/2022/DMG dated 25.04.2023 (<b>Annexure 10</b>)</li> <li>• Quarrying Lease Registration Agreement in Form H at Thiruvananthapuram Registrar Office dated 31.05.2023 (<b>Annexure 2</b>).</li> <li>• Explosives magazine license E/SE/KL/22/331(E121778) dated 13.09.2022 (enclosed as <b>Annexure 11</b>).</li> <li>• Explosives van-1 (KL01CP2414) license E/SE/KL/25/99(E135886) and Explosives van-2 (KL01CP2472) license E/SE/KL/25/99(E135883) dated 22.09.2021 (enclosed as <b>Annexure 12</b>).</li> <li>• Panchayath License vide No. 232/2022-2023/A-2/RPTL19/2139 dated 25.02.2023 (Enclosed as <b>Annexure 13</b>).</li> </ul>
3	The project proponent should advertise in news papers that the project has been accorded Environmental Clearance and copies of clearance letters are available in the Office of State	<b>Complied</b> EC for the project was issued on 16.08.2022. Details of the EC were advertised in two local newspapers (The Hindu – English and Mathrubhumi – Malayalam) published on 18.08.2022. Copies of the Newspapers and the

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	Environment Impact Assessment Authority (SEIAA) and on the website of the Authority at <a href="http://www.seiaakerala.in">www.seiaakerala.in</a> . The advertisement should be in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language. The advertisement should be made within 10 days from the date of receipt of the Environmental Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.	signed EC were submitted to SEIAA vide reference 2; letter No. AVPPL/SEIAA/2022-23/2090 dated 31.08.2022 (Enclosed as <b>Annexure 6</b> ).
4	The proponent shall send a copy of the EC to concerned Grama Panchayat/ District Panchayat/Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The Environmental Clearance shall also be uploaded on the website of the company.	<b>Complied</b> AVPPL submitted a copy of the EC to the Nagaroor Gram Panchayat vide letter No. AVPPL/SEIAA/2022-23/2117 dated 16.09.2022 (Enclosed as <b>Annexure 14</b> ). The copy of EC is also uploaded to the company website: <a href="https://www.adaniports.com/Downloads">https://www.adaniports.com/Downloads</a>
5	The lease area shall be fenced with barbed wire to a minimum height of 4ft around, before starting mining. All the boundary indicators (boards, markings, etc) shall be conspicuous and maintained at all times.	<b>Being Complied</b> The lease area is being fenced with barbed wire of around 4 feet height at all applicable fronts. AVPPL have placed boundary indicators such as boundary pillars, signage boards, safety boards and other markings at the lease boundary for clear demarcation of the mining area.

**Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) No. 92-Q-2022 dated 16.08.2022 for the Period April 2023 to September 2023**

S. No.	Conditions	Compliance Status as on September 30, 2023
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**Temporary Wall Barbed Wire**



**Photograph of Boundary Indicators**



**Photograph of Safety Boards**

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6	The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public.	<p><b>Complied</b></p> <p>The details of EC have been displayed at the site next to the entrance of the quarry, visible to the public.</p>  <p><b>Photograph of EC Details Board at Site</b></p>
7	Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department. Mats to reduce fly rock blasts to a maximum of 10 PPV should be provided.	<p><b>Complied</b></p> <p>AVPPL constructed 500 Kgs portable explosives magazine at an area called Chappath; which is 45 km away from the quarry location. AVPPL are transporting the explosives and detonators from Chappath to Kadavilla-2&amp;3 quarry through two authorized explosives vans for which following licenses were obtained from PESO:</p> <ul style="list-style-type: none"> <li>Explosives magazine license E/SE/KL/22/331(E121778) dated 13.09.2021 (enclosed as <b>Annexure 11</b>).</li> <li>Explosives van-1 (KL01CP2414) license E/SE/KL/25/99(E135886) and Explosives van-2(KL01CP2472) license</li> </ul>

**Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) No. 92-Q-2022 dated 16.08.2022 for the Period April 2023 to September 2023**

S. No.	Conditions	Compliance Status as on September 30, 2023
		E/SE/KL/25/99(E135883) dated 22.09.2021 (enclosed as <b>Annexure 12</b> ).
8	Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged stipulated by Explosive Department.	<p><b>Being Complied</b></p> <p>Announcements are made in the nearby areas by use of loudspeakers to alert people in the immediate surroundings of the impending blasting. This is done 15 to 20 minutes before the blasting. Once clearance is received from the nearby areas that the announcements have been made then the alarm warning signal is transmitted via siren three times before the blasting is initiated and once after blasting.</p> <div> <p>21.09.2023 13:32</p> </div> <p align="center"><b>Loudspeaker Announcements</b></p> <div> <p>21.09.2023 13:38</p> </div> <p align="center"><b>Photographs of Warning Alarm/Siren</b></p>

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9	Access roads to the quarry shall be black topped to contain dust emissions that may arise during transportation of materials. The transportation of minerals should be done in covered trucks to contain dust emissions.	<p><b>Complied</b></p> <p>AVPPL has developed a tar road of around 0.9 km from the quarry project site gate to Kadavilla Junction (which is connected to SH46 and onto NH66) for movement of vehicles; thereby reducing the dust pollution.</p>  <p style="text-align: center;"><b>Tar Road</b></p> <p>The transportation of minerals in trucks is being undertaken covered with tarpaulin cover.</p>  <p style="text-align: center;"><b>Truck with Tarpaulin Cover</b></p>

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10	A separate Environmental Management Cell (EMC) with suitable qualified personnel should be set-up under the chairmanship of a Senior Executive, who will report directly to the Head of the Organization. The Cell should have representative of Biodiversity Management Committee of the Panchayath and a representative of NGO, if any active in the area. The EMC should meet at least once in six months and review the activities and minutes should be a part of the compliance report.	<b>Complied</b> A separate Environmental Management and Monitoring Cell (EMMC) with qualified personnel has been set up by AVPPL. The cell is under the control of the Head of Department (HoD), Environment who reports directly to the Chief Executive Officer (CEO), AVPPL. The EMMC had its first meeting on 27.09.2023 to review the mining activities and compliance with EC conditions. It was decided to write a letter to the Biodiversity Management Committee of the Panchayath to nominate a suitable person to form part of the EMMC and attend the meetings.
11	Quarrying has to be carried out as per approved mining plan with the suggestions from SEAC incorporated and following KMMC rules 2015 and the Amendments thereby	<b>Being Complied</b> AVPPL commenced operation on 14.07.2023. AVPPL will carry out quarrying as per the Approved Mining Plan ( <b>Annexure 1</b> ) and will strictly follow the Kerala Minor Mineral Concession Rules (KMMCR), 2015 and amendments. AVPPL are complying with the recommendations of SEAC as stipulated in the EC.
12	The quarrying operation shall be restricted between 7 AM and 5PM	<b>Being Complied</b> The quarrying operation is being restricted between sun rise and sunset.
13	Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR/KPBR, unless otherwise specified. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.	<b>Not Applicable</b> There are no buildings or roofed terrace areas within the quarry project site to implement rainwater harvesting as per the prevailing provisions of KMBR/KPBR.  Solar energy generation is not envisaged as there is no requirement of power and no nighttime operation.

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14	Maximum depth of mining shall be as per the mining plan and as per specific direction of SEAC after field inspection. The maximum depth of mining should not be deeper than the local ground water table. No mining operations should be carried out at places having a slope greater than 45	<b>Complied</b> Based on observations made in and around the quarry area, it was found that the general ground level in the area is 32 m above MSL and the general groundwater table is 8 m below the general ground level i.e., 24 m above MSL. During monsoons the ground water table will rise by 2-3 m. The lease area is situated on an isolated hillock where the topmost working level is about 120 m above MSL, and the lowest working level is 64 m above MSL. The total depth will be 56 m. Therefore, mining operations will be restricted to workings at a higher level at the quarry and will not touch the ground water table and will be carried out as per the approved mining plan and specific conditions as stipulated in the EC.
15	The height of any bench shall not exceed five meters and breadth shall not be less than the height.	<b>Being Complied</b> As per the Modified Approved Mining Plan, the bench height and width need to be maintained at a maximum of 6.0 m. Also, a 45° pit slope will be maintained; which is currently being adhered to.
16	The Project proponent shall ensure that no perennial or intermittent natural water course and/or water resources are obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.	<b>Not Applicable</b> There are no natural water courses and/or water resources of first order streams in and around the mine lease area.
17	A minimum buffer distance specified as per existing rules and statutory orders shall be maintained from the boundary of the quarry to the nearest dwelling unit or other structures, and from forest boundaries or any other ecologically sensitive and	<b>Complied</b> A minimum buffer distance of 50 m from any residential buildings or from the nearest dwelling unit or other structures is maintained. As per the map prepared by the village officer, the nearest house is approximately 62 m from the boundary of the quarry.

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	archeologically important areas or the specific distance specified by SEIAA in EC as per recommendations of SEAC depending on specific local conditions.	There are no forest areas or any other ecologically sensitive and archeologically important areas in the vicinity of the project site.
18	The proponent should plant seedlings at least 5 times of the loss of trees that has occurred while clearing the land for the project and follow planting measures as suggested by SEAC. Suitable avenue trees should be planted along the sides of the approach road and internal roads and open parking areas, if any. Preference should be given to endemic native and fruit bearing species. Planting in buffer areas should be taken up beforehand. Proper upkeep and maintenance of planted seedlings shall be ensured by the project proponent.	<p><b>Noted for Compliance</b></p> <p>There are no trees cut for clearing of land for commencement of mining operations. If during the project, there are any trees cut, suitable compensatory afforestation will be done at a feasible location as identified with seedlings 5 times of the loss of trees that has occurred following the planting measures as suggested.</p> <p>Suitable avenue trees will be planted along the sides of the approach road and internal roads and open parking areas, if any. Preference will be given to endemic native and fruit bearing species. Proper upkeep and maintenance of planted seedlings shall be ensured.</p>
19	The proponent should ensure that the vegetation in the buffer is retained, maintained and strengthened with additions of native broad leaved plants.	<p><b>Will be Complied</b></p> <p>A natural greenbelt already exists and is present in the area. Since the safety zone is rocky in nature, plantation cannot be carried out. Planting of trees for development of greenbelt shall be done in the post-monsoon season and shall be maintained during the entire project.</p>
20	Eco-restoration including the closure of mine as per the progressive closure plan and final closure plan shall be done at the cost of the project proponent. This eco-restoration should follow scientific standards available for restoration, full recovery of the	<p><b>Being Complied</b></p> <p>Eco-restoration including Mine Closure Plan is provided in the Modified Approved Mining Plan (<b>Annexure 1</b>). The same shall be implemented during the closure at the cost of AVPPL. Overburden material is being used to fill kadavila-1 area.</p>

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	original vegetation and improving the resilience of different ecosystems. Overburden materials should be managed within the site and used for reclamation of mined pit as per mine closure plan / specific conditions.										
21	At least 10 percent out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with stacked dumping and overburden and planted with suitable indigenous plant species, if no other specific condition on reclamation of pit is stipulated in the E.C. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.	<p><b>Being Complied</b></p> <p>As per the mine closure plan the pit will be utilized for storing of water as a rainwater harvesting method and will also be induced to sustain the groundwater table. As per the post mining land use, due to the hilly terrain, an area of 0.35 Ha will be used for water pond for storage of water.</p> <p>AVPPL shall undertake plantation as per Progressive Mine Closure Plan, which is included in the Approved Mining Plan (<b>Annexure 1</b>) as per KMMCR, 2015. AVPPL shall also undertake re-grassing in any other area which may have been disturbed due to mining activities to restore the land to a condition fit for growth of suitable flora.</p>									
22	Control measures on noise and vibration prescribed by KSPCB should be implemented. Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.	<p><b>Being Complied</b></p> <p>Ambient Noise is being monitored by NABL accredited laboratory; Standards Environmental &amp; Analytical Laboratories as per Noise Pollution (Regulation &amp; Control) Rules, 2000 (Rules 3 (1) and 4(1)) at 5 locations.</p> <p>Summary of the Ambient Noise Monitoring during the compliance period at 5 monitoring locations is mentioned below:</p> <table border="1"> <thead> <tr> <th>Location</th> <th>L<sub>eq</sub> Day time</th> <th>L<sub>eq</sub> Night time</th> </tr> </thead> <tbody> <tr> <td>Quarry Area (Project Site)</td> <td>50.00</td> <td>41.8</td> </tr> <tr> <td>Near Operators Rest Room (North Side)</td> <td>52.10</td> <td>40.0</td> </tr> </tbody> </table>	Location	L <sub>eq</sub> Day time	L <sub>eq</sub> Night time	Quarry Area (Project Site)	50.00	41.8	Near Operators Rest Room (North Side)	52.10	40.0
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		Vanchiyoor UP School (West Side)	57.6	42.1
		St. Joseph of Cluny Public School (South Side)	54.5	41.8
		Viswanadhapuram Shiva Temple (East Side)	51.9	41.4
		The results obtained were compared with Noise Pollution (Regulation & Control) Rule, 2000 (Rule 3(1) and 4(1)). The Noise Monitoring report is enclosed as <b>Annexure 15</b> .		
		Quarrying activities including loading of mined materials are being carried out during the prescribed timings only.		
23	Periodical monitoring of the vibration at specified location (preferably at a distance of 50 m and 100 m) to be conducted and records kept for inspection. This could also form a part of the compliance reports.	<b>Being Complied</b> AVPPL are in the process of engaging Dr. Shastri who is the nationally reputed former Head of Department and Professor of Mining Engineering at National Institute of Technology (NIT) Surathkal, Karnataka and presently at Gandhi Institute of Technology and Management (GITAM) University, Visakhapatnam, to conduct a vibration impact study on various built structures within 200m from the project boundary and submit the study report. A copy of the report will be submitted to the Dept. of Mining and Geology and as a part of the HYCR once completed.		
24	Speed of trucks entering or leaving the mine site is to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks.	<b>Being Complied</b> It is ensured that vehicles transporting the materials follow the speed limit of 20 kmph to maintain the noise level.		
25	Acoustic enclosures should be provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed	<b>Not Applicable</b> There is no crusher adjacent to the quarry and the same is not proposed.		

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	standard limit indicated by CPCB/KSPCB.	
26	Blasting should be done in a controlled manner using NONEL technique as specified by the regulations of Petroleum and explosive safety organization (GOI) or any other concerned authorized agency. A licensed person should supervise/control the blasting operations.	<p><b>Being Complied</b></p> <p>Mining is being conducted using Non-Electric Detonator (NONEL) method of controlled blasting only; to minimize the air blast, fly rock and ground vibration.</p> <p>Charging and Blasting are both done by competent persons employed by AVPPL. Following licensed persons are authorized to supervise/control the blasting operations:</p> <ul style="list-style-type: none"> <li>• Mr. P. Kumar (1<sup>st</sup> Class Mines Manager) (1395)</li> <li>• Mr. Jawahar Srinath S (Assistant Mines Manager – 2<sup>nd</sup> class) (SMU-E 2901)</li> <li>• Mr. Selva Kumareshan N G (Mines Foreman) (FR/5197)</li> <li>• Mr. S. Madasamy (Mining Mate cum Blaster) (MR/SZ/0747)</li> <li>• Mr. S. R. Ebinsam (Mechanical Engineer) (961216114034/RG)</li> </ul> <p>Notice of appointment of statutory persons is given as <b>Annexure 16</b>.</p>
27	Measures should be taken for maintaining noise levels below 85 dBA in the work environment	<p><b>Being Complied</b></p> <p>The following measures are being taken for the control of noise levels:</p> <ul style="list-style-type: none"> <li>• Drilling: Good captive silencers are being used in drilling equipment.</li> <li>• Blasting: AVPPL uses the NONEL method - bottom initiation to reduce the noise of blasting.</li> <li>• Machinery &amp; Tippers: It is ensured that equipment is fitted with effective silencers, mufflers, acoustic linings, or shields, as necessary.</li> <li>• It is ensured that vehicles transporting the materials follow the speed limit to maintain the noise level.</li> </ul>

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		<ul style="list-style-type: none"> <li>Vehicles are serviced regularly and maintained properly to avoid any unwanted generation of noise or vibration from them.</li> </ul> <p>Ambient Noise is being monitored by NABL accredited laboratory; Standards Environmental &amp; Analytical Laboratories as per Noise Pollution (Regulation &amp; Control) Rules, 2000 (Rules 3 (1) and 4(1)) at 5 locations. The results obtained were compared with Noise Pollution (Regulation &amp; Control) Rule, 2000 (Rule 3(1) and 4(1)). The Noise Monitoring report is enclosed as <b>Annexure 15</b>.</p>
28	Project proponent should obtain necessary prior permission of the competent authorities for drawing requisite quantity of surface water and ground water for the project.	<p><b>Complied</b></p> <p>There will not be any withdrawal of groundwater. In case of requirement of groundwater withdrawal, specific prior permission will be obtained from State/Central Groundwater Board.</p> <p>Water requirements for the project are met from the old mining pit through water tankers. Drinking water is sourced from suppliers who provide water cans.</p>
29	Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly compliance reports to SEIAA.	<p><b>Not Applicable</b></p> <p>There are no natural water courses and/or water resources of first order streams in and around the mine lease area.</p>
30	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps, to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so	<p><b>Being Complied</b></p> <p>Presently the working area is adjacent to the Kadavilla-1 quarry and the water from Kadavilla-2&amp;3 quarry flows through the garland drainage of Kadavilla-1 and reaches the check dam at the bottom of Kadavilla-1 area.</p>

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	collected should be utilized for watering the mine area, roads, and for green belt development etc. The drains shall be regularly desilted and maintained properly, particularly after monsoon	<p>For the remaining mining area on the other side of the quarry which is proposed to be mined at a later stage, it is planned to construct garland drain, retaining wall all along the boundary and check dam of 12.5 m length and retaining wall.</p> <p>The water collected will be utilized for watering the mine area, roads, and for green belt development etc. The drains will be regularly desilted particularly after monsoon and maintained properly.</p>
31	Regular monitoring of ground water level and quality shall be carried out around the mine area during mining operation. If any stage, if it is observed that ground water table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.	<p><b>Being Complied</b></p> <p>AVPPL are conducting groundwater and surface water sampling in and around the mine lease area. The Water Sampling reports are enclosed as <b>Annexure 17</b>.</p> <p>Topographically the area located on a hill and is an elevated sloping terrain towards North West and South East, Based on observations made in and around the quarry area, it was found that the general ground level in the area is 32 m above MSL and the general groundwater table is 8 m below the general ground level i.e., 24 m above MSL. During monsoons the ground water table will rise by 2-3 m. The lease area is situated on an isolated hillock where the topmost working level is about 120 m above MSL, and the lowest working level is 64 m above MSL. The total depth will be 56 m. Therefore, mining operations will be restricted to workings at a higher level at the quarry and will not touch the ground water table and will be carried out as per the approved mining plan and specific conditions as stipulated in the EC.</p> <p>If it is observed that ground water table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.</p>

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32	<p>Garland drains and silt traps are to be provided in the slopes around the core area to channelize storm water. De-silting of Garland canal and silt traps have to be attended on a daily basis. A labour has to be specifically assigned for the purpose. The proponent shall ensure the quality of the discharging storm water as per the General Effluent Discharge Standards of CPCB.</p>	<p><b>Being Complied</b></p> <p>Presently the working area is adjacent to the Kadavilla-1 quarry and the water from Kadavilla-2&amp;3 quarry flows through the garland drainage of Kadavilla-1 and reaches the check dam at the bottom of Kadavilla-1 area.</p> <p>For the remaining mining area on the other side of the quarry which is proposed to be mined at a later stage, it is planned to construct garland drain, retaining wall all along the boundary and check dam of 12.5 m length and retaining wall.</p> <p>A labour has been engaged to supervise the excavator being used to clean silt.</p> <p>AVPPL are conducting groundwater and surface water sampling in and around the mine lease area. The Water Sampling reports are enclosed as <b>Annexure 17.</b></p>
33	<p>In the case of any change(s) in the scope of the project, extent, quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which the E.C was issued, the project would require a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority. In the case of transfer of ECs, the matter shall be intimated and get the approval from the Authority as per the existing norms.</p>	<b>Noted</b>
34	<p>The stipulations by Statutory Authorities under different Acts</p>	<b>Noted</b>

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	and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	
35	The top soil, if any, shall be temporarily stored at earmarked place (s) and used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained at 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. At critical points, use of geo textile shall be undertaken for stabilization of the dump. Protective wall or gabions should be made around the dump to prevent erosion / flow of sediments during rains. The entire excavated area shall be backfilled.	<b>Not Applicable</b> The mine is already opened. All the overburden from Kadavilla-2&3 is being used to backfill the completed worked area in Kadavilla-1 and therefore there is no overburden dumping site.
36	All the mining equipment used in Mining like backhoe loaders and excavators cause pollution and hence shall be serviced regularly & maintained for their	<b>Being Complied</b> The following measures are being taken for the control of noise levels: Good captive silencers are being used in drilling equipment. It is ensured that equipment is fitted with effective silencers,

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	efficient functioning and for reducing pollution. Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.	<p>mufflers, acoustic linings, or shields, as necessary. Vehicles are serviced regularly and maintained properly to avoid any unwanted generation of noise or vibration from them.</p> <p>The mining contractor of AVPPL have Annual Maintenance Contract (AMC) of the mining equipment with the manufacturers who once service the machinery take back the spent oil and is ensured that it is handled as per Hazardous Waste Rules and further disposed to authorized (CPCB/KSPCB) handlers.</p>
37	All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution checking centre. Washing of all vehicles shall be inside the lease area.	<p><b>Complied</b></p> <p>It is ensured that all vehicles used for transportation have valid Pollution Under Control (PuC) certificate from authorized centers. Washing of all vehicles is being done inside the lease area.</p>  <p align="center"><b>Photograph of PUC</b></p>
38	Effective safeguard measures such as regular water sprinkling	<p><b>Being Complied</b></p> <p>Regular water sprinkling through water tankers</p>

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	shall be carried out in critical areas prone to air pollution such as haul road, loading and unloading points and transfer points and having high levels of PM10 and PM2.5. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board.	<p>on haul road and other dust prone areas such as loading and unloading of minerals is being carried out.</p> <p>Environment Monitoring at the site has been carried out by NABL accredited laboratory; M/s. Standards Environmental &amp; Analytical Laboratories. Summary of the Ambient Air Quality Monitoring (AAQM) during the compliance period at 5 monitoring locations is mentioned below.</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Unit</th> <th>Max</th> <th>Min</th> <th>Perm. Limit</th> </tr> </thead> <tbody> <tr> <td>PM<sub>10</sub></td> <td>µg/m<sup>3</sup></td> <td>72.5</td> <td>58.4</td> <td>100</td> </tr> <tr> <td>PM<sub>2.5</sub></td> <td>µg/m<sup>3</sup></td> <td>37.8</td> <td>26.9</td> <td>60</td> </tr> <tr> <td>SO<sub>2</sub></td> <td>µg/m<sup>3</sup></td> <td>BDL</td> <td>-</td> <td>80</td> </tr> <tr> <td>NO<sub>2</sub></td> <td>µg/m<sup>3</sup></td> <td>BDL</td> <td>-</td> <td>80</td> </tr> </tbody> </table> <p>The Ambient Air Quality Monitoring Report is enclosed as <b>Annexure 18</b>. All the monitored parameters were found within the prescribed limits.</p>	Parameter	Unit	Max	Min	Perm. Limit	PM <sub>10</sub>	µg/m <sup>3</sup>	72.5	58.4	100	PM <sub>2.5</sub>	µg/m <sup>3</sup>	37.8	26.9	60	SO <sub>2</sub>	µg/m <sup>3</sup>	BDL	-	80	NO <sub>2</sub>	µg/m <sup>3</sup>	BDL	-	80		
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39	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement at project site, parking area, on haul roads, loading and unloading and at transport points should be provided and properly maintained.	<b>Being Complied</b>	Regular water sprinkling through water tankers on haul road and other dust prone areas such as loading and unloading of minerals is being carried out.																										
40	Corporate Environmental Responsibilities (CER) as prescribed by SEIAA/SEAC should be carried out leading to Environmental stability of the Project region. The activities carried out under CER should be a part of the half yearly compliance report. The	<b>Being Complied</b>	AVPPL are in the process of implementing the CER plan with expense heads under specific activities as mentioned in the EC and the same are being reported in the Half Yearly Compliance Reports (HYCRs). Please refer Specific Conditions: S. No. 9 and 19.																										

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	certificates from the beneficiaries, if the CER part is completed should also be submitted to the State Environment Impact Assessment Authority (SEIAA) along with year wise expenditure.	
41	The project proponent is responsible for implementing all the provisions of labour laws applicable from time to time to quarrying/Mining operations. The workers on the site should be provided with on-site accommodation or facilities at a suitable boarding place, protective equipment such as ear muffs, helmet, etc.	<p><b>Being Complied</b></p> <p>AVPPL comply with all applicable provisions of labour laws from time to time relevant to quarrying/Mining operations. Contractors involved in mining activity have given the labourers accommodation in a residence about 2.5 km from the quarry location along with required boarding facilities and with suitable transportation to and from the quarry site.</p> <p>All employees are provided with relevant Personal Protective Equipment (PPEs) like Helmets, Shoes, Fluorescent Reflective Jackets, etc.</p>
42	The proponent has to provide insurance protection to the workers in the case of existing mining or provide the affidavit in case of fresh lease before execution of mining lease.	<p><b>Complied</b></p> <p>The contractors involved in mining at the quarry will be completely responsible for insurance for their workers and the same will be explicitly mentioned the Service Order issued to them. Affidavit for the same was submitted to SEIAA vide letter No. AVPPL/SEIAA/2022-23/2090 dated 31.08.2022 (Enclosed as <b>Annexure 6</b>).</p>
43	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. The report of health surveillance programme should be included	<p><b>Being Complied</b></p> <p>The medical health test checkup of the employees, workers, and laborers as per Director General of Mines (DGM) prescribed statutory format are being taken up periodically by the contractor involved in the mining operations to observe any contractions due to exposure to dust and take corrective measures.</p>

**Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) No. 92-Q-2022 dated 16.08.2022 for the Period April 2023 to September 2023**

S. No.	Conditions	Compliance Status as on September 30, 2023
	in the half yearly compliance reports.	 <p align="center"><b>Medical Examination Report (Form O)</b></p>
44	The pits in the abandoned quarries and in the mined area shall be used for activities like water harvesting, aqua culture etc. in an eco friendly manner.	<p><b>Will be Complied</b></p> <p>As per the mine closure plan the pits will be utilized for storing water as a rainwater harvesting method and will also be induced to sustain the groundwater table in an eco-friendly manner. As per the post mining land use, an area of 0.35 Ha will be used for water pond for storage of water.</p>
45	If Government land is partly or fully used for mining, the area shall be returned at the end of lease period after mine closure with separate demarcation with suitable survey marks.	<p><b>Noted</b></p>
46	Any accident occurring in the mined out area after the lease period due to negligence in carrying out safety measures and non-closure, will lead to suspension of all EC obtained for mining by the Proponent.	<p><b>Noted</b></p>

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) No. 92-Q-2022 dated 16.08.2022 for the Period April 2023 to September 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on September 30, 2023</b>
47	In case of transfer of EC the matter shall be intimated and approval from the Authority shall be obtained as per the existing norms.	<b>Noted</b>
48	The proponent shall submit Half Yearly Compliance Reports (1st of June & 1st of December) on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall be simultaneously sent to the respective Regional Office of Ministry of Environment, Forests and Climate Change, Govt. of India and also to the Office of State Environment Impact Assessment Authority (SEIAA). The proponent has to submit Environmental statement in form V of Environment (Protection) Rules 1986 to SPCB on 31st March every year.	<p><b>Being Complied</b> Since the EC for the project was issued on 16.08.2022 and as per specific condition S. No. 2, <i>The EC shall be valid from the date of execution of permit/lease from the Department of Mining and Geology</i>, the Lease Order from Department of Mining &amp; Geology was executed on 31.05.2023. Therefore, this present document is the first Half Yearly Compliance Report (HYCR); the same had been notified to MoEF vide Letter AVPPL/MOEF/2022-23/2440 dated 24.05.2023 and email dated 26.05.2023 (enclosed as <b>Annexure 19</b>).</p> <p>AVPPL had complied with certain conditions that were applicable prior to commencement of operations and details of the same were submitted to SEIAA vide Letter AVPPL/MOEF/2022-23/2230 and email dated 28.11.2022 (enclosed as <b>Annexure 20</b>).</p> <p>HYCRs on the status of compliance of the stipulated clearance conditions are being submitted to all the concerned agencies. As per the Notification of Ministry of Environment and Forests &amp; Climate Change (MoEF&amp;CC) dated 26.11.2018, wherein submission of HYCRs by email/soft copy is declared acceptable, therefore soft copy of HYCR for the period April 2023 to September 2023 is being submitted.</p>
49	The project authorities should extend full cooperation to the officer (s) from the Regional Office of MOEF & CC located at Bangalore/SEAC/SPCB/CPCB/	<b>Noted</b>

Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) No. 92-Q-2022 dated 16.08.2022 for the Period April 2023 to September 2023		
S. No.	Conditions	Compliance Status as on September 30, 2023
	Dept of Mining and Geology, while monitoring compliance of the stipulated conditions, by furnishing the requisite data/information/monitoring reports.	
50	The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project.	<b>Noted</b>
51	The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the Environment Clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	<b>Noted</b>
52	The EC given will be withdrawn at any time if the area is declared high hazardous by the SDMA.	<b>Noted</b>
53	The Environmental Clearance will be subject to the final order of the courts on any pending litigation related to the land or project, in any court of law.	<b>Noted</b>
54	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a	<b>Noted</b>

Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) No. 92-Q-2022 dated 16.08.2022 for the Period April 2023 to September 2023		
S. No.	Conditions	Compliance Status as on September 30, 2023
	period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	
55	Concealing the factual data or submission of false/fabricated data and 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.	<b>Noted</b>
56	The SEIAA may revoke or suspend the order, for non implementation of any of the specific or any of the above conditions. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environmental protection.	<b>Noted</b>
57	As per regulation no. 106(2) of metalliferous mines regulation under Mine act, the height of any bench shall not exceed six meters and breadth shall not be less than the height.	<b>Being Complied</b> As per the Modified Approved Mining Plan ( <b>Annexure 1</b> ), the bench height and width will be maintained at a maximum of 6.0 m. It will be ensured that the breadth shall not be less than the height of the benches.

**Enclosures:**

<b>Annexure Number</b>	<b>Details of Annexure</b>
Annexure 1:	Approved Mining Plan
Annexure 2:	Quarrying Lease Registration Agreement – Form H
Annexure 3:	AVPPL Letter – Submission of Quarrying Lease Agreement to SEIAA
Annexure 4:	Nagaroor Panchayath Meeting Minutes Regarding the Road Improvement
Annexure 5:	AVPPL Letter – Submission of EMP to Nagaroor Panchayath
Annexure 6:	Letter and Copy of Notarized Affidavit sent to SEIAA by AVPPL
Annexure 7:	NOC from District Collector
Annexure 8:	Lol From DMG
Annexure 9:	CTO from KSPCB
Annexure 10:	Proceedings of Execution of Quarrying Lease Deed and Lease Order Sanctioned from DMG
Annexure 11:	Explosive License for Magazine
Annexure 12:	Explosive Van License for Van 1 and Van 2
Annexure 13:	Panchayath License
Annexure 14:	AVPPL Letter – Submission of EC Copy to Nagaroor Panchayath
Annexure 15:	Ambient Noise Monitoring Report
Annexure 16:	Notice of Appointment of Statutory Persons
Annexure 17:	Ground Water and Surface Water Quality Report
Annexure 18:	Ambient Air Quality Monitoring Report
Annexure 19:	Letter and email Regarding the submission of First HYCR
Annexure 20:	Letter and email Regarding the submission of Compliance to Certain Points

**Annexure 1:  
Approved Mining Plan**

2934

No. 2304/DOT/ML/18

Department of Mining & Geology  
Government of Kerala  
District Office, Thiruvananthapuram,  
Kesavadasapuram, Pattom Palace P. O.,  
Thiruvananthapuram 695004,  
Phone 0471-2442055  
eMail: [geo.thi.dmg@kerala.gov.in](mailto:geo.thi.dmg@kerala.gov.in)  
Dated 14.01.2019.

From Geologist.

To M/s. Adani Vizhinjam Port Pvt Limited  
2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud  
Thiruvananthapuram

Sir,

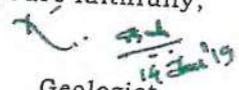
Sub:- Approval of Eco-friendly Mining Plan - Granite Building Stone quarry in  
Block no. 37 Re. survey nos. 554/1, 554/5, 554/6 of Nagaroor Village,  
Chirayinkeezhu Taluk, Thiruvananthapuram District - reg.

Ref:- 1. Kerala Minor Mineral Concession Rules 2015  
2. Your application dated 07.08.2018  
3. Site inspection dated 29.12.2018

The mining plan for the Granite Building Stone quarry of M/s. Adani Vizhinjam Port Pvt Limited, 2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District in Block no. 37 Re. survey nos. 554/1, 554/5, 554/6 of Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala for an extent of 2.4706 Hectares is hereby approved vide the powers delegated to the District geologist for the approval of mining plan for the minor minerals issued under Rule 66 of Kerala Minor Mineral Concession Rules 2015, with the following conditions:

1. That you will follow the prescribed Rules & Regulations of Central Government and State Government issued from time to time in regard to mining.
2. That you will follow the Mines Safety Rules & Regulations.
3. That you will store the mining waste in the earmarked location/ dumping yard only as specified in the plan.
4. That you will carry out the plantation as committed in the plan.
5. That provision shall be made for the housing facility for the labour with all basic infrastructure facilities including safe drinking water, toilets etc., within the site.
6. That the yearly production (1<sup>st</sup> year 36,875MT, 2<sup>nd</sup> year 2,30,000MT, 3<sup>rd</sup> year 2,29,969MT, 4<sup>th</sup> year 2,29,250MT, 5<sup>th</sup> year 55,000 MT respectively) approved in the plan shall be strictly adhered to and if any deviation is required the same shall be intimated in advance.

Yours faithfully,

  
14 Jan 19  
Geologist



# Mining plan

(including Progressive Mine Closure plan)

Prepared under Rule 53 & 58 of  
Kerala Minor Mineral Concession Rule - 2015  
for the applied Building Stone Quarry

Situated at Re - Survey Block No. 37, Re - Sy. No. 554/1, 554/5  
& 554/6 of Nagaroor village (Kadavila), Chirayinkeezh Taluk,  
Thiruvananthapuram District - Kerala State.

**Type of Land : Government Land.**

**EXTENT : 2.4706HA**

**M/s. ADANI VIZHINJAM PORT PVT. LTD.,**  
**2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud**  
**THIRUVANANTHAPURAM - KERALA**

*This mining plan  
is approved.*

*K. S. S. S.*  
*14 Jan 15*

PREPARED BY
KANTHARAJ. K.
RQP / GOA / 130 / 2000 / A
METAMORPHOSIS
# 200, 2 <sup>nd</sup> Floor, 40 <sup>th</sup> Main, 1 <sup>ST</sup> Cross, Behind Silk Board, BTM Layout, 2 <sup>nd</sup> Stage, Kuvempu Nagar, Bangalore - 560 068 Ph : +91 80 2678 3006 Mob. +91 9448384321

GEOLOGIST  
DISTRICT OFFICE  
DEPT. OF MINING & GEOLOGY  
THIRUVANANTHAPURAM



# CERTIFICATES



## CERTIFICATE

1. This is to certify that the Mining/quarrying Plan including Progressive Mine Closure Plan of proposed Building Stone quarry situated at Re - Sy. Block No. 37, Re – Sy No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavila), Chirayinkeezh Taluk, Thiruvnanthapuram district of Kerala state, extends over an area of **2.4706 Ha.** of **M/s. Adani Vizhinjam Port Pvt. Ltd.,** has prepared under Rule 53 & 58 of KMMCR 2015 by Mr. **KANTHARAJ K**

This is to request the Department of Mining and Geology, to make any further correspondence regarding any correction of the Mining Plan with the said recognized person at his address below:

<b>KANTHARAJ K</b>	
<b>METAMORPHOSIS</b>	
<b>Head Office</b>	
<b>“PRAKRUTHI BHAVAN”</b> # 200, 1 <sup>st</sup> & 2 <sup>nd</sup> Floor, 40 <sup>TH</sup> Main, 1 <sup>ST</sup> Cross, Behind Silk Board, BTM Layout, 2 <sup>nd</sup> Stage, Bangalore – 560 058	
+91 80 26687649	+9180 26783006
+91 94483 84321	+91 98450 27457

We hereby undertake that all modifications / updating as made in the said Mining plan by the said recognized person be deemed to have been made with our knowledge and consent and shall be acceptable on us and binding in all respects.



2. It is certified that the **Progressive Mine Closure Plan** of proposed Building Stone quarry situated at Re - Sy. Block No. 37, Re - Sy No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavila), Chirayinkeezh Taluk, Thiruvnanthapuram district of Kerala state, extends over an area of **2.4706 Ha.** of **M/s. Adani Vizhinjam Port Pvt. Ltd.**, Complies all statutory rules, regulations, orders made by the Central or State Government, Statutory Organizations, Court etc., which have been taken into consideration and wherever any specific permission is required the lessee will approach the concerned authorities. The Information furnished in the **Progressive Mine Closure Plan** is true and correct to the best our knowledge and records.
3. The provision of **Mines Act, Rules and Regulations** made there under have been observed in the Mining Plan of proposed Building Stone quarry situated at Re - Sy. Block No. 37, Re - Sy No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavila), Chirayinkeezh Taluk, Thiruvnanthapuram district of Kerala state, extends over an area of **2.4706 Ha.** of **M/s. Adani Vizhinjam Port Pvt. Ltd.**, where specific permissions are required, the applicant will approach Director General of Mines Safety, and further the Standards prescribed by DGMS in respect of Miners Health will be strictly implemented.

10/01/2019

07/01/2019

DATE: 01.12.2018

Rajesh



For ADANI VIZHINJAM PORT PVT. LTD.

For ADANI VIZHINJAM PORT PRIVATE LTD

Rajesh  
Rajesh Jha  
MD & CEO

PLACE : THIRUVANANTHAPURAM

RAJESH KUMAR JHA

CEO - Authorized signatory



## CERTIFICATE

This is to certify that, the provision of KMMCR 2015, have been observed in preparation of the Mining Plan of proposed Building Stone quarry situated at Re - Sy. Block No. 37, Re - Sy No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavila), Chirayinkeezh Taluk, Thiruvnanthapuram district of Kerala state, extends over an area of **2.4706 Ha.** of **M/s. Adani Vizhinjam Port Pvt. Ltd.**, Wherever the specific permissions are required, the applicant will approach the concerned authorities of Department of Mining and Geology.

The information furnished in the mining plan is true and correct to the best of our knowledge.

Date : ~~03/01/2019~~ <sup>10/01/2019</sup> ~~01.12.2018~~ *Rajesh*

Place : *Munthar* Bangalore.

*Kantharaj K*

**KANTHARAJ K**

RQP / GOA / 130 / 2000 / A.

**KANTHARAJ.K.**  
**RQP/GOA/130/2000/A**



# CONTENTS

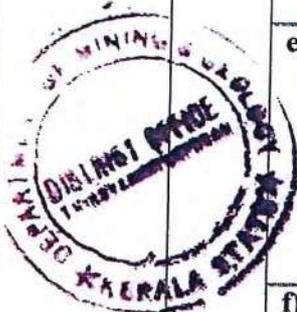


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TEXT



**MINING PLAN / QUARRYING PLAN INCLUDING PROGRESSIVE MINE CLOSURE**  
**PLAN OF PROPOSED "BUILDING STONE QUARRY" OF**  
**M/s. ADANI VIZHINJAM PORT PRIVATE LIMITED**  
**situated in Nagaroor village (Kadavila), Chirayinkeezh Taluk of Thiruvananthapuram**  
**District extends over an area of 2.4706 Ha,**  
**(Prepared under Rule 53 & 58 of KMMCR 2015)**

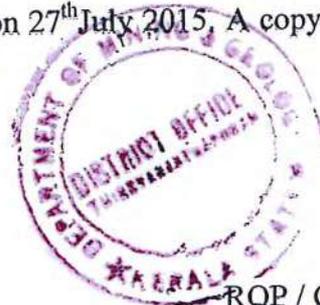
**INTRODUCTION.**

The **Adani Group** is one of India's leading business houses based at Ahmadabad – Gujarat, founded in 1988. Adani has grown to become a global integrated infrastructure player with businesses in key industry verticals – Resources, in **coal mining and trading; Logistics**, which is spread across **ports, logistics, shipping and rail; Energy, with renewable, thermal power generation and transmission businesses and Agro commodities and ancillary industries**. The integrated model is well adapted to the infrastructure challenges of the emerging economies.

**Adani Ports and Special Economic Zone Limited (APSEZ)** is promoted by Adani Group, which is one of India's largest business conglomerates. The US\$11 bn Group has interests across resources.

90% of India's international trade is through its ports, where Adani represent 24% of the country's port capacity and handle 15% of the country's seaborne cargo. Adani ports' footprint is spread across the Indian coastline with ports at 10 different locations. Adani have ports at Mundra, Dahej, Tuna (in Tekra), Hazira and Mormugao, on the west coast; Dhamra and Visakhapatnam on the east coast; and Kattupalli and Ennore on the southern coast of India. **Now container transshipment terminal is also upcoming Vizhinjam port in Thiruvananthapuram, Kerala.**

**Adani Vizhinjam Port Pvt, Ltd., (AVPPL)** is company belongs to Adani groups, having their Registered office at Ahmedabad – Gujarat, and the local office at 2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram - 695014. The said company is a private limited company register under Companies Act, 2013 on 27<sup>th</sup> July 2015. A copy of the incorporation certificate is enclosed as **Annexure No. 1.**



*Kantharaj K.*

KANTHARAJ K

RQP / GOA / 130 / 2000 / A

**KANTHARAJ.K.**

**RQP/GOA/130/2000/A**

Page 1

Further a copy of the MOA & AOA is enclosed as **Annexure No. 2**. **Mr. Rajesh Kumar Jha** is the Chief Executive officer (CEO) and authorized signatory of the said quarry for all the operations. A copy of the board of resolution passed by the company is enclosed as **Annexure No. 3**. A copy of the photo ID and address proof of the authorized signatory is enclosed as **Annexure No. 4**. Further company has filed the income tax returns up to date and an affidavit to an extent has been submitted to DMG (along with the Form B), a copy of the same is enclosed as **Annexure No. 5**.

In view of the above, for the development of the port, Building stone material is one of the major raw material. So the said company has applied in "**Form B**" to DMG, Thiruvananthapuram, Government of Kerala for the grant of Quarry lease in Re - Sy. Block No. 37, Re - Sy No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavila), Chirayinkeezh Taluk, Thiruvnanthapuram district of Kerala state, extends over an area of **2.4706 Ha**. A copy of the **form B** is enclosed as **Annexure No. 7**.

Since the said land belongs to government (Parambooke) land, the District Collector of Thiruvananthapuram has issued the NOC for purpose of quarry operation, a copy of the same is enclosed as **Annexure No. 8**.

Further, **M/s. AVPPL** are in receipt of the Letter of Intent from the DMG - Thiruvananthapuram for submission of approved quarry plan and Environmental clearance for process and grant of the lease, a copy of the same is enclosed as **Annexure No. 9**.

The proposed area was demarcated on the ground by the village officer and also they have issued the demarcation certificate and land assignment certificate. A copy of the same is enclosed as **Annexure No. 10 & 11** respectively.

When once the lease is granted, applicant has to take all the proposed safety, environmental protective and other measures, to this effect an affidavit is enclosed as **Annexure No. 12**.

A Block map showing the above said area duly signed by the village officer is enclosed as **Plate No. 3** & Survey maps showing the said lease (lease sketch) duly signed by the village officer is enclosed as **Plate No. 4**. The said area is marked on the google image and enclosed as **Plate No. 5**.

The said area was worked by some party earlier, and there is no operation of this area since from last few years, thereafter **M/s. AVPPL** approached Kerala government for grant of building stone quarry.



**1.0 GENERAL :**

**a) Name and Address of the Lessee:**

<b>Name of the applicant</b>	AdaniVizhinjam Port Pvt, Ltd., Represented by Mr. Rajesh Kumar Jha – Chief Executive Officer, (CEO)
<b>Address</b>	2 <sup>nd</sup> Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram.
<b>District</b>	Thiruvananthapuram
<b>State</b>	Kerala
<b>Phone</b>	--
<b>Fax</b>	nil
<b>Email</b>	<a href="mailto:kadavilaland1@gmail.com">kadavilaland1@gmail.com</a>
<b>Mobile</b>	+91 9099005722

**Mr. Rajesh Kumar Jha** is the chief executive officer (CEO) and authorized signing authority for the operation of the said quarry. To this effect board of resolution was passed and a copy of the same is enclosed as **Annexure No. 3**. Further a copy of the photo ID and address proof of the Authorized signatory is enclosed as **Annexure No. 4**.

**b) Status of the Applicant :** Private Limited Company.

**c) Mineral(s) which is / are included in the prospecting license (for Fresh grant):**

Biotite Gneiss (Granite) as Building Stone Material

**d) Mineral(s) which is / are included in the / are included in the letter of Intent / Lease deed:**

Granite Building Stone Material

**e) Mineral(s) which is the applicant / lessee intends to mine:**

Building Stone Material



f) **Name of the Recognized Person preparing Mining Plan:**

<b>Name</b>	<b>KANTHARAJ K</b>	
<b>Address</b>	<b>METAMORPHOSIS</b>	
	<b>Head Office</b>	
	# 200, 2 <sup>nd</sup> Floor, 40 <sup>th</sup> Main, 1 <sup>st</sup> Cross, Behind Silk Board, BTM Layout, 2 <sup>nd</sup> Stage, Kuvempu Nagar, Bangalore – 560 068	
<b>Phone &amp; Fax</b>	+91 80 26687649	+9180 26783006
<b>Mobile</b>	+91 94483 84321	+919845027475
<b>E-mail</b>	kantharajk@metamorphosis-india.com,	
<b>Registration No.</b>	RQP / GOA / 130 / 2000 / A	
<b>Valid up to</b>	5 <sup>th</sup> October 2022	

A copy of RQP certificate is enclosed as **Annexure No. 13.**

**2.0 LOCATION AND ACCESSIBILITY:**

a) **Lease details :**

The said proposed quarry area falls in the Re - Sy. Block No. 37, Re – Sy No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavila), Chirayinkeezh Taluk, Thiruvnanthapuram district of Kerala state, extends over an area of **2.4706 Ha.** The said area lies towards southwest of Nagaroor village at a distance of 1.20 kms and lies towards north of Kadavila Bus stop at a distance of 0.50 kms approximately (distances are aerial distance). This lease area is approachable by all-weather road/s up to the up to Kadavila bus stop, thereafter a kutchra road towards north will leads to area.

Thiruvananthapuram is the district head quarter and state's capital too, which is at a distance of 35.0 kms (by road) towards south of quarry area & Chirayinkeezh is the Taluk head quarter which is at a distance of 13.0 kms towards southwest, where all the infrastructural facilities are available. The nearest airport is at Thiruvananthapuram at a distance of 40.0 kms and sea port at kollam which is at a distance of 50.0 kms. The nearest railhead on Broad-gauge is Chirayinkeezh which is at distance of 9.0 kms.



**Toposheet No. with Latitude & Longitude of all corner boundary points / pillars:**

This area falls under the Survey of India's Topomap No. 58 / D / 13 & 58 / D / 14. Since the topomaps of Kerala are restricted hence, the same are not available. The said quarry area falls between the geographical co-ordinates i.e

Latitude	08 <sup>o</sup> 43' 41.70" N to 08 <sup>o</sup> 43' 51.74" N
Longitude	76 <sup>o</sup> 50' 21.24" E to 76 <sup>o</sup> 50' 27.59" E

Totally, there are 8 corner pillars, where all the latitude and longitude are recorded and the same are furnished below:

Boundary Pillar	Latitude : N			Longitude : E		
	D	M	S	D	M	S
1	08	43	51.74	76	50	21.24
2	08	43	50.16	76	50	24.90
3	08	43	49.21	76	50	25.94
4	08	43	47.59	76	50	24.33
5	08	43	45.21	76	50	25.43
6	08	43	45.30	76	50	27.59
7	08	43	43.54	76	50	27.45
8	08	43	41.70	76	50	24.14

However the Latitude and Longitude so recorded of all the corner boundary pillar is also depicted on the Surface Plan enclosed as **Plate No. 6** and the area is marked on the google satellite image and enclosed as **Plate No. 5**.

**Name of the Mine** : Building stone quarry

**Date of Grant of Lease** : Applied for fresh grant  
& **Period / Expiry Date**



Mining Plan (Including Progressive Mine Closure Plan) Of M/s. Adani Vizhinjam Port Pvt. Ltd.,  
Thiruvananthapuram - Kerala.

**Name of the Lease holder :** Adani Vizhinjam Port Pvt, Ltd.,  
Mr. Rajesh Kumar Jha- CEO.

<b>Address</b>	2 <sup>nd</sup> Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram.
<b>District</b>	Thiruvananthapura
<b>State</b>	Kerala
<b>Phone</b>	--
<b>Fax</b>	nil
<b>Email</b>	<a href="mailto:kadavilaland1@gmail.com">kadavilaland1@gmail.com</a>
<b>Mobile</b>	+91 9099005722

**b) Details of applied / lease area with location map (fresh area / mine)**

Forest		Non Forest	
Forest ( Specify)	Area in Ha		Area in Ha
	--	1. Waste Land	
	--	2. Grazing land	
	--	3. Agricultural land	
	--	4. Others specify Govt. land	2.4706
<b>Total</b>	--	<b>Total</b>	<b>2.4706</b>

Location and the accessibility map of the applied area is enclosed as **Plate No. 2.**

**Total lease area / applied area :** 2.4706 Ha

**District & State :** Thiruvananthapuram and Kerala

**Taluk :** Chirayinkeezh **Village :** Nagaroor



**Whether the area falls under Coastal Regulation Zone (CRZ)? if yes, details thereof :**

The said area does not falls under CRZ

**Existence of road railway line, if any nearby approximate distance:**

Public road connecting between Alamcode – Nagaroor lies towards south of the quarry area which is at a distance of 0.50 kms, Main central road (MC Road) connecting between Tivandrum to Kottayam lies towards east of the quarry area which is at a distance of 6.50 kms and the National Highway connecting between Thiruvananthapuram to Kochi lies towards west of the quarry at a distance of 3.00 kms. The nearest railway line and station on Broad-gauge is Chirayinkeezh which is at distance of 9.0 kms.

Mining Plan (Including Progressive Mine Closure Plan) Of M/s. Adani Vizhinjam Port Pvt. Ltd.,  
Thiruvananthapuram - Kerala.

- c) **Attach a general location map showing area and access routes. It is preferred that the area be marked on a Survey of India Topographical map or a Cadastral map or Forest map as the case may be. However, if none is of these available the area may be shown on an administrative map.**

The said area is demarked on the key plan showing the location and surrounding features up to 5.0 kms radius is enclosed as **Plate No. 1**, the location and accessibility of the said area is marked on the Kerala political map and enclosed as **Plate No. 2**. The applied area is marked on the Re- Sy Block map No. 37 enclosed as **Plate No. 3**, a survey map / sketch showing the applied area issued by the Thasildar is enclosed as **Plate No. 4**. Further the said quarry area is shown on the Google satellite image enclosed as **Plate No. 5**.

### 3.0 DETAILS OF APPROVED MINING PLAN / SCHEME OF MINING (if any):

#### 3.1 Date and reference of earlier approved MP / SOM

This is a fresh grant of lease which is under process, hence there was no Mining plan or Scheme of mining was prepared. This is the first mining plan has been prepared and submitted for approval.

#### 3.2 Details of last modifications if any (for the previous approved period) of approved MP / SOM, indicating date of approval, reason for modification.

NOT APPLICABLE

#### 3.3 Give reason of earlier approved proposal (if any) in respect of exploration, excavation, reclamation etc.,

NOT APPLICABLE

i) **Exploration** : NOT APPLICABLE

ii) **Mine Development & Exploitation**

This mine / quarry was worked by some other person / company (party / company not know) way back in 2007. Over all in the proposed and applied quarry area have been excavated over an area of 0.8530 ha approximately. Below table shows the detail calculation of excavated quantity:

*Kantharaj K.*  
**KANTHARAJ.K.**  
**RQP/GOA/130/2000/A**



Mining Plan (Including Progressive Mine Closure Plan) Of M/s. Adani Vizhinjam Port Pvt. Ltd.,  
Thiruvananthapuram - Kerala.

Pit No.	Ave. Length (in M)	Ave. Width (in M)	Ave Depth (in M)	Volume (CuM)	Quantity In tonnes
1.	70	10	25	17,500	43,750
2.	25	25	4	2,500	6,250
3.	50	25	15	18,750	46,875
	50	40	15	30,000	75,000
<b>Total</b>				<b>73,500</b>	<b>1,71,875</b>

(Say 1,72,000 tonnes)

About 1,72,000 tonnes of material has been extracted by the earlier party who worked this area.

Even considering by standard method i.e, 3,20,000 tonnes per hector (as per the form 2) the worked out area is 0.8530 which works out to 2,72,960 tonnes. Since most of the bench are having slopes and which are erratic manner so the above said length, width & depth is considered on an average basis and excavated tonnages has been estimated.

iii) **Land Reclamation & Rehabilitation.** NOT APPLICABLE

iv) **Waste Management.** NOT APPLICABLE

v) **Plantation.** NOT APPLICABLE

**3.4 Give status of compliance of violations pointed out :**

NOT APPLICABLE

**3.5 Indicate and give details of any suspension / closure / prohibitory order issued by any government agency under any rule of court of law.**

NOT APPLICABLE

**3.6 In case of the MP / SOM is submitted under rules 9 and 10 of the MCDR' 88 or under rule 22 (6) of the MCR' 1960 for approval of modification, specify reason and justification for modification under these rules.**

NOT APPLICABLE

All the above paragraphs are not applicable, as this mining plan is first mining plan is being prepared and submitted for approval.

*Kantharaj K.*  
KANTHARAJ.K.  
RQP/GOA/130/2000/A



## PART - A



## 1.0 GEOLOGY AND EXPLORATION.

- a) Briefly describe the topography, drainage pattern, vegetation, climatic, rainfall data of the area applied / mining lease area:

**Topography** : The said proposed area occupies the isolated hillock lies toward north of Kadavilla trending NW – SE. The highest elevation is about 120 m above MSL at middle of the quarry (near BP 4) and the lowest elevation is 55 m above MSL towards north (near BP 1). The lease area is generally sloppy towards northwest & southeast. The slope is moderate to steep.

**Drainage pattern** : There are no any perennial water course / water bodies / streams / nallahs within the quarry area. The storm water passes through the minor water courses and gets confluence with the adjacent nallah. Apart from this the water source in this area is mainly storm water. Entire storm water flows through the garland drains provided all around the quarry pit and same will be collected in settling pond. The drainage pattern in this region is parallel to sub parallel.

**Vegetation** : Most of the quarry area is broken up, the broken up area is devoid of any vegetation, the area which remained as unbroken and surrounding the lease is sparsely vegetated.

**Climatic** : The climate of the area is typical of Western Ghats region. It receives high rainfall and exhibits temperature variations with moderate summer and moderate winter. Meteorological data for the following climatic are under progress

1. Temperature
2. Relative Humidity
3. Rainfall

**Temperature** : The temperature normally ranges from 28°C to 32° C on the plains but drops to about 20°C in the highlands. The Highlands of Kerala, enjoys a cool and invigorating climate the year-round. Owing to its diversity in geographical features, the climatic condition in Kerala is diverse.

**Relative humidity** : In general the relative humidity in the area is observed to be high due to its proximity to the sea. During the summer it varies from 36 to 93, during monsoon it varies from 22 to 90 (some time up to 100) and during the winter it varies 80 to 90.

**Rainfall** : Generally there are two monsoons in Kerala, the onset monsoon is known as Southwest Monsoon which commence from June and ends in September. The second monsoon is known as Northeast Monsoon and also known as Reverse monsoon which commence from October and ends in November. The average rainfall for the last ten years is around 3,000 mm annually.

**b) Brief description of Regional Geology with reference to location of lease / applied area:**

Kerala State, bounded by north latitudes  $8^{\circ} 17' 30''$  and  $12^{\circ} 47' 40''$  and east longitudes  $74^{\circ} 51' 57''$  and  $77^{\circ} 24' 47''$  covers an area of 38,864 sq km and is located in the southwestern part of the Indian Peninsular shield. This linear strip of land is bounded by the Western Ghats on the east and the Arabian Sea on the west.

The state is divisible into four broad physiographic units. They are:

- (i) the low-level coastal strip fringing the Lakshadweep sea,
- (ii) the landforms marked by laterite cappings between altitudes of 30m and 200 m,
- (iii) the foot hills of Western Ghats ranging in altitude from 200 to 600 m and
- (iv) the steeply rising Western Ghat hill ranges with altitudes reaching upto 2500 m. of the total area, 35,955 sq km area is constituted by hard rock crystallines and the rest by soft sediments. The crystalline comprise Gneiss, gneiss, granite, metasediments, gabbro and dolerite to mention the major ones. The sedimentaries occur mostly in the coastal areas. mineral deposits of clay, bauxite, rare earth sands, glass sand, iron ore, limestone, gold, graphite, chrysoberyl etc. are known to occur in the state.

The geology of Kerala kindled the interest of even the earliest workers in the field. Buchanan in 1800 coined the term "laterite" after a study of the quarries near Angadipuram in the erstwhile Malabar. General Cullen (1840 – 60) discovered graphite occurrence in Travancore and was the earliest to study the sedimentary formations around Kollam. In the later part of the 19th Century, Bruce Foote, (1883) and William King, (1875, 1878, 1882) of the Geological Survey of India (GSI) took traverses across the State and recorded their findings on geology and mineral resources. In 1907, a Geology Department was formed in Travancore for systematic survey of minerals. Chacko (1922) and Masillamani (1914) made significant contributions to the geology of Kerala.

Geologically, Kerala is occupied by Precambrian crystallines, acid to ultra basic intrusive of Archaean to Proterozoic age, Tertiary (Mio-Pliocene) sedimentary rocks and Quaternary sediments of fluvial and marine origin. Both the crystallines and the Tertiary sediments have been extensively lateritised. Based on the detailed studies by GSI during the last three decades, the following stratigraphic sequence has been suggested.

Quaternary (Q)		Pebble bed
		Kadappuram Formation(marine)
		Periyar Formation(fluvial)
		Viyyam Formation(fluvio-marine)
		GuruvayurFormation (Palaeo-marine)
Mio-Pliocene (Tertiary/Tt)		Laterite
		Warkalli Formation(Sandstone and clay with lignite intercalations)
		Quilon Formation (Fossiliferous limestone and calcareous marl).
Mesozoic		Gabbro / Dolerite dykes
P R O T E R O Z O I C	Younger granites (550-390ma)	Alkali granites, granite, granophyres and other acid Intrusive.
	Gneiss(younger) (550Ma)	Massive Gneiss, incipient Gneiss, Cordierite Gneiss.
	Ultrabasic/basics(Younger) (700-600Ma)	Perinthattaanorthosite, Kartikulum gabbro, Adakkathodu gabbro, Begur diorite
	Basic Intrusives (2100-1600Ma)	Agali- Anakkatti dykes
	Migmatite/gneiss/older granitoid(PGC II) (Ptm)(2500-2200Ma)	Garnet- biotite- gneiss with associated migmatites, quartzo-felspathic gneiss, hornblende gneiss, hornblende- biotite gneiss, quartz- mica gneiss
	Vengad (APtv) Group	Quartz-mica schist and quartzite, conglomerate
A R C H A E A N	Gneiss(older) (Ac) 2600Ma	Mafic granulite, pyroxene granulite, Banded magnetite quartzite and gneissic Gneiss
	Khondalite Group (Ak)	Quartzite, mafic granulite, calc-granulite garnetbiotite- sillimanite-cordierite gneiss, garnet-biotitegneiss, leptynite
	Peninsular Gneissic Complex (PGC I) (Ap) (3000Ma)	Foliated granite, hornblende gneiss, pink granite gneiss, biotite gneiss.
	Layerd ultrabasic – basic Complex (3100- 3000Ma)	Peridotite, dunite, pyroxenite, anorthosite
	Wynad Schist Complex (Aw) (3200Ma)	Talc- tremolite schist , fuchsite quartzite, amphibolite, calc granulite, quartz sericite schist, kyanite quartzite, garnet - sillimanite gneiss/ schist, magnetite quartzite, kyanite mica schist.
Base not recognized		
<p><b>Source:</b> Geological Survey Of India, Miscellaneous Publication No. 30, Geology And mineral Resources Of The States Of India Part IX – Kerala – May 2005.</p>		

c) **Detailed description of geology of the lease area such as shape, size of the mineral / ore deposit.**

Most of the quarry area is exposed by Charnokite (commercially known as Granite), only towards the north of the quarry area part is covered by topsoil with the thickness varying from 0.75m to 1.00 mts.

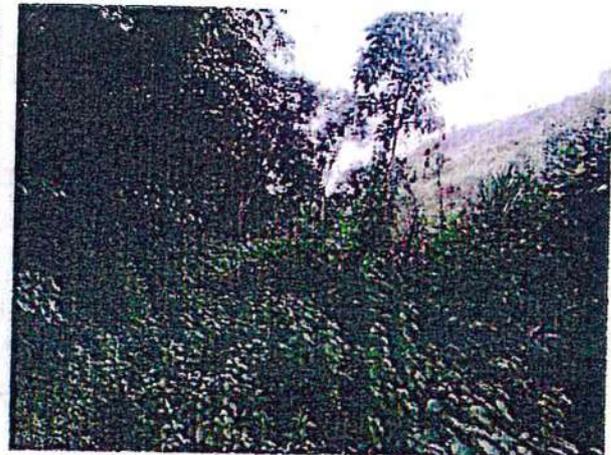
The geological parameters / features of the ore body as obtained from the field mapping and exploration studies reveal the following.

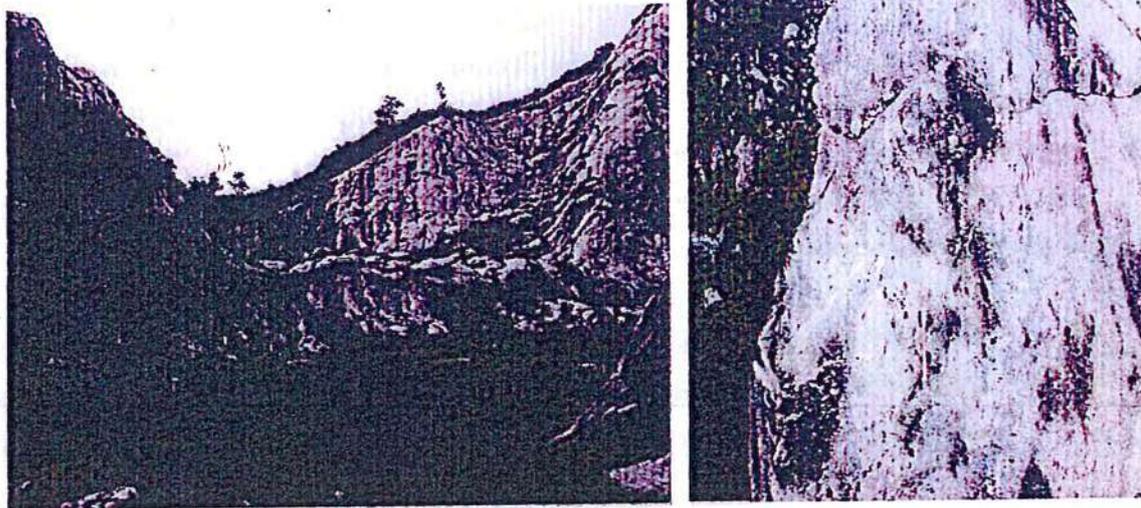
<b>General strike</b>	:	NW - SE with local variation of $15^{\circ}$ - $20^{\circ}$ on Either side.
<b>Dip</b>	:	$70^{\circ}$ - $80^{\circ}$ dipping northerly.
<b>Length of the ore body</b>	:	250 mts.
<b>Width of the ore body</b>	:	50 - 100 mts.
<b>Depth of the ore body</b>	:	50 mts



A geological map showing the different litho units is mapped and enclosed as **Plate No. 7**. And the cross section showing the disposition of the different litho units are marked and enclosed as **Plate No. 8**.

**Overburden :** The overburden is mainly topsoil, intercalated waste and mining loss.





PHOTOGRAPH SHOWING THE OUTCROP OF GNEISS

d) (i) Name of the prospecting agency : In House

(ii)	Address	2 <sup>nd</sup> Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram..
	District	Thiruvananthapura
	State	Kerala
	Phone	--
	Fax	nil
(iii)	Email	<a href="mailto:kadavilaland1@gmail.com">kadavilaland1@gmail.com</a>
	Mobile	+91 9099005722



e) Details of prospecting / Exploration already carried out:

- i) Number of pits and trenches indicating dimension, spacing etc along and across the strike / foliation with reference to geological plan:
- ii) Number of Boreholes indicating dimensions, spacing inclination, color level, depth etc with standard borehole logs duly marking on geological plan / section.
- iii) Details of samples analysis indicating type of sample (surface / subsurface from pit / Trenches / boreholes etc)
- iv) Expenditure incurred in various prospecting operations:

No explorations in the form of boreholes / pits / trenches are carried out. More over this quarry area was worked formerly by some party / company way back in 2007 and the broken up area is about 1.30 Ha which is fully exposed by Building stone. More over the material is continued along the strike.

Since the quarry lease area is exposed by Biotite Gneiss / Granite (Building stone) outcrop with thin layer of soil. Biotite Gneiss / Granite is a type of Granite which is a plutonic igneous rock of coarse to fine grained nature, formed by molten magma. Granite, petrologically connotation refers to the group name of a family of deep seated rocks. Hence the exploration is not required and the depth will extend beyond 50.00 mts.

- f) **The surface plan of the lease area may be prepared on a scale of 1 : 1000 or 1 : 2000 with contour intervals of maximum of 10 m depending upon the topography and size of the are duly marked by grid lines showing all features.**

Surface plan of the lease area has been prepared on 1 :1000 scale showing all the surface features with 5.0 mts contour interval is enclosed as **Plate No. 6.**

- g) **For preparation of geological plan, surface plan prepared on a scale of 1 : 1000 or 1 : 2000 scale specified under para 1.0 (f) of Part A of the format may be taken as the base plan.**

Geological plan of the lease area has been prepared on 1 :1000 scale showing all the geological attitudes such as dip, strike and so on considering the surface plan as a base plan is enclosed as **Plate No. 7.**

- h) **Geological sections may be prepared on natural scale of Geological plan at suitable interval across the lease area from boundary to boundary.**

Geological cross sections are prepared on 1:1000 scale from boundary to boundary, showing the disposition of the various lithounits, structural features and etc, is enclosed as **Plate No. 8.**

- i) **Broadly indicate the future programme of exploration with due justification (duly marking on Geological plan year wise location in different colours) taking into consideration the future tentative excavation programme planned in next five years as in table below:**

The said quarry area was worked formerly and Gneiss (building stone material) is exposed in entire area and it can be seen up to 40 mts above from the general ground level. Gneiss is a type of Granite which is a plutonic igneous rock of coarse to fine grained nature, formed by molten magma. Gneiss, petrologically connotation refers to the group name of a family of deep seated rocks. Hence the exploration is not required and the depth will extend beyond 50.00 mts.

j) Reserves and resources are furnished in a tabular form as given below:

Below table shows the reserves of Building stone material (Gneiss)  
: As on 01<sup>st</sup> November, 2018

Insitu reserves		Unit : in tonnes
Category	ROM	Waste Rock
	Total	
Mineable reserves	7,81,094	Considered as a production.
Blocked reserves	16,17,406	
<b>Geological reserves</b>	<b>23,98,500</b>	

Note : Geological Reserves = Mineable Reserves + Blocked Reserves

Of the above Geological reserves of 2.398 million tonnes, only 0.784 million tonnes of reserves can be exploited / mineable, while the balance of 1.617 million tonnes of reserves is getting blocked which cannot be mined due to the boundary and practical constraints. Hence for all practical purpose (for production and future planning) only Mineable reserves are considered.

Below table shows the Level wise /bench wise Insitu reserves (Mineable)  
As on 01<sup>st</sup> November 2018

		Unit : tonnes
Bench levels	ROM	Waste Rock
118	2,500	Considered as production hence not established
112	34,375	
106	1,08,125	
100	1,15,625	
94	1,27,031	
88	1,21,040	
82	94,674	
76	96,232	
70	56,924	
64	24,567	
<b>Total</b>	<b>7,81,094</b>	



Below table shows the Section wise Insutu reserves (Mineable) :  
As on 01<sup>st</sup> November 2018

		Unit : tonnes
Between Cross section	R O M	Waste Rock
N : 2050 to N : 2000	84,250	Considered as production hence not established
N : 2000 to N : 1950	2,16,437	
N : 1950 to N : 1900	1,96,563	
N : 1900 to N : 1850	1,10,625	
N : 1850 to N : 1800	1,20,938	
N : 1800 to N : LB	52,281	
<b>Total</b>	<b>7,81,094</b>	

NOTE : Above figures are rounded to next nearest decimal.

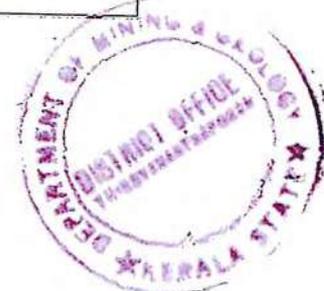
The details calculations of section wise / bench wise areas, volume, tonnages are enclosed as **Annexure No. 14.**

**Method of Estimation:**

The estimation of ore reserves is made by conventional parallel cross section method using geological cross section. The geological cross sections are prepared at a regular interval of 100 m across the strike of the ore body. The area of individual litho units in each and every cross section is calculated separately. The volume between the cross section is arrived on the basis of the average the area of parallel cross section i. e.  $((S1 + S2) / 2)$  and multiplying sectional interval. And tonnage is arrived by multiplying by its bulk density.

**Note: Following are the parameters considered for reserve estimation:**

Category of ore	Bulk density	Recovery %
Granite	2.50	100.00
Waste rock	-	-



## 2.0 MINING

### A. OPENCAST MINING

- a) Describe briefly the existing as well as proposed method for excavation with all design parameters indicating on plans / sections.

#### Quarrying / Mining

Formerly, this quarry was in operation, it was being worked with conventional open cast method. Based on the mode and method so adopted and taking into the consideration of geological parameters, the quarry pit is designed such that the height of the bench is kept about 6.0 mts max., and the width is also kept 6.0 mts, maintaining 45° pit slope.

Mining operation will be commenced from higher elevation to the lower elevation, benches will be developed and it will be advance in south and west direction laterally. More so this area was worked earlier by some other party, where there is a high wall benches, so initially the height of the high-wall bench will be reduced, when it comes to the lower levels, benches will take the circular shapes and pit will be formed. The Mining operation will be controlled and supervised by Statutory persons like Mine Manager, Mine Foreman, Mining Mate Cum Blaster certificate Holder issued by the Director General of Mines Safety, Dhanbad.

#### Drilling, Blasting and its parameters:

The nature of the rock is mainly hard to medium hard in nature hence drilling and blasting is required to dislodge / loosen the material from the main rock mass. The broad blasting parameters are determined for the blasting pattern and blast design, which are as follows:

- The Drilling pattern will be decided by the Certificate Holders / competent personnel and the blasting hole area is marked on the ground by certificate Holders.
- Since the bench height needs to be maintained at 6.0 m, Blast hole will be, preferably by deep hole where the diameter is normally 115 mm and the depth of the hole is 6.5 m including sub drilling. Considering the safety aspect, the blast will be carried out in two phases i.e, 3.00 m each phase.
- Blasting pattern is generally square or rectangle or staggered, The Burden and Spacing will be decided as per the requirements of the size of the boulders, generally the burden ranging from 2.00 to 2.50 meters and spacing of 2.50 to 3.00 meters.
- Usually single / double row of holes is blasted along free face to achieve optimum powder factor, best fragmentation and minimized adverse impacts on account of blasting.

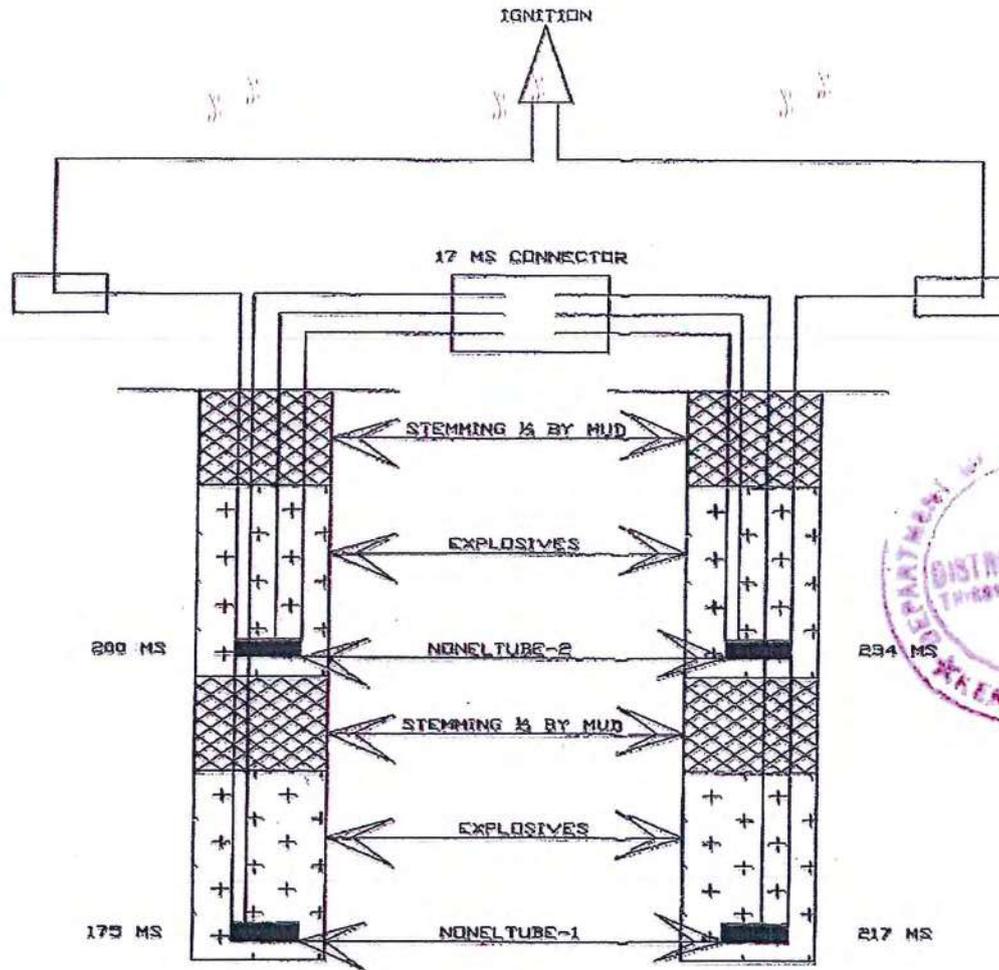
- Maximum numbers of holes will be blasted at a time in a round are generally limited to 20 with non – electrical detonators (NONEL) to mitigate adverse impacts such as air blast, fly rock and ground vibration. The Ignition will be the Non Conventional and Eco Friendly method by **NONEL (Non Electric Detonators)**.
- The 6 Meter hole will be blasted in two phases of 3.0 mts each one after the other, by inserting one Nonel at bottom and another one is at the middle of the hole, so the hole will be blasted two times one after the other with delay of 17 Milli Seconds. The first 3 Meters at the bottom will be blasted first and the middle one next will get blast a gap of 17 Milli Seconds. The blast delay from hole to hole will be 17 Milli Second and 42 Milli Second from row to row. A schematic of drilling and blasting pattern is shown in the foregoing page :
- After drilling the certificate Holder prepare the Blasting Date Sheet incorporating the Burden, Spacing, Depth, Conversion Factor, Expected Yield, Powder factor, Booster consumption in Kgs and Percentage, Column charges in Kgs and Percentages, Charge per Delay, Time of Blasting and other Parameters as per the field and after the Blasting the Noise level, Fly rock distance, Vibration limit will be recorded in the Blasting Date Sheet. Different Parameters and get approval from the Head of Mining Operation.
- Nitrate mixture types of explosives are used for blasting with 20 to 25 percent, proportion of primer / booster cartridges and rest as column charge. About 20 - 25kgs of explosives are loaded in 115 mm diameter holes. And powder factor ranging between 5 to 6 tons per kgs of explosives is achieved.
- Subsequent to the drilling and blasting, the material so fragmented / loosens from the rock mass, the boulders so generated subsequent to the blasting, will be broken with the help of the rock breakers. There after the material is loaded into trucks / tippers of 20 tonnes capacity with the help of the excavator. The loaded material is transported to the Vizhinjam Port.

#### SCHAMITIC SHOWING THE BLAST HOLE PATTERN

O -17Ms-O- 17Ms-O -17Ms-O-17Ms-O-17 Ms-O- 17Ms-O- 17 Ms-O- 17Ms-O - second row  
 620 586 552 518 484 467 433 399 365 42Ms  
 603 569 535 501 467 450 416 382 348

O -17Ms-O- 17Ms-O -17Ms-O-17Ms-O-17 Ms-O- 17Ms-O- 17 Ms-O- 17Ms-O x - first row  
 34 68 102 136 170 204 238 272 306  
 17 51 85 119 153 187 220 255 289

Free Face



### PRECAUTION TAKEN WHILE BLASTING

1. Siren will given three Times before the Blasting and Hooter announcement will be made before the Blasting
2. 8 persons will be sent to different locations with Red flag as a sign of caution of blasting.
3. After getting the confirmation from 8 persons through Mobil or WalkeTalke (wireless) the ignition will be given.
4. One Time siren will be given after the Blasting.
5. The 8 persons will be called back to the Quarry and get the feed back about the Blasting.

### ADVANTAGES OF NONEL

1. The Nonel is used in rainy season because it is Non Electric Detonator.
2. It is bottom ignition.
3. The Noise is less.

4. Fly Rock is less.
5. Vibration is less.
6. Fragmentation is good.
7. It is Eco friendly method of Blasting.

**Safety and Precautions:**

Before onset of monsoon, drains are cut along toe of the quarry faces to divert the surface run off. Garland drain is provided at the quarry top to regulate monsoon water and direct the same to the settling ponds / quarry pit to contain the quarry wash off and to avoid the same joining to the adjoining surface water bodies / water courses. It also helps to avert eventual collapses and damages to the quarry faces.

The pit will be fenced by barbed wire, such that no habitats can enter the pit. And watch and ward is provided round the clock.

- b) **Indicate year – wise tentative Excavation in Cubic meter indicating development, ROM, pit wise as in table below:**

**I. Insitu tentative excavation.**

Below table shows the proposed Year wise Production & Development quantities (in three leases) with its respective strip ratio:

**Unit in Tonnes**

Year	ROM	Waste
1st Year	36,875	Considered as production hence not established
2nd Year	2,30,000	
3rd Year	2,29,969	
4th year	2,29,250	
5th year	55,000	
<b>Total</b>	<b>7,81,094</b>	



The year wise projection of working is marked on the Production plan and enclosed as **Plate No. 9**. The year wise proposed projection and its dispositions of the benches are shown on the Production Cross Section and enclosed as **Plate No. 10**. The detail calculation of the area, volume & tonnage for the above said years is enclosed as **Annexure No. 15**.

**II. Dump re-handling (for the purpose of recovery of mineral)**

Presently there are no any dumps so as to recover the mineral.

Prepared by Kantharaj K – Metamorphosis – Bangalore.

- c) **Enclose individual year wise development plans and sections showing pit layouts, dumps, stacks of mineral rejects, if any etc in case of "A" category mines. Composite development plans showing pit layouts, dumps, stacks of mineral reject, if any, etc, and year wise sections in case of "B" category mines.**

The year wise projection of working is marked on the Production plan and enclosed as **Plate No. 9**. The year wise proposed projection and its dispositions of the benches are shown on the Production Cross Section and enclosed as **Plate No. 10**.

- d) **Describe briefly giving salient features of the proposed method of working indicating category of mine.**

By taking into the consideration of geological parameters of the building stone, the said quarry is proposed to work with conventional open cast method with bench system and mode of operation is mechanized. Based on the mode and method so adopted and considering the geological parameters the quarry pit is designed such that the height of the bench is kept about 6.00 mts max., and the width is also kept 6.00 mts, maintaining 45° pit slope.

- e) **Describe briefly the layout of mine workings, pit road layout, the layout of the faces and sites for disposal of overburden / waste along with the ground preparation prior to disposal of waste, reject etc. a reference to the plans and sections may be given.**

As far as mine working is considered, a systematic and scientific way of mining will be carried out. Based on the mode and method so adopted and taking into the consideration of geological parameters of the ore body the quarry pit is designed such that the height of the bench is kept about 6.00 mts max., and the width is also kept 6.00 mts, maintaining 45° pit slope. To win the material the benches are advanced sideward and laterally.

The waste rock in this quarry is mainly, the topsoil. Generally, in the building stone quarry about 5 – 6 % of waste will likely to generate. But in this quarry the material is consumed for development / construction of Sea port, where the waste generated is consumed for the purpose. Hence no waste is estimated.

#### **Extent of mechanization:**

The maximum handling of building stone material is **2,30,000 tonnes** during the second year of the ensuing plan period. The adequate total handling capacity of loading units will be deployed. For hauling of proposed quantities of building stone, the requirement is met with a



fleet of 20 nos. of tippers of 20 tonnes capacity each. List of Quarrying machinery deployed in the quarry along with their capacities, are shown in below table:

Sr. No	Equipment / Machinery	No. of units	Engine HP	Bucket Capacity
1	Excavator	1	350	2.5 M <sup>3</sup>
2	Rock breaker	2	165	F 22
3	Tippers	10	400	20 tonnes
4	Compressor	1	169	600 CFM
5	Drilling machine	1	--	--
6	Jack hammer	4	--	--
7	Water tanker	1	130	10.0KL



- f) **Conceptual Mine planning upto the end of lease period taking into consideration the present available reserves and resources describing the excavation, recovery of ROM, Disposal of waste, Backfilling of voids, Reclamation and rehabilitation showing on a plan with few relevant sections.**

For any Mine / quarry, Preparation of Conceptual Plan amounts to, fore-seeing in totality and planning for quarrying and related activities through-out its life span, till such time all the usable mineral / ores are exhausted to the economical limits and lease area is reclaimed to the extent possible. The norms laid down by the government agencies from time to time do play important roles.

Therefore, preparation of ideal conceptual quarry plan for any quarry is difficult and such plan prepared, remains acceptable only under given circumstances. It cannot be over looked that, any such plan undergoes amendments and revisions in the course of progressive stages of exploitation.

#### **Anticipated Life of Quarry :**

Based on the reserves and considering the projected production target during first five year the anticipated life of the quarry will be about 5years.

**Excavation :** The below table shows the production for the successive blocks of five year till the conceptual period:

Qty in tonnes	
Period of five years	Proposed Production
1 <sup>st</sup> block of five years	7,81,094

### Recovery of R O M:

Subsequent to the drilling and blasting, the material so dislodged / fragmented / loosens from the rock mass, the boulders so generated, will be broken with the help of the rock breakers. There after the material is loaded into trucks / tippers of 10.0 tonnes capacity with the help of the excavator. The loaded material is transported to the port development.

### Disposal of waste :

Generally, in the building stone quarry about 5 – 6 % of waste will likely to generate. But in this quarry the material is consumed for development / construction of Sea port, so the waste generated is considered as production. Hence no waste is estimated and no disposal of waste.

**Backfilling of voids** : Since there is no waste generation at this quarry, no backfilling of voids.

### Reclamation and rehabilitation:

At the end of the lease period / conceptual period pit extends over an area of **1.9706 ha** approximately (including roads). Part of the pit i.e **0.3500 ha** of area will be converted as a water pond, and the balance area **1.6206 Ha** will be retained as pit.

Plantation will be carried out on the lease periphery, covering at the rate of **0.100 ha** yearly by sapling about **150 nos** per year. Over all during the first block of five years **0.500 ha** will be covered by plantation by sapling **750 nos**. Mainly the local species will be planted along with the other plants such as Rain tree, Bougainville, Picus, plantation crops like Fruit bearing plants like mango tree, jack fruit tree will be planted. It is proposed to plant at the rate of 1,500 saplings per hectare. Anticipated survival growth rate is about 60 – 70 %. The above measures are marked on Production plan and Conceptual / plan enclosed as **Plate No.9 & 12** respectively.

### 3.0 MINE DRAINAGE

a) **Minimum and maximum depth of water table based on the observations from nearby wells and water bodies.**

Based on the observations made in and around the quarry area it was found that the general ground level in this area is 32 m above MSL, and the general ground water table is 8 m below the general ground level i.e 24 m above MSL. During monsoon the ground water table will raise by 2 – 3 mts.

**b) Indicate maximum and minimum depth of workings:**

The lease area is situated on the isolated hillock where the top most working level is 118 m above MSL and the lowest is 64 m above MSL, total depth of quarry will be 54 mts.

**c) Quantity and quality of water likely to be encountered, the pumping arrangements and places where the mine water is finally proposed to be discharged.**

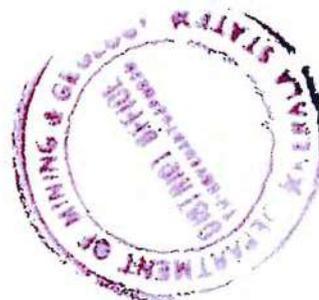
The mine is situated on the hillocks, where the ultimate workings are not going to touch the ground water table; the general water table is 24 m above MSL and the ultimate working is 64 m above MSL. Hence no pumping of water is required.

**d) Describe regional and local drainage pattern. Also indicate annual rainfall, catchment area, and likely quantity of rain water to flow through the lease area, arrangement for arresting solid wash off.****Drainage pattern :**

There are no any perennial water course / water bodies / streams / nallahs within the quarry area. The storm water passes through the minor water courses and gets confluence with the adjacent nallah. Apart from this the water source in this area is mainly storm water. Entire storm water flows through the garland drains provided all around the quarry pit and same will be collected in settling pond. The drainage pattern in this region is parallel to sub parallel.

**Rainfall :**

Generally there are two monsoons in Kerala, the onset monsoon is known as Southwest Monsoon which commence from June and ends in September. The second monsoon is known as Northeast Monsoon and also known as Reverse monsoon which commence from October and ends in November. The average rainfall for the last ten years is around 3,000 mm annually.



#### 4.0 STACKING OF MINERAL REJECT / SUBGRADE MATERIAL AND DISPOSAL OF WASTE:

- a) Indicate briefly the nature and quantity of topsoil, overburden / waste and Mineral reject to be disposed off.

##### Top Soil :

Most of the quarry area is exposed by Gneiss, part of area towards the north of the quarry is covered by topsoil with the thickness varying from 0.25 to 0.75 m, topsoil so visualized is sparsely distributed. However during the course of quarrying of this area, the topsoil so occurs will be removed and stacked separately and it will be used for plantation purpose.

Spread area : 3,000 Sq M  
Depth : 0.50 mts (average)  
Bulk density : 1.50

$$3,000 \times 0.5 \times 1.50 = 2,250 \text{ tonnes.}$$



- b) The proposed dumping ground within the lease area be proved for presence or absence of mineral and be outside the UPL unless simultaneous backfilling is proposed or purely temporary dumping for a short period is proposed in mineralized area with technical constraints & justification.

And

- c) Attach a note indicating the manner of disposal of waste, configuration and sequence of year wise build up of dump along with the proposals for protective measures:

Since no waste is generating at this quarry, so no dumping is proposed.

#### 5.0 USE OF MINERALS AND MINERAL REJECT:

- a) Describe briefly the requirement of end – use industry specifically in terms of physical and chemical composition:

The material produced at this quarry will be used for development / construction of Vizhinjam Port.

- b) Give brief requirement of intermediate industries involved in up-gradation of mineral before its end use.

Not applicable.

- c) Give detail requirements for other industries, captive consumption, export associated industrial use etc.

The material generated at this quarry is supplied to port development.

- d) Indicate precise physical and chemical specification stipulated by buyers:

Basically, the material produced at this quarry is used for development / construction of Vizhinjam Port. Only physical specifications are involved and the same are mentioned below:

Sl. No.	Details	specifications
1	Boulders	100 mm / 2,400 Cum

- e) Give detail of processes adopted to upgrade the ROM to suit the used requirement.

No process is adapted to up-grade the Building stone.

#### 6.0 PROCESSING OF ROM AND MINERAL REJECT:

- a) If processing / beneficiation of the ROM or Mineral Reject is planned to be conducted, briefly describe nature of processing / beneficiation. This may indicate size and grade of feed material and concentrate (finished marketable product), recovery etc.
- b) Give a material balance chart with flow sheet or schematic diagram of the processing procedure indicating feed, product, recovery and its gradate each stage of processing:

Not applicable.

- c) Explain the disposal method for tailings or reject from the processing plant.

- d) Quantity and quality of tailings / reject proposed to be disposed, size and capacity of tailing pond, toxic effect of such tailings, if any, with process adopted to neutralize any such effect before their disposal and dealing of excess water from the tailings dam.
- e) Specific quantity and type of chemicals if any to be used in the processing plant.
- f) Specific quantity and type of chemicals to be stored on site / plant.
- g) Indicate quantity (cum per day) of water required for mining and processing and sources of supply of water, disposal of water and extent of recycling. Water balance chart may be given.

All the above paragraphs are not applicable as there is no processing / beneficiation plant

**7.0 OTHERS : Describe the following:**

**a) Site Services.**

The said proposed quarry area falls in the Re - Sy. Block No. 37, Re - Sy No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavila), Chirayinkeezh Taluk, Thiruvnanthapuram district of Kerala state, extends over an area of **2.4706 Ha**. The said area lies towards southwest of Nagaroor village at a distance of 1.20 kms and lies towards north of Kadavila Bus stop at a distance of 0.50 kms approximately (distances are aerial distance). This lease area is approachable by all-weather road/s up to the up to Kadavila bus stop, thereafter a kutchra road towards north will leads to area.

Thiruvananthapuram is the district head quarter and state's capital too, which is at a distance of 35.0 kms (by road) towards south of quarry area & Chirayinkeezh is the Taluk head quarter which is at a distance of 13.0 kms towards southwest, where all the infrastructural facilities are available. The nearest airport is at Thiruvananthapuram at a distance of 40.0 kms and sea port at kollam which is at a distance of 50.0 kms. The nearest railhead on Broad-gauge is Chirayinkeezh which is at distance of 9.0 kms.

This area falls under the Survey of India's Topomap No. **58 / D / 13 & 58 / D / 14**. Since the topomaps of Kerala are restricted hence, the same are not available. The said quarry area falls between the geographical co-ordinates i.e

Latitude	08°43' 41.70" N to 08°43' 51.74" N
Longitude	76°50' 21.24" E to 76° 50' 27.59" E

However the Latitude and Longitude so recorded of all the corner boundary pillar is depicted on the Surface Plan enclosed as **Plate No. 6** and the area is marked on the google satellite image and enclosed as **Plate No. 5**.

**b) Employment potential:**

About 30 people are appointed as direct employment and it generates indirect employment for few hundred people. Most of the directly employed people are skilled. The respective distribution/ numbers are follows.

<b>Highly skilled</b>	:	<b>03</b> nos., such as technical professionals like Quarry Manager Quarry eng., Asst. Quarry Manager and etc.,
<b>Skilled</b>	:	<b>12</b> nos., under skilled category of people includes Quarry Foreman, Quarry mates, heavy earth moving machinery operators, drivers, mechanics and asst. mechanics etc.
<b>Semi skilled</b>	:	<b>08</b> nos. include helpers, greaser's etc.
<b>Un skilled</b>	:	<b>07</b> nos. include spotters, cleaners, attendant's etc.



**8.0 PROGRESSIVE MINE CLOSURE PLAN.**

**8.1 Environment Baseline information:**

**Attach a note on the status of baseline information with regard to the following.**

- **Existing land use pattern indicating the area already degraded due to mining, roads, processing plant, workshop, township etc in tabular form:**

Quarrying area is **2.4706 ha**. Entire area is exposed by Gneiss, more so, this area was worked formerly by some other party. The present land use pattern of the Quarrying area is shown below:

<b>Description</b>	<b>As on date (area in Ha)</b>
Area under Quarrying	1.1000
roads	0.0700
Safety barrier 7.50 mts	0.5000
Area for future use / undisturbed	0.8006
<b>Total</b>	<b>2.4706</b>

The existing land use pattern of the quarry is shown on the surface plan enclosed as **Plate No. 6**.

➤ **Water regime:**

Water resources in this area are Ground water and rainwater. The area receives copious amount of rainfall 3,000 to 4,000 mm annually on an average. Hence the level of water table in the open wells is shallow i. e about 8mts below the general ground level.

There are no any perennial water course / water bodies / streams / nallahs within the quarry area. The storm water passes through the minor water courses and gets confluence with the adjacent nallah. Apart from this the water source in this area is mainly storm water. Entire storm water flows through the garland drains provided all around the quarry pit and same will be collected in settling pond. The drainage pattern in this region is parallel to sub parallel.

**Flora & Fauna**

Flora & Fauna surveys were carried out as part of the management plan preparation. The observation of the Flora and Fauna are given below:

**A. Floral Diversity**

**Table 1.1. List of Trees**

SI No	Scientific Name	Vernacular / English Name	Family	Status
1.	Terminaliapaniculata	Maruthu	Combretaceae	Indigenous /Common
2.	Gliricidiasepium	Gliricidia/ Poonchedi	Fabaceae	Exotic

**Table1.2. List of Shrubs**

SI No	Scientific Name	Vernacular / English Name	Family	Status
1.	Manihotutilissima	Cheeni	Euphorbiaceae	Exotic
2.	Chromolaenaodorata	Communistpacha	Asteraceae	Exotic weed
3.	Hyptissuaveolens	Nattapoochedi	Lamiaceae	Common
4.	Melastomamalabathricum	Athirani	Melastomataceae	Common

**Table 1.3. List of Herbs**

SI No	Scientific Name	Vernacular / English Name	Family	Status
1.	Leucasaspera	Thumba	Lamiaceae	Common
2.	Mimosa pudica	Thottavadi	Mimosaceae	Exotic
3.	Phyllanthusniruri	Keezharnelli	Euphorbiaceae	Common

**Table 1.4. List of Climbers**

SI No	Scientific Name	Vernacular / English Name	Family	Status
1.	Calycopteris floribunda	Pullanji	Combretaceae	Common
2.	Acacia caesia	Incha	Leguminosae	Common

**Table 1.5. List of Grass**

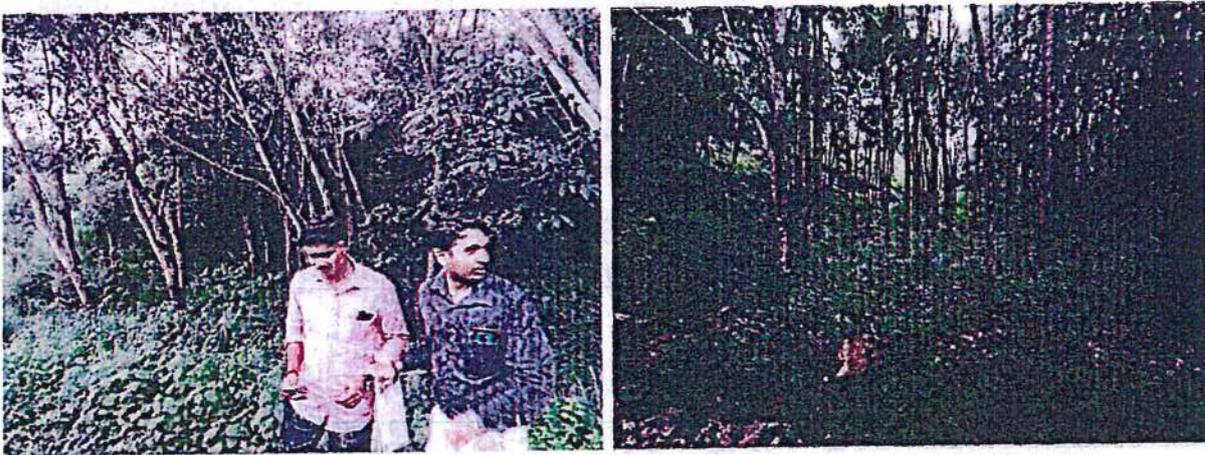
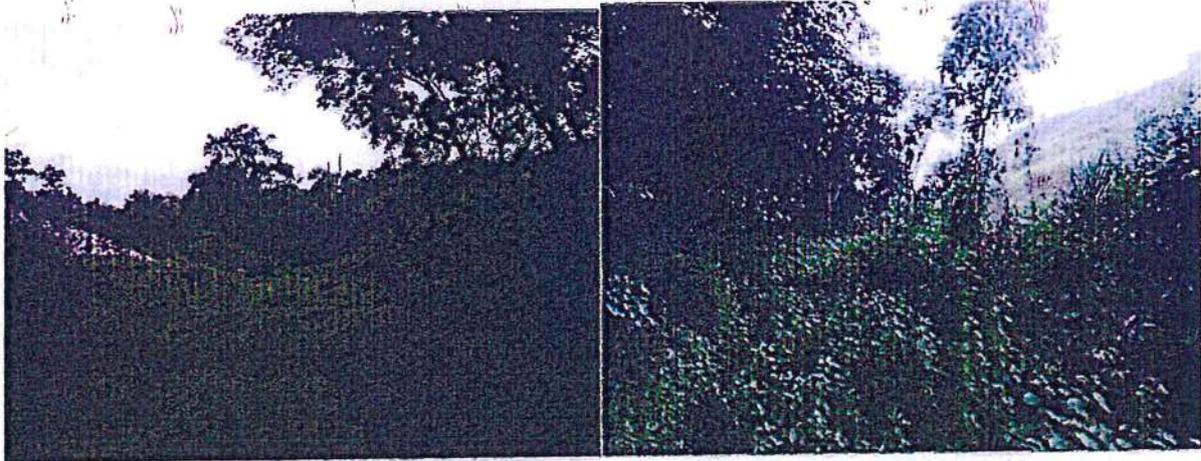
SI No	Scientific Name	Vernacular / English Name	Family	Status
1.	Cymbopogoncitratatus	Inchipullu	Poaceae	Common
2.	Axonopuscompressus	Kalapullu	Poaceae	Common

**B. Faunal Diversity**

SI No	Scientific Name	Vernacular / English Name	Family	Status
<b>Frog</b>				
1.	Pseudophilautus sp.	Bush frog	---	Common
<b>Dragon Fly</b>				
2.	Prodasineuraverticalis	Black bambootail	Platycnemididae.	Common
3.	Rhyothemisvariegata	Picturewing/ Onathumbi	Libellulidae	Common
<b>Birds</b>				
4.	Acridotherestrictis	Indian myna	Sturnidae	Common

The most of the mined area extensively altered from its natural state through past mining activity. There is no area used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering and migration within the applied lease area. Shrubs and grasses cover the area in a scattered manner. Some trees of small height can be spotted in entire lease land. As there is no natural forest cover, the area does not contain

any wild animals. Only domestic animals like goat, cow, buffalo, cat, dog etc. are observed / found in the area.



PHOTOGRAPHS SHOWING FLORA IN AND AROUND QUARRY AREA

### QUALITY OF AIR, AMBIENT NOISE LEVELS AND WATER

To know the base line values within the core and buffer zone monitoring was carried out for various environmental parameters such Air, Water, Noise and soil the location of the same is shown in below table:



Sl. No.	Locations	Distance and direction wrt quarry	Environmental parameters			
CORE ZONE						
1	Quarry area	--	Air	--	Noise	Soil
BUFFER ZONE						
1	Nearest settlement towards Near (Kadavila bus stop)	@ 450 mts>> SE	Air	Water	Noise	Soil
2	Nearest settlement towards	@ 900 mts>> W	Air	Water	Noise	---
3	Nearest settlement towards	@ 330 mts>> NNW	Air	Water	Noise	Soil
4	Nearest settlement towards (near Altharamudu bus stop)	@ 825 mts>> NNE	Air	Water	Noise	----
5	Vamanapuram river	@ 1.90 km >> SSE	--	Water	---	--

A key plan showing all the above monitoring location is enclosed as **Plate No. 1**. Apart from this a Surface plan showing the existing environment / land use up to 500 mts from the quarry area is enclosed as **Plate No. 11**.

➤ **Quality of Air:**

Quarrying activity contributes to pollution of air due to Quarry operation, since the mode of Quarrying is mechanized heavy earth moving machineries are involved; the pollution of the air is mainly due to generation of dust and noise. However the air quality monitoring was carried out to study the baseline values and found that the values so obtained are well within the limits. A copy of the air quality monitoring reports is enclosed as **Annexure No. 16**.

➤ **Water Quality:**

There are no perennial water courses / bodies within the leasehold area, but for the minor seasonal watercourses. Apart from this the water source to this area is mainly storm and ground water. Entire storm water flows through the minor watercourses and joins the adjoining seasonal nallah. The drainage pattern in this area is dendritic in nature.

However the water samples were collected both in core and buffer zone to know the baseline values and found that the values so obtained are well within the limits. A copy of the air quality reports is enclosed as **Annexure No. 17**.

➤ **Ambient noise level** :

Since the quarry is mechanized the generation of the noise at this quarry is mainly by machineries and movement of trucks. However the noise levels were monitored to study the baseline values and found that the values so obtained are well within the limits. A copy of the Noise levels reports is enclosed as **Annexure No. 18**.

➤ **Climatic conditions** :

The climate of the area is typical of Western Ghats and the Malnad region. It receives high rainfall and exhibits temperature variations with moderate summer and moderate winter. Meteorological data for the following climatic are under progress

1. Temperature
2. Relative Humidity
3. Rainfall

**Temperature** : The temperature normally ranges from 28°C to 32° C on the plains but drops to about 20°C in the highlands. The Highlands of Kerala, enjoys a cool and invigorating climate the year-round. Owing to its diversity in geographical features, the climatic condition in Kerala is diverse.

**Relative humidity** : In general the relative humidity in the area is observed to be high due to its proximity to the sea. During the summer it varies from 36 to 93, during monsoon it varies from 22 to 90 (some time up to 100) and during the winter it varies 80 to 90.

**Rainfall** : Generally there are two monsoons in Kerala, the onset monsoon is known as Southwest Monsoon which commence form June and ends in September. The second monsoon is known as Northeast Monsoon and also known as Reverse monsoon which commence from October and ends in November. The average rainfall for the last ten years is around 3,000 mm annually.

➤ **Human settlements** :

There is no any human settlement within the quarry area, but the nearest human settlement is 300 m & 700 m from the quarry area towards North and Southeast respectively. The nearest village is Nagaroor which is at a distance of 1.2 kms. There are totally 24 villages / wadas within 5.0 kms study area.

In 2011, Thiruvananthapuram district had population of 33,01,427 of which male and female were 15,81,678 and 15,69,917 respectively. There was change of 2.07 percent in the population compared to population as per 2001.

Average literacy rate of Thiruvananthapuram district in 2011 were 93.02 compared to 89.28 of 2001. Total literate in Thiruvananthapuram District were 2,785,408 of which male and female were 1,354,857 and 1,430,551 respectively. With regards to Sex Ratio in Thiruvananthapuram, it stood at 1087 per 1000 male compared to 2001 census figure of 1060.

➤ **Public building, Places of worship and monuments:**

There are no any public building, places of worship and monuments within the lease area.

➤ **Indicate any sanctuary is located in the vicinity of leasehold:**

There are no any sanctuaries located in the vicinity of the leasehold area. And there are no any sanctuaries, wildlife within the buffer zone of 5.00 kms. The nearest Neyyar wild life sanctuary is at a distance of 40:00 kms.

**8.2 Impact Assessment : Attach an Environmental Impact Assessment Statement describing the impact of mining and beneficiation on environment on the following:**

**i) Land area indicating the area likely to be degraded due to quarrying, dumping, roads, workshop, processing plant, tailing pond / dam, township etc.,**

Due to Quarrying and exploitation of the ore, there will be change in the ground profile in the form of pits and dumps. The detail of the land use as at present, Plan / conceptual period is shown below in tabular form:

Description	Unit in Ha.	
	As on date	Plan / lease period
Area under Quarrying	1.1000	1.9706
roads	0.0700	--
Green belt	--	0.5000
Safety barrier 7.50 mts	0.5000	--
Area for future use / undisturbed	0.8006	--
<b>Total</b>	<b>2.4706</b>	<b>2.4706</b>

Subsequent to the Conceptual stage, this quarry will be used for various activities as per the mine closure plan, as a part of closure the activities such as water pond, back filling and etc., the details of the land use of post mine closure is given below:

Sl. No.	Type of activities	Extent in Ha.	Post mining land use of degraded land	Extent in Ha.
1.	Area under Quarrying	1.9706	1. Area under water pond 2. Area remained as pit	0.3500 1.6206
2.	roads	---	Retained as roads	---
3.	Green belt	0.5000	Retained as Green belt	0.5000
	<b>Total</b>	<b>2.4706</b>	<b>Total</b>	<b>2.4706</b>

NOTE: Roads are part of the quarry area.

A conceptual plan / Post mining land use plan is enclosed as **Plate No. 12.**

**ii) Air quality:**

Quarrying activity contributes to pollution of air due to working heavy earth moving & Quarrying machineries. To know the impacts of quality of air the parameter such as Suspended Particulate Matter (SPM), Sulphur Dioxide (SO<sub>2</sub>), oxides of Nitrogen (NO<sub>x</sub>) and Carbon monoxide (CO) monitoring is being carried out through consultant having MoEF & NABET accredited agencies.

However may be the impact, to reduce the same, following measures are adopted.

1. Water sprinkling will be done at regular interval on haul roads, pit and etc., to avoid the emission of dust into atmosphere.
2. Wet drilling will be adopted to avoid the dust in the air atmosphere.
3. All the belt conveyors are covered such that no is entered into the atmosphere.
4. Regular maintenance of haul roads to avoid the dust generation.

A copy of the Air quality report is enclosed as **Annexure No. 16.**

**ii) Water Quality:**

During the monsoon, there will be an impact in the form of surface runoff, wash off where the material will be transported to the local water bodies. And also there will be an impact on the ground water due to mining activities.

Following protective measures will be adopted to maintain the water quality:

1. Garland drains are cut all along the benches prior to the monsoon to avert the water into the pit.
2. No mine working will touch the ground water.
3. Where ever the water flow is likely to join with nalas or water bodies, the check dam will be constructed.
4. Retention wall / rubble walls will be constructed to arrest any wash off / surface runoff from the quarry area.

A copy of the Water quality report is enclosed as **Annexure No. 17.**

**iii) Noise levels :**

Since the quarry is mechanized, the noise pollution is mainly due to the Quarrying machinery and movement of trucks and drilling and blasting activities. There will be impact in surrounding area due to the noise generation.

To reduce the impact on the noise following measures will be adopted:

1. Preventive maintenance of HEMM and Trucks
2. Controlled blasting will be carried out to avoid noise levels.
3. No employees are allowed to work without PPE's where the noise levels are more and beyond the limits.

A copy of the Noise monitoring report is enclosed as **Annexure No. 18.**

**iv) Vibration levels (due to blasting):**

Due to drilling and blasting, following are the impacts visualized:

1. There will be disturbance of Fauna,
2. Vibration due to blasting,
3. Noise generation but as per the list enclosed.

To mitigate the above visualized impacts, following are the measures will be adopted.

1. Scientific methods will be adopted to while drilling and blasting,
2. Proper spacing and burden will be adopted,

3. Controlled blasting will be carried out to avoid noise levels and also to control the PPV.
4. NONEL technology will be adopted,

v) **Water Regime :**

There are no perennial water courses / bodies within the quarry area. Apart from this the water source in this area is mainly storm and ground water. Entire storm water flows through the minor watercourses and joins the adjoining seasonal nallah. The drainage pattern in this area is parallel to sub parallel in nature.

Water resources in this area are Ground water and rainwater. The area receives copious amount of rainfall 3,000 – 4,000 mm annually on an average. Hence the level of water table in the open wells is shallow. Based on the observations made in and around the quarry area it was found that the general ground level in this area is 32 m above MSL, and the general ground water table is 8 m below the general ground level i.e 24 m above MSL. During monsoon the ground water table will raise by 2 – 3 mts. The bottom most working of the pit is 64 m above MSL where quarry operation will not touch the general ground water table. The impact could be in the form of the fluctuation of the ground water table, which is insignificant.

During the monsoon, there will be an impact in the form of surface runoff, wash off where the material will be transported to the local water bodies. To avoid these following protective measures will be taken up.

1. Construction of rubble walls all along the toe of the dumps.
2. Construction of drains all along the toe of the dumps.
3. Before onset of monsoon, drains are cut along toe of the quarry faces to divert the surface run off. Garland drain is provided at the quarry top to regulate monsoon water and direct the same to the settling ponds / quarry pit to contain the quarry wash off and to avoid the same joining to the adjoining surface water bodies / water courses. It also helps to avert eventual collapses and damages to the quarry faces.

A Water drainage / Rain water harvesting plan to this effect is enclosed as **Plate No. 14**.

vi) **Acid Mine drainage :** Not applicable.

vii) **Surface Subsidence :** Not applicable.

**viii) Socio Economics :**

There are twenty four wadas / villages within the buffer zone of 5.00 kms radius. In which the three villages namely Nagaroor, Kadavila, Vellalore and so on. Due to this Quarrying activity, no significant adverse changes are visualized in the traditional way of life of the people residing in the villages within the buffer zone. Further people residing in the nearby villages are benefited by the direct and indirect employment opportunities created by the Quarrying activities. Quarrying activity will contribute towards economic up-liftment by way of job opportunities in the region, hence there is an increase in population of the area. Quarrying activity also boosts the ancillary industries, business and market establishments.

Facilities like power linkage, water supply, communication facilities, construction of roads and statutory buildings, medical facility, vocational training provided by the lessee will augment the socio-economic status of the villagers residing nearby.

As a part of CSR activities, following community welfare measures are proposed to be carried out and the same will be continued:

Sr. No	Description	Amount in INR	Remarks
1.	<b>HEALTH :</b> Medical Camp to do the different Health Check up to the nearby and surrounding village peoples for each and every year. Medical Assistance Potable Drinking Water, Nutritious Food to the School Childrens	3,00,000/-	Yearly
2.	<b>EDUCATION:</b> Scholarship to best performance Students Text Books, School Bags and Umbrella to the nearby and Surrounding village Primary School. Educational Support to the abandoned Kids	2,00,000/-	Yearly
3.	<b>WELFARE CONTRIBUTION</b> Contribution for marriages and other functions to poor / needy people. Arranging food pockets and water while Cultural Activities and Festivals. Distribution of Ration and Vegetables to the needy people during Onam / Ramzan / Christmas.	2,00,000/-	Yearly
4.	<b>COMMUNITY INFRASTRUCTURAL DEVELOPMENT.</b> Construction of Washrooms and Toilets for Government Schools / High Schools at Nagroor, Kadavila and Vanichoor Village . The construction programme will be taken up as per the guidelines of Panchayat.	2,00,000/-	Yearly
5.	<b>RELIGION COMMUNITY INFRASTRUCTURAL DEVELOPMENT.</b> Renovation / repair of temples nearby (Sree Ayiravilly, Sree Durga devi, Perumpally temples)	2,00,000	Yearly
	<b>Total</b>	<b>11,00,000/-</b>	<b>Yearly</b>

**ix) Historical Monuments:**

No historical monuments exist within the vicinity of the quarry.

**8.3 Progressive Reclamation Plan:**

**8.3.1 Mined – out Land:**

Due to Quarrying and exploitation of the ore, there will be change in the ground profile in the form of pits and dumps. The detail of the land use as at present, Plan / conceptual period is shown below in tabular form:



Description	Unit in Ha.	
	As on date	Plan / lease period
Area under Quarrying	1.1000	1.9706
roads	0.0700	--
Green belt	--	0.5000
Safety barrier 7.50 mts	0.5000	--
Area for future use / undisturbed	0.8006	--
<b>Total</b>	<b>2.4706</b>	<b>2.4706</b>

Subsequent to the Conceptual stage, this quarry will be used for various activities as per the mine closure plan, as a part of closure the activities such as water pond, back filling and etc., the details of the land use of post mine closure is given below:

Sl. No.	Type of activities	Extent in Ha.	Post mining land use of degraded land	Extent in Ha.
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2.	roads	---	Retained as roads	---
3.	Green belt	0.5000	Retained as Green belt	0.5000
	<b>Total</b>	<b>2.4706</b>	<b>Total</b>	<b>2.4706</b>

NOTE: Roads are part of the quarry area.

A conceptual plan / Post mining land use plan is enclosed as **Plate No. 12.**

### 8.3.2 Topsoil management:

More or less entire area is exposed by Building Stone Material only at places, topsoil is visualized which is sparsely distributed. The amount of topsoil exists to the thickness is just 0.50 mts (average). However during the course of quarrying of such areas, the topsoil so occurs, will be removed separately and will be used for plantation purpose. During the entire life of the quarry about 2,250 tonnes of topsoil is likely to generate.

As a part of the topsoil management, to know the present quality levels of the topsoil, three soil samples locations were identified i.e one in core zone and two in buffer zone namely one location is nearest human settlements at a distance of 450 mts towards SE from the quarry site and the other is at a distance of 330 mts towards NNW from quarry. Accordingly it was sample and analysed, a quality report of the same is enclosed as **Annexure No. 19**.

**8.3.3 Tailings Dam Management** : Not applicable.

**8.3.4 Acid mine drainage, if any and its mitigative measures** : Not applicable.

**8.3.5 Surface subsidence mitigation measure through back filling the mine voids or by other means and its monitoring mechanism:**

Not applicable.

### 8.4 Disaster Management and Risk Assessment:

Disasters might occur only due to natural calamities like earth quake, excessive rains and flooding etc. To overcome such risks, help / aid would be sought from emergency services providers like Police station, Fire station, Hospital, Ambulance services from the authorities in the vicinity of the mine site. Their contact telephone numbers and communication facilities are provided and displayed on the board at the mine office as well as mine site. Responsibility of coordinating rescue activities is entrusted to Quarry – in - Charge at the Quarry site in addition to Quarry – in Charge is also looking after statutory obligations under Mines Act, 1952.

### 8.5 Care and Maintenance during temporary discontinuance:

Lessee proposes to work continuously, till the conceptual stage as such there is no temporary discontinuance of the mine. All required actions are timely taken and therefore, we do not foreseen such discontinuation to occur, however, management is fully equipped up to



overcome any such eventuality. However due to unforeseen situation, if mines happens to discontinue temporarily due to strike, lockout & any order passed by the government, court and etc, lessee shall take care of mine by fencing the pit/quarry deploying the security guards for watch and ward of the mine.

**8.6 Financial assurance :**

(Submitted under Rule 58 of KMMCR 2015, as a component of Mining Plan)

Area for the Financial Assurance is calculated as per the Rule 58 of KMMCR 2015, till the end of the Ensuing Mining Plan period and the details of land use considered are furnished below:

Sl. No.	Type of Land use	Area of Land in use (in Ha)			The area is considered as fully reclaimed and rehabilitated	Net area considered for calculation
		Area put on use at start of Plan	Additional Requirement during plan period	Total		
		A	B	C = (A + B)		
1	Area under Quarrying	1.1000	0.8706	1.9706		1.9706
2	roads	0.0700		--		--
3	Green belt	--	0.5000	0.5000		0.5000
4	Safety barrier 7.50 mts	0.5000				
5	Area for future use / undisturbed	0.8006				
<b>Total</b>		<b>2.4706</b>		<b>2.4706</b>		<b>2.4706</b>

A P M C P showing the below land use is enclosed as **Plate No. 13**

The total area under utilization till the end of the plan Period  
Financial assurance @ Rs. 25,000/- per hectore.

**2.4706 Ha X Rs. 25,000/- per hectore. Rs. 61,765/-**



The financial assurance being the sum of Rs. Sixty One thousand Seven Hundred Sixty Five only. But as per the rule 62 of KMMCR 2015, the minimum financial amount is **Rs. One Lakh only**. Accordingly the sum of **Rs. One Lakh only** will be submitted in the form of Bank guarantee, when once we receive the vetted from your department.

- 9.0 CERTIFICATES : All the required certificates are enclosed.
- 10.0 PLATES : All the required plates are enclosed and made the reference in the text at relevant places.
- 11.0 ANNEXURES. : All the required annexure are and made the reference in the text at relevant places.

KANTHARAJ K  
RQP / GOA / 130 / 2000 / A

**KANTHARAJ.K.**  
**RQP/GOA/130/2000/A**

*This mining plan  
is approved.*

*N. S. S.*  
*14 Jan 19*

**GEOLOGIST**  
**DISTRICT OFFICE**  
**DEPT. OF MINING & GEOLOGY**  
**THIRUVANANTHAPURAM**



# ANNEXURES





GOVERNMENT OF INDIA

MINISTRY OF CORPORATE AFFAIRS

Registrar of Companies, Ahmedabad  
RoC Bhavan , Opp Rupal Park Society , Behind Ankur Bus Stop , Naranpura

Certificate of Incorporation

[Pursuant to sub-section (2) of section 7 of the Companies Act, 2013 and rule 8 of the Companies (Incorporation) Rules, 2014]

I hereby certify that ADANI VIZHINJAM PORT PRIVATE LIMITED is incorporated on this Twenty Seventh day of July Two Thousand Fifteen under the Companies Act, 2013 and that the company is limited by shares.

The CIN of the company is U61200GJ2015PTC083954.

Given under my hand at Ahmedabad this Twenty Seventh day of July Two Thousand Fifteen.

Signature of  
Rathod Kamleshkumar Gangibhai  
Assistant Registrar of Companies  
Gujarat

Rathod Kamleshkumar Gangibhai  
Assistant Registrar of Companies  
Gujarat

Mailing Address as per record available in Registrar of Companies office:

ADANI VIZHINJAM PORT PRIVATE LIMITED  
Adani House, Nr. Mithakhali Six Roads, Navrangpura,  
Ahmedabad - 380009,  
Gujarat, INDIA



*Kantharaj.K*

KANTHARAJ.K  
RQP/GOA/130/2000/A



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**MEMORANDUM**  
**AND**  
**ARTICLES OF ASSOCIATION**  
**OF**  
**ADANI VIZHINJAM PORT PRIVATE LIMITED**

---

ATTESTED  
VERIFIED AND CERTIFIED  
THAT THIS IS THE TRUE COPY  
OF THE ORIGINAL

*Kantharaj K.*  
**KANTHARAJ.K.**  
**RQP/GOA/130/2000/A**

*T.N. Omana*  
*13.6.2005*

**T.N. OMANA**  
Advocate & Notary  
Thiruvananthapuram Revenue District  
Kerala State South India



THE COMPANIES ACT, 2013  
 COMPANY LIMITED BY SHARES  
 MEMORANDUM OF ASSOCIATION

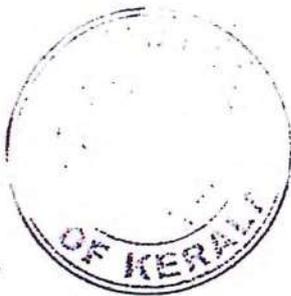
OF

**ADANI VIZHINJAM PORT PRIVATE LIMITED**

- I. The Name of the Company is "ADANI VIZHINJAM PORT PRIVATE LIMITED".
- II. The Registered Office of the Company will be situated in the State of Gujarat.
- III. The objects for which the Company is established are:

[A] THE OBJECTS TO BE PURSUED BY THE COMPANY ON ITS INCORPORATION ARE:

1. To construct, develop, maintain, build, equip, hire or otherwise deal with ports, shipyard, jetties, harbours, docks, ship breaking, ship repair, ship building at any port in India or elsewhere and to carry on business of inland and sea transport including goods, passengers and mail, shippers, ship agents, ship underwriters, ship managers, tug owners, barge owners, loading brokers, freight brokers, freight contractors, stevedores, warehouseman, wharfingers and building, assembling, fitting, constructing, repairing, servicing and managing ships, seagoing vessels for inland waterways and to carry on in India and in any part of the world the business and to construct, develop, erect, build, buy, sell, give or take on lease or license, repair, remodel, demolish, develop, improve, own, equip, operate and maintain, ports and port approaches, breakwaters for protection of port or on the fore shore of the port or port approaches with all such convenient arches, drains, landing places, hard jetties, floating barges or pontoons, stairs, fences, roads, railways, sidings, bridges, tunnels and approaches and widening, deepening and improving any portion of the port or port approaches, light houses, light ships, beacons, pilot boats or other appliances necessary for the safe navigation of the ports and the port approaches and to construct and establish, dry docks, shipways and boat basins and workshops to carry out repairs or overwhelming of vessels, tugs, boats, machinery or appliances.



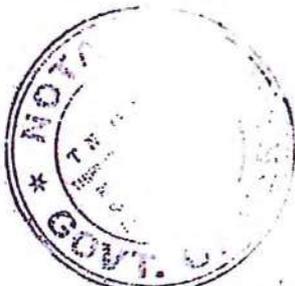
*T.N. Omana*

T.N. OMANA  
 Advocate & Notary  
 Thiruvananthapuram Revenue District  
 Kerala State South India



(B) MATTERS WHICH ARE NECESSARY FOR FURTHERANCE OF THE OBJECTS SPECIFIED IN CLAUSE III (A) are:

1. To construct, improve, maintain, develop, manage, carry out or control any wharfingers, fuel storage tanks, fire stations, electric workshops, stores, roadways and convenience which may seem to advance the business interest and contribute to or subsidise, assist or take part in the construction, improvement, maintenance, working, management, carving out, control thereof and to maintain, overhaul, repair, fit-out, refit, improve, insure, alter, sell, exchange or let out on hire or hire purchase or charter or otherwise deal with and dispose off any of the ships and container, Roll-on and Roll-off Vessels, manufacturing and processing vessels and aircrafts, helicopters, all kinds of off-shore drilling rigs, platforms, storage-floating and transport and such other facilities and other transport and conveyances or any of the engines or furnitures or equipments or stores on the ships, aircrafts or other transport and conveyances.
2. To acquire, build, construct, improve, develop, give or take in exchange or on lease, rent, occupy, allow, control, maintain, operate, run, sell dispose off carry out or later as may be necessary or convenient any leasehold or freehold lands, movable or immovable properties, including building jetty, workshops, warehouse, stores, easement or other rights, machineries, plant, work, stock-in-trade industrial colonies, conveniences together with all modern amenities and facilities such as housing, schools, hospitals, water supply, sanitation, townships and other facilities or properties which may seem calculated directly or indirectly to advance the Company's objects and interest either in consideration of a gross sum of a rent charged in cash or services.
3. To acquire and takeover any business or undertaking carried on, upon or in connection with / without any land or building which the Company may desire to acquire as aforesaid or become interested in and the whole or any of the assets and liabilities of such business or undertaking and to carry on the same or to dispose or remove or put an end thereto.
4. To acquire, purchase, start, run, erect and maintain lands, buildings, factories, foundries, workshops, mills, cold storage plants, equipments, machineries, plants and tools, industrial undertaking of any kind, warehouses, cellars, vaults, wagons, branch offices, depots and show-rooms for the business of the Company.
5. To form, promote, subsidise, organise and assist or aid in forming, promoting, subsidising, organising or aiding companies, syndicates and partnerships of all kinds for the purpose of acquiring and undertaking any properties and liabilities of this Company or for advancing directly the objects thereof which this Company may think expedient.
6. To acquire from and/or give to any person, firm or body corporate incorporated whether in India or elsewhere, technical information, know-how, processes, engineering, manufacturing and operating data, plants, lay outs and blue prints useful for the design, erection and operation of plant required for any of the business of Company and to acquire any grant or licenses and other rights and benefits in the foregoing matters and things.
7. To pay to promoters such remuneration and fees and otherwise recompensate them for their time and for the services rendered by them.
8. To invest any moneys of the Company not immediately required for the purpose of its business in such investments or securities as may be thought expedient including securities issued and/or guaranteed by Central or State Government, Corporations, Trusts and Financial Institutions.
9. To carry out in any part of the world all or any part of the Company's objects as principal, agent, factor, trustee, contractor either alone or in conjunction with any other Person, Firm, Association, Corporate Body, Municipality Province, State of Government or Colony or Dependency thereof.
10. To secure or discharge any debt or obligation of or binding on the Company in such manner as may be thought fit and in particular by mortgage, charges upon the undertaking and all or any of the assets and properties (present and future) and the uncalled capital of the Company or by the creation and issue on such terms as may be thought expedient of debentures, debenture-stock or other securities of any description or by the issue of shares credited as fully or partly paid up.

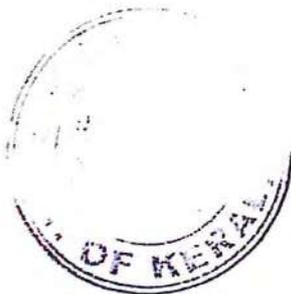


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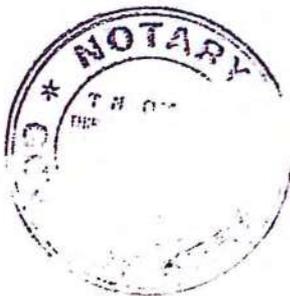
11. To purchase or otherwise acquire, sell, dispose off, concerns and undertakings, mortgages, charges, annuities for certain period or on deferred basis, patents, licences, securities, concessions, policies, book debts and claims, any interest in real or personal property and any claims against such property or against any person or company;
12. To amalgamate, enter into partnerships or into any arrangements for sharing profits or losses, union of interests, co-operation, joint ventures or reciprocal concessions with any person or company carrying on or engaged in or about to carry on or engaged in or which can be carried on in conjunction therewith or which is capable of being conducted so as directly or indirectly to benefit the Company and to give or accept by way of consideration for any of the acts or things aforesaid or properties 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.
13. To negotiate, enter into agreements and contracts or collaborate with foreign companies, firms and individuals for getting or supplying and procuring technical assistance, know-hows in the marketing, importing and exporting of any of the products.
14. To become member of and to communicate with Chamber of Commerce and other mercantile and public bodies throughout the world and to advise on, concert, promote and support measures for the protection, advancement, growth of commerce and industry and for protection and welfare of persons engaged therein.
15. To take or hold mortgages, liens and charges, to secure the payment of the purchase price or any unpaid balance of the purchase price of any part of the Company's property of whatsoever kind sold by the Company or any money due to the Company from the purchaser and others.
16. To contract with lease holders, borrowers, lenders, annuitants and other for the establishment, accumulation, provisions and payment of sinking funds, renewal funds, redemption funds any other special funds and that either in consideration of lumpsum or of annual premium or otherwise and generally on such terms and conditions as may be arranged.
17. To undertake and execute any trust or discretion the undertaking whereof may seem desirable and the distribution amongst the beneficiaries, pensioners or other persons entitled to thereof, any income, capital, annuity or other sums of moneys or other properties whether periodically or otherwise and whether in money or in specimen in furtherance of any trust discretion or other obligation or permission.
18. To lend money to, or provide guarantee or security on behalf of any subsidiary or group company, and guarantee obligations of any subsidiary or group company, and the payment of interest on any stocks, shares and securities of any company, firm or person in any case in which such loan, guarantee or security may be considered likely directly or indirectly to further the objects of this Company or any of its subsidiaries or group companies, and generally to give any guarantee or security whatsoever which may be deemed likely, directly or indirectly, to any person to benefit the Company or its members.
19. To train and get trained to and/or pay to training for the employees both present and future, for and in connection with the business of the Company.
20. To hold, administer, sell, realise, invest, dispose off the moneys and properties, both real and personal and to carry on, sell, realise, dispose off and deal with any estate of which the Company is executor or administrator or in any trust of which the Company is the Trustee or which the Company is administrator or in a trust of which the Company is trustee or administrator, receiver, liquidator or agent.
21. To make deposit, enter into recognised bonds and otherwise give security for the execution of the offices and performance of the duties of executors, administrators and trustees, receivers, liquidators and agents.
22. To take such steps as may be necessary to give the Company the same rights and privileges in any part of the world as are possessed by local companies or partnership of a similar nature.



T.N. OMANA  
 Advocate & Notary  
 Thiruvananthapuram Revenue District  
 Kerala State South India

23. To apply for tender, purchase or otherwise acquire any contracts, sub-contracts, licences and concessions for or in relation to the objects or business herein mentioned or any of them and to undertake, execute, carry out, dispose off or otherwise turn to account the same.
24. To dedicate present or otherwise dispose off either voluntarily or for value any property of the Company deemed to be of national, public or local interest to any national trust, public body, museum, corporation or authority or any trustees for or on behalf of the same or on behalf of the public.
25. To promote, assist or take part and appear or lead evidences before any commission, investigation, inquiry, trial or hearing, whether public or private, relating to matters connected with any trade, business or industry.
26. To promote co-operation, hold conferences, organise and participate in meetings, maintain bureau, carry on correspondence, arrange discussions, symposiums and debates, prepare statements, reports and articles relating to any and all matters of interest to the Company.
27. To acquire by purchase, lease, assignment or otherwise, lands, tenements, buildings, hereditaments, rights and advantages of any kind whatsoever and to resell, mortgage and let on lease the same.
28. To subject all or any of the works, contracts from time to time and upon such terms and conditions as may be thought expedient.
29. To form, manage, join or subscribe to any syndicate, pool or cartel for the business of the Company.
30. Subject to the provisions of the Companies Act, 2013 to distribute among the members, in specie, any property of the Company or any proceeds of sale or disposal of any property in the event of winding up.
31. To enter into any arrangement with any Government or authority, supreme, municipal, local or otherwise or any person or company that may seem conducive to the Company's objects or any of them and to obtain from any such Government, authority, person or company any rights, privileges, charters, licences and concession which the Company may think fit and desirable to obtain and to carry out, exercise and comply therewith.
32. To apply for, promote and obtain any act, charter, order, regulation, privilege, concession, licence or authorization of any Government, State or municipality or any authority or any corporation or any Public Body which may be empowered to grant for enabling the Company to carry on its objects into effect or for extending any of powers of the Company or for affecting any modification of the Company's constitution or for any other purpose which may seem expedient and to oppose any bills, proceedings, applications which may seem calculated directly or indirectly to prejudice the Company's interest and to appropriate any of the Company's shares, debentures, debenture-stock or other securities and assets to defray the necessary costs, charges and expenses thereof.
33. To apply for, purchase or otherwise acquire, use, protect and renew in any part of the world any patents, patent rights, brevets, inventions, trademarks, designs, licences, copyrights, concessions and the like conferring any exclusive or non-exclusive or limited right to their use or any secret or other information as to any invention which may seem capable of being used for any of the purposes of the Company or acquisition of which may seem calculated directly or indirectly to benefit the Company and to use, exercise develop or grant licences in respect of or otherwise turn to account the property, rights or information so acquired and to expend money in experimenting upon, testing or improving any such patents, inventions or rights.
34. To establish, provide, maintain, conduct or otherwise subsidise, assist research laboratories and experimental workshops for scientific and technical researches and experiments and to undertake and carry on the scientific and technical research, experiments and tests of all kinds and to promote studies and research, both scientific and technical, investigations and invention by providing, subsidising, endowing or assisting laboratories, workshops, libraries, the remuneration of scientific or technical professors or teachers and by providing for the award of scholarships, prizes and grant to students or otherwise and generally to encourage, promote and reward studies, researches, investigations, experiments, tests and inventions of

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 T.N. OMANA  
 Advocate & Notary  
 Thiruvananthapuram Revenue District  
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any kind that may be considered likely to assist any of the businesses which the Company is authorised to carry on.

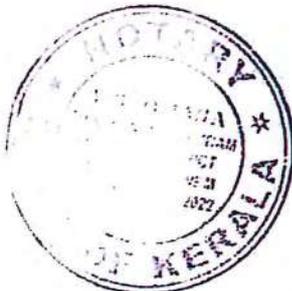
35. To make donations to such persons or institutions either of cash or any other assets as may be thought directly or indirectly conducive to any of Company's objects or otherwise and in particular to remunerate any person or corporation introducing business to this Company and also to subscribe, contribute or otherwise assist or guarantee money for charitable, scientific, religious or benevolent, national, public, cultural, educational or other institutions or objects or any exhibitions for any public, general or other objects.
36. To establish aid, support or / and in the establishment and support of association, institutions, funds, trusts, private or public, for the benefit of its employees or ex-employees, Directors, ex-Directors of the Company or its connections in business and for persons having dealings with the company or the dependents, relatives or connections of such persons and in particular friendly or other benefit societies and grant pensions, allowances, gratuities and bonuses either by way of annual payment or lumpsum and to make payment towards insurance and to form and contribute to provident and other benefit funds for such persons; and to provide for the welfare of Directors, ex-Directors and employees and ex-employees of the company and the wives, widows and families or the dependents or connections of such persons by building or contributing to the building of houses, dwellings or chawls or by grant of moneys, pensions, allowances, bonuses or other payments and to provide or subscribe or contribute towards places of instructions and recreations, hospitals, dispensaries, holiday-homes, medical and other attendance and other assistance as the company shall think fit.
37. To refer or agree to refer any claims, demands, disputes or any other questions by or against the Company or in which the Company is interested or concerned and whether between the Company and the member or members or his or their representatives or between the Company and third parties to arbitration in India or any places outside India and to observe and perform awards made thereon and to do all acts, deeds, matters and things to carry out or enforce the awards in accordance with the provisions of India Arbitration Act.
38. 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 and preliminary expenses may include all or any part of the costs and expenses of owners of any business or property acquired by the Company.
39. To enter into joint sector arrangements with any person, body or corporate whether in India or abroad for the business of the Company.
40. 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 or the issue of capital including brokerage and commission for obtaining applications for taking, placing or underwriting of shares, debentures, debenture-stocks or other securities of the Company.
41. To pay for any rights or properties acquired by the Company and to pay or to remunerate any person or company for services rendered or to be rendered in placing or assisting to place or guaranteeing the placing of shares in Company's capital or any debentures, debenture-stocks or other securities of the Company or in or about the formation or promotion of the company or acquisition of properties by the Company for the purpose of the Company whether by cash payment or by the allotment of shares, debentures, debenture-stocks or other securities of the Company credited as paid-up in full or in part or otherwise as the case may be.
42. To open current or fixed accounts with any bank, bankers, shroff or merchants and to pay into and draw money from such accounts and to draw, make endorse, discount and execute all types of negotiable instruments.
43. To insure the whole or any part of the property and personnels of the Company either full or partially, to protect and indemnify any part or portion thereof either on mutual, principal or otherwise.
44. To employ experts to investigate and examine into conditions value, character and circumstances of any business, concerns and undertakings having similar objects and generally of any assets, properties or rights.
45. To carry on any branch of a business whether in India or outside India which this Company is authorised to carry on by means or through the agency of any subsidiary company or



*T.N. Ojara*

Thiruvananthapuram Revenue District  
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- companies and to enter into any arrangement with such subsidiary company for taking the profits and bearing the losses of any business or branch so carried on or for finance any such subsidiary, guaranteeing its liabilities or to make any other arrangement which seem desirable with reference to any business or branch so carried on including the power and provision at any time either temporarily or permanently to close any such branch or business.
46. To take part in the management, supervision, conduct and control of the business or operations of any company or undertaking having similar objects and for that purpose to appoint and remunerate the Directors, trustees, accountants or other experts, personnel or agent for any of such operations or purposes.
  47. To purchase, take on lease or exchange, hire or otherwise, acquire and dispose off any immovable or movable properties, real or personal of all kinds and of any rights or privileges which the Company may think necessary or convenient for the purpose of its business and either to retain the properties so acquired for the purpose of the Company's business or to turn the same to account as may seem expedient.
  48. To accept as consideration for or in lieu of the whole or any part of the Company's properties either land or cash or Government security or securities guaranteed by Government or shares in joint stock companies or partly the one and partly the other and such other properties or securities as may be determined by the Company and to take back or acquire the property so disposed off by repurchasing or taking lease the same at such price and on such terms and conditions as may be agreed upon by the Company.
  49. To let on lease, or license, or on hire purchase or to lend or any properties belonging to the Company and to finance for the purpose of any article or articles whether made by the Company or not by way of loans or by hire-purchase system.
  50. To sell, purchase, mortgage, grants, easements and other rights over and in any other manner deal with the undertakings, properties, assets, both movable and immovable, rights, effects of the Company or any part thereof whether real or personal for such consideration as the Company may think fit and in particular for shares, debentures, debenture-stock, securities of any other company whether or not having objects altogether or in part similar to those of the Company and to make advances upon the security of land and/or buildings and/or other properties movable and/or any interest therein.
  51. To vest any movable or immovable properties, 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.
  52. To undertake and execute any contracts for works for the business of the Company.
  53. To create any depreciation fund, reserve fund, sinking fund, insurance fund or any other special fund whether for depreciation or for repairing, improving, extending or maintaining any of the properties of the Company or for redemption of debentures or redeemable preference shares or any other purpose whatsoever conducive to the interest of the Company.
  54. To accept, donations, gifts with such conditions, restrictions, obligations, stipulations and liabilities provided that such receipts are not derogative to any objects of the Company.
  55. To alienate, transfer, gift, donate, settle any property of the Company with or without consideration to any person including any trust whether public or private, discretionary or specific either by revocable or irrevocable transfer or settlement and upon such terms and conditions as the Company may deem fit.
  56. To explore, examine, investigation, test, make, experiment, obtain report, opinion of experts, certificates, analysis, surveys, plans, descriptions and information in relation to any property or right which the Company may acquire or become interested in or may propose to acquire or with the view of discovering properties or rights which company may acquire or become interested in and to engage, employ, pay fees to retain the services of and send to any part of the world agents, explorers, technical experts, engineers, lawyers and counsels.
  57. To adopt such means of making known the business/activities of the Company as may seem expedient and in particular by advertising in the press, by circulars, by purchase and exhibition of works of art or interest, by publications of books and periodicals and by granting prizes, rewards and donations.



*P. N. S. M. A.*



58. To undertake, carry out, promote, sponsor, contribute or assist in any activity, project for rural development including any programme for promoting the social and economic welfare of or the upliftment of the people in rural areas irrespective whether the Company has any business dealings in such areas or not and to incur any expenditure or use any of the assets and facilities of the Company on any programme or project or activity or rural development and to assist execution and promotion thereof either directly or in association with any other company or person or organisation or through an independent agency or in any manner as the Company may deem fit in order to implement any of the projects or programmes or activities of rural development, to transfer without consideration or at such fair or concessional value and divert the ownership of the properties of the Company to or in favour of any public or local body, authority, Central or State Government or any public institution or trust or fund.
59. To raise or borrow money from time to time for any of the purposes and objects of the Company by receiving advances of any sum or sums with or without security upon such terms as the Directors may deem expedient and in particular by taking deposits from or open current accounts with any individual or firms including the agents of the Company, whether with or without giving the security or by mortgaging or selling or receiving advances on the sale of any lands, buildings, machineries, goods or other properties of the Company or by the issue of the debentures or debenture-stocks, perpetual or otherwise, charged upon all or any of Company's properties (both present and future) including its uncalled capital or by such other means as Directors may in their absolute discretion deem expedient.
60. Subject to the Companies Act, 2013 and rules made thereunder and directions issued by Reserve Bank of India, to borrow, raise, or secure the payment of money to or receive money and deposit as time deposit or otherwise at interest for any purpose of the Company and at such time or times and in such manner as may be thought fit and in particular by the creation and issue of the debentures or debenture-stock, bonds, shares credited as fully or partly paid up, obligations, mortgages, charges and securities of all kinds, either perpetual or otherwise either redeemable annuities in as and by way of securities for any such money so borrowed, raised or received or of any such debentures, debenture-stock, bonds, obligations, mortgage, charges and securities of all kinds, either so issued to mortgage, pledge or charge the undertaking or whole or any part of the properties, rights, assets or revenue and profits of the Company, present and future, including its uncalled capital or otherwise howsoever by trust, special assignment or otherwise or to transfer or convey the same absolutely or in trust and give the lenders powers, as may seem expedient and to purchase, redeem or pay off any such securities. The Company shall not carry on business of Banking as defined by the Banking Regulation Act, 1949.
61. To promote or join in the promotion of any company or companies including subsidiary companies (wholly owned or partly owned) for the purpose of acquiring all or any of the properties, rights and liabilities of the Company or for any other purpose which may seem directly or indirectly calculated to benefit the Company and to underwrite shares and securities therein.
62. To indemnify, members, officers, Directors, agents and employees of the Company against proceedings, cost, damages, claims and demands in respect of anything done or ordered to be done by them and in the interest of the Company of any loss, damage or misfortune whatsoever which shall happen in the execution of the duties of their offices or in relation thereto.
63. Subject to the provisions of the Act, the Company shall have power to borrow any sum or sums of money for the purpose of the Company on such other terms and conditions and from such person or persons, firms, bank or any financial, industrial, institutions or any Government or Semi-Government Corporation as the Company may deem fit.
64. To provide for the welfare of Directors, employees, or ex-employees of the Company and the wives, widows and families of the dependents or connections of such persons by building or contributing for the building, houses, dwelling or quarters, or by grants of money, pensions, gratuities, allowance, bonus, profit sharing bonus or benefits or other payments or by creating and from time to time subscribing to provident and other associations, institutions, funds, profit sharing or other scheme or trust and hospitals and dispensaries, medical and other attendants, and other assistance as the Company shall think fit.



*T.M. Omana*

65. To undertake and/or direct all types of constructions and the maintenance of or/and acquire by purchase, lease, exchange, hire or otherwise, lands, properties, buildings and estates of any tenure or any interest therein, to sell, lease let, mortgage or otherwise dispose off the same and to purchase, construct and sell or for any person free hold or lease hold lands, house properties, buildings, offices, factories, workshops, godowns farm houses, farm and any kind of landed properties or any share/interest therein and to carry on the business of land and estate agents on commission or otherwise without commission.
66. To act as promoters and developers of lands, commercial buildings, offices or other buildings in furtherance of the objects and for the purpose to purchase, take on lease acquire, hold, develop, prepare building sites, construct, reconstruct, repair maintain, pull down alter, improve, decrease, furnish, give on hire, purchase or on installments or deal in any lands, commercial buildings, offices, works and sanitary conveniences of all kinds and to lay out roads, drainage pipes, water pipes and electric installations and to set apart lands for pleasure, gardens and recreation grounds or improve the land or any part thereof.
67. To establish, maintain and operate shipping, air transport and road transport services and all ancillary services and for these purposes as or an independent undertaking to purchase, take in exchange, charter, hire, build construct or otherwise acquire and to own, work, manage and trade with steam, sailing, motor and other ships, trawlers, drifters, tugs and vessels, aircraft and motor and other vehicles with all necessary and convenient equipments, engines, tackle, gears, furniture and stores and to maintain, repair, fit out, refit, improve, insure, alter, sell, exchange or let out on hire or hire-purchase or charter or otherwise deal with and dispose off any of the ships, vessels, aircrafts and vehicles or any of the engines, tackles, gears, furniture, equipments and stores.
68. To establish the business of warehousing in all its aspects in India and elsewhere.
69. To purchase or acquire container stacking cranes, Mobile Container Cranes, Van Movers, Trailers, Heavy Forklift Trucks, barges, Ships, Wooden Crafts and Pallets, Portainers, Transtainers, Straddle carries and such other handling equipment and retain them as service in Docks, Container Freight and on roads.
70. To purchase, take on exchange or on lease or on rent, occupy, or otherwise acquire lands, warehouse, godowns and to erect, construct, build and establish Cold Storage Plants, Warehouses, godowns, Container Terminals and container freight stations or to enter into contracts with Government Bodies, to construct such container freight stations or terminals as required by them.
71. To manufacture and repair containers, to purchase or acquire on lease or otherwise containers and give them on lease or on rent.
72. To make available the warehousing facilities including cold storage facilities for stuffing and destuffing the cargo into the containers.
73. To erect or build container freight station or container terminals semi or fully automated.
74. To study, advice planning, management and administration of terminals, port operating companies, handling of general and RO/RO-LO/LO cargo, handling of bulk goods, warehousing, handling of containers, trucking of containers, collecting and disposal of oily residues, recycling of special wastes.
75. To offer facilities and services for RO/RO handling such as despatch of all sizes of vessels, trailer handling, cargo lashing.
76. To offer facilities and services for port lighterage and barge transport for conventional and bulk cargo, container transport, heavy lifts and specialised transports, push boats and tug services, barge rental, storage in lighters.
77. To offer facilities and services for inland waterway transports, such as push boat, seabee and lash transports, bulk goods transports, forwarding storage.
78. To offer facilities and services for rank transportation in port and inland waterway push boat transports of mineral and vegetable oils, chemicals and other liquids, bundering, oily residues, ballast and tank wash water, transit storage of all types of oil.

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 T.H. OMANA  
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 Thiruvananthapuram Revenue District



- IV. The liability of the members 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. 5,00,000/- [Rupees Five Lac Only] divided into 50,000 [Fifty Thousand] Equity Shares of Rs.10/- [Rupees Ten Only] each.

TESTED  
AND CERTIFIED  
THAT THIS IS THE TRUE COPY  
OF THE ORIGINAL



*T.N. Omana*  
*13.01.2018*  
**T.N. OMANA**  
Advocate & Notary  
Thiruvananthapuram Revenue District  
Kerala State South India

We, the several persons, whose name and addresses are subscribed are desirous of being formed into a Company in pursuance of this Memorandum of Association and we respectively agree to take the respective number of shares in the capital of the Company set opposite our respective names:

Photo	Sr. No.	Name, Addresses, Descriptions, Occupation and Signature of the subscribers	Number of Equity Shares taken by each subscriber	Name, Address, Description and Occupation of the Common Witness
	1	For and on behalf of M/s Adani Ports and Special Economic Zone Limited (CIN L63090GJ1998PLC034182) having its registered office at Adani House, Nr. Mithakhali Six Roads, Navrangpura, Ahmedabad - 380009 through its authorised person vide Board Resolution passed on 1st May, 2015. Dipti Shah W/o Yogesh Shah residing at 601, Shalkraj Tower, Nehru Park, Vastrapur, Ahmedabad-380015 Occupation: Service Sd/-	49,940 (Forty Nine Thousand Nine Hundred Forty only)	Common witness for all 7 subscribers I, witness to subscribers who have subscribed and signed in my presence. Further, I have verified his/her/their identify details for their identification and satisfied myself of their identification particulars as filled in  Hardik Sanghvi S/o, Shri Harshadkumar Sanghvi residing at 15, Parshwanathnagar Society, Nr. Police Chowki, Naranpura Char Rasta, Ahmedabad-380013, Occupation: Service Company Secretary FCS No. 7247 Sd/-
	2	Malay Mahadevia [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Dr. Ramesh Mahadevia residing at 12-B, Gyankunj Society, Opp. St. Xavier's College, Navrangpura, Ahmedabad - 380009. Occupation: Service Sd/-	10 (Ten Only)	
	3	Ravi Bhamidipaty [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Srirama Murthy Bhamidipaty residing at 'Amrut' 26, Amrashrish Bungalows, Opp. Chimanbhai Patel Institute, Bh. Shapath 4, Prahaladnagar, Ahmedabad-380058 Occupation: Service Sd/-	10 (Ten Only)	
	4	Azad Kumar Somani [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Jwala Prasad Somani residing at 84, Star Apartments, Karnavatpagarkpa Bazar, Ahmedabad-380001. Occupation: Service Sd/-	10 (Ten Only)	
	5	Manoj Kumar Chanduka [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Biswanath Lal Chanduka residing at B-401, Panchamrut Apartments, Opp. Nehru Foundation, Bodakdev, Ahmedabad-380054. Occupation: Service Sd/-	10 (Ten Only)	
	6	Anish Ashokkumar Shah [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Ashokkumar Amrutlal Shah residing at B-12, Keshav Apartments, Near Memnagar Talavdi, Memnagar, Ahmedabad-380052. Occupation: Service Sd/-	10 (Ten Only)	
	7	Kamlesh Bhagla [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Prabhudas Bhagla residing at A-203, Samarthy Residency, Nr. P. R. Patel School, D'eabin, Kalligam, Sabarmati, Ahmedabad-380019. Occupation: Service Sd/-	10 (Ten Only)	
Total:			50,000 (Fifty Thousand)	

Place: Ahmedabad

Dated: 22.07.2015



ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

*T.N. Omana*  
13.6.2014

T.N. OMANA  
Advocate & Notary



THE COMPANIES ACT, 2013  
[COMPANY LIMITED BY SHARES]

ARTICLES OF ASSOCIATION

OF

ADANI VIZHINJAM PORT PRIVATE LIMITED

PRELIMINARY AND INTERPRETATION

1. [1] The Regulations contained in Table "F" in Schedule I of the Companies Act, 2013 shall not apply to the Company, except in so far as the same are repeated, contained or expressly made applicable in these Articles or by the said Act.

[2] (a) The marginal notes used in these Articles shall not affect the construction thereof.

(b) In the interpretation of these Articles, the following expressions shall have the following meanings, unless repugnant to the subject or context

"Act" means the Companies Act, 2013 or any statutory modification or re-enactment thereof for the time being in force and the Companies Act 1956, so far as may be applicable.

"Articles" means these articles of association of the Company or as altered from time to time.

"Board of Directors" or "Board" means collective body of Directors of the Company.

"Company" means "ADANI VIZHINJAM PORT PRIVATE LIMITED".

"Depository" means and includes a Company as defined in the Depositories Act 1996.

"Rules" means the applicable rule for the time being in force as prescribed in relevant sections of the Act.

"Seal" means Common Seal of the Company.

"Secretarial Standards" means standards provided by the Institute of Companies Secretaries of India.

"Securities" means the securities as defined in clause (h) of Section 2 of the Securities Contracts (Regulation) Act 1956.

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*T.N. Omana*

**T.N. OMANA**  
Advocate & Notary  
Thiruvananthapuram Revenue District  
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- (d) Words importing the singular number also include, where the context requires or admits, the plural number and vice-versa.
- (e) Unless the context otherwise requires, words or expression contained in these Articles shall bear the same meaning as in the Act or the Rules, as the case may be.

PRIVATE COMPANY

2. The Company is a Private Company Limited by Shares within the meaning of Section 2(68) of the Act, and accordingly,
- (a) Restricts the right to transfer its shares, in the manner and to the extent as hereinafter provided;
- (b) Limits the number of its members to 200 [Two Hundred] but not including :
- (i) Persons who are in the employment of the Company.
- (ii) 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 the members after the employment ceased; provided that where two or more persons hold one or more shares in the Company jointly, they shall, for the purpose of this Article, be treated as a single member.
- (c) Prohibits any invitation to the public to subscribe for any securities of the Company.
- (d) The Company is having a minimum paid up share capital of Rs. 1,00,000/- (Rupees One Lac only) or such higher amount of capital as may be prescribed.

SHARE CAPITAL AND VARIATION OF RIGHTS

3. Subject to the provisions of the Act and these Articles, the shares in the capital of the company shall be under the control of the Directors who may issue, allot or otherwise dispose of the same or any of them to such persons, in such proportion and on such terms and conditions and either at par or at a premium or at consideration otherwise than in cash and at such time as they may from time to time think fit. The Company may issue equity with voting rights and/or with differential rights as to dividend, voting or otherwise in accordance with the Rules and preference shares.
4. (i) Every person whose name is entered as a member in the register of members shall be entitled to receive within two months 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 provide,-

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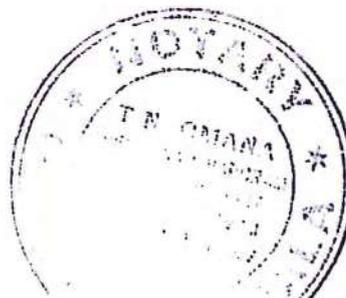
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 Advocate & Notary  
 Thiruvananthapuram Revenue District  
 Kerala State South India



- such sum as may be prescribed for each certificate after the first.
- (ii) Every certificate shall be under the seal and shall specify the shares to which it relates and the amount paid-up thereon.
  - (iii) 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.
5. Every holder of or subscriber to Securities of the Company shall have the option to receive security certificates or to hold the Securities with a depository. Such a person who is the beneficial owner of the Securities can at any time opt out of a Depository, if permitted, by the law, in respect of any Securities in the manner provided by the Depositories Act, 1996 and the Company shall, in the manner and within the time prescribed, issue to the beneficial owner the required Certificates for the Securities.
  6. (i) If any share certificate be worn out, defaced, mutilated or torn or if there be no further space on the back for endorsement of transfer, then upon production and surrender thereof to the company, a new certificate may be issued in lieu thereof, and if any certificate is lost or destroyed then upon proof thereof to the satisfaction of the company and on execution of indemnity or such other documents as may be prescribed by the Board, a new certificate in lieu thereof shall be given. Every certificate under this Article shall be issued on payment of fees for each certificate as may be fixed by the Board.
  - (ii) The provisions of the foregoing article relating to issue of certificates shall mutatis mutandis apply to debentures or other securities of the company.
  7. Except as required by law, no person shall be recognised by the company as holding any share upon any trust, and the company shall not be bound by, or be compelled in any way to recognise (even when having notice thereof) any equitable, contingent, future or partial interest in any share, or any interest in any fractional part of a share, or (except only as by these regulations or by law otherwise provided) any other rights in respect of any share except an absolute right to the entirety thereof in the registered holder.
  8. (i) The company may exercise the powers of paying commissions conferred under the Act, provided that the rate per cent or the amount of the commission paid or agreed to be paid shall be disclosed in the manner required under the Act and rules made thereunder.
  - (ii) The rate or amount of the commission shall not exceed the rate or amount prescribed in rules made under the Act.
  - (iii) The commission may be satisfied by the payment of cash or the allotment of fully or partly paid shares or partly in the one way and partly in the other.

*T.N. Omana*

**T.N. OMANA**  
 Advocate & Notary  
 Thiruvananthapuram Revenue District  
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of the shares of that class) may, subject to the provisions of the Act, and whether or not the company is being wound up, be varied with the consent in writing of the holders of three-fourths of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.

- (ii) To every such separate meeting, the provisions of these regulations relating to general meetings shall mutatis mutandis apply.
10. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking pari passu therewith.
11. Subject to the provisions of the Act, any preference shares may be issued on the terms that they are to be redeemed or converted into equity shares on such terms and in such manner as the company before the issue of the shares may determine.
12. The Board or the Company as the case may be, may, by way of right issue or preferential offer or private placement or any other manner, subject to and in accordance with Act and the Rules, issue further securities to;
- persons who, at the date of the offer, are holders of equity shares of the Company. Such offer shall be deemed to include a right exercisable by the person concerned to renounce the shares offered to him or any of them in favor of other person or;
  - employees under the employees' stock option or;
  - any person whether or not those persons include the persons referred to in clause (a) or clause (b) above;

#### LIEN

13. (i) The company shall have a first and paramount lien—
- on every share (not being a fully paid share), for all monies (whether presently payable or not) called, or payable at a fixed time, in respect of that share; and
  - on all shares (not being fully paid shares) standing registered in the name of a single person, for all monies presently payable by him or his estate to the company.
- Provided that the Board of directors may at any time declare any share to be wholly or in part exempt from the provisions of this clause.
- (ii) The company's lien, if any, on a share shall extend to all dividends payable and bonuses declared from time to time in respect of such shares.

*T.N. Omana*

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 Advocate & Notary  
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Provided that no sale shall be made-

- (a) unless a sum in respect of which the lien exists is presently payable; or
  - (b) until the expiration of fourteen days after a notice in writing stating and demanding payment of such part of the amount in respect of which the lien exists as is presently payable, has been given to the registered holder for the time being of the share or the person entitled thereto by reason of his death or insolvency.
15. (i) To give effect to any such sale, the Board may authorise some person to transfer the shares sold to the purchaser thereof.
- (ii) The purchaser shall be registered as the holder of the shares comprised in any such transfer.
- (iii) The purchaser shall not be bound to see to the application of the purchase money, nor shall his title to the shares be affected by any irregularity or invalidity in the proceedings in reference to the sale.
16. (i) The proceeds of the sale shall be received by the company and applied in payment of such part of the amount in respect of which the lien exists as is presently payable.
- (ii) The residue, if any, shall, subject to a like lien for sums not presently payable as existed upon the shares before the sale, be paid to the person entitled to the shares at the date of the sale.

The provisions of these Articles relating to Lien shall mutatis mutandis apply to any other Securities including debentures of the Company.

**CALLS ON SHARES**

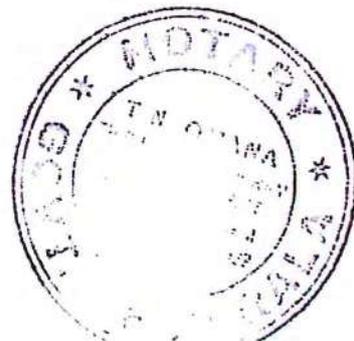
17. (i) The Board may, from time to time, make calls upon the members in respect of any monies unpaid on their shares (whether on account of the nominal value of the shares or by way of premium) and not by the conditions of allotment thereof made payable at fixed times:

Provided that no call shall exceed one fourth of the nominal value of the share or be payable at less than one month from the date fixed for the payment of the last preceding call.

- (ii) Each member shall, subject to receiving at least fourteen days' notice specifying the time or times and place of payment, pay to the company, at the time or times and place so specified, the amount called on his shares.
  - (iii) A call may be revoked or postponed at the discretion of the Board.
18. A call shall be deemed to have been made at the time when the resolution of the Board authorising the call was passed and may be required to be paid by installments.



*T. N. Bhowmik*



20. (i) If a sum called in respect of a share is not paid before or on the day appointed for payment thereof, the person from whom the sum is due shall pay interest thereon from the day appointed for payment thereof to the time of actual payment at ten per cent per annum or at such lower rate, if any, as the Board may determine.
- (ii) The Board shall be at liberty to waive payment of any such interest wholly or in part.
21. (i) Any sum which by the terms of issue of a share becomes payable on allotment or at any fixed date, whether on account of the nominal value of the share or by way of premium, shall, for the purposes of these regulations, be deemed to be a call duly made and payable on the date on which by the terms of issue such sum becomes payable.
- (ii) In case of non-payment of such sum, all the relevant provisions of these regulations as to payment of interest and expenses, forfeiture or otherwise shall apply as if such sum had become payable by virtue of a call duly made and notified.
22. The Board-
- (a) may, if it thinks fit, receive from any member willing to advance the same, all or any part of the monies uncalled and unpaid upon any shares held by him; and
- (b) upon all or any of the monies so advanced, may (until the same would, but for such advance, become presently payable) pay interest at such rate not exceeding, unless the company in general meeting shall otherwise direct, twelve per cent per annum, as may be agreed upon between the Board and the member paying the sum in advance.

#### TRANSFER OF SHARES

23. (i) The instrument of transfer of any share in the company shall be executed by or on behalf of both the transferor and transferee.
- (ii) The transferor shall be deemed to remain a holder of the share until the name of the transferee is entered in the register of members in respect thereof.
24. The Board may, subject to the right of appeal conferred by the Act decline to register-
- (a) the transfer of a share, not being a fully paid share, to a person of whom they do not approve; or
- (b) any transfer of shares on which the company has a lien.



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**T.N. OMANA**  
 Advocate & Notary  
 Thiruvananthapuram, Revenue District  
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- (a) the instrument of transfer is in the form as prescribed in rules made under the Act;
- (b) the instrument of transfer is accompanied by the certificate of the shares to which it relates, and such other evidence as the Board may reasonably require to show the right of the transferor to make the transfer; and
- (c) the instrument of transfer is in respect of only one class of shares.
26. On giving not less than seven days' previous notice in accordance with the Act and rules made there under, the registration of transfers may be suspended at such times and for such periods as the Board may from time to time determine:

Provided that such registration shall not be suspended for more than thirty days at any one time or for more than forty-five days in the aggregate in any year.

27. The provision of these Articles relating to transfer of shares shall mutatis mutandis apply to any other securities including debentures of the Company.

#### TRANSMISSION OF SHARES

28. (i) On the death of a member, the survivor or survivors where the member was a joint holder, and his nominee or nominees or legal representatives where he was a sole holder, shall be the only persons recognised by the company as having any title to his interest in the shares.
- (ii) Nothing in clause (i) shall release the estate of a deceased joint holder from any liability in respect of any share which had been jointly held by him with other persons.
29. (i) Any person becoming entitled to a share in consequence of the death or insolvency of a member may, upon such evidence being produced as may from time to time properly be required by the Board and subject as hereinafter provided, elect, either-
- (a) to be registered himself as holder of the share; or
- (b) to make such transfer of the share as the deceased or insolvent member could have made.
- (ii) The Board shall, in either case, have the same right to decline or suspend registration as it would have had, if the deceased or insolvent member had transferred the share before his death or insolvency.
30. (i) If the person so becoming entitled shall elect to be 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 elects.

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**T.N. OMANA**  
 Advocate & Notary  
 Thiruvananthapuram Revenue District  
 Kerala State South India



(iii) All the limitations, restrictions and provisions of these regulations relating to the right to transfer and the registration of transfers of shares shall be applicable to any such notice or transfer as aforesaid as if the death or insolvency of the member had not occurred and the notice or transfer were a transfer signed by that member.

31. A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the company:

Provided that the Board may, at any time, give notice requiring any such person to elect either to be registered himself or to transfer the share, and if the notice is not complied with within ninety days, the Board may thereafter withhold payment of all dividends, bonuses or other monies payable in respect of the share, until the requirements of the notice have been complied with.

32. The Company shall incur no liability or responsibility whatsoever in consequence of its registering or giving effect to any transfer of shares made or purporting to be made by any apparent legal owner thereof (as shown or appearing in the Register of Members) to the prejudice of persons having or claiming any equitable right, title or interest to or in the said shares, notwithstanding that the company may have had notice of such equitable right, title or interest or notice prohibiting registration of such transfer and may have entered such notice referred thereto in any book of the company and the company shall not be bound or required to regard or attend or give effect to any notice which may be given to it of any equitable right, title or interest or be under any liability whatsoever for refusing or neglecting so to do, though it may have been entered or referred to in some book of the company, but the company shall nevertheless be at liberty to regard and attend to any such notice and give effect thereto if the Directors shall so think fit.

**FOREFEITURE OF SHARES**

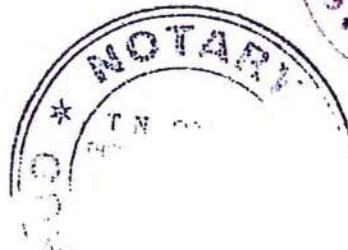
33. If a member fails to pay any call, or installment of a call, on the day appointed for payment thereof, the Board may, at any time thereafter during such time as any part of the call or installment remains unpaid, serve a notice on him requiring payment of so much of the call or installment as is unpaid, together with any interest which may have accrued.

34. The notice aforesaid shall-

(a) name a further day (not being earlier than the expiry of fourteen days from the date of service of the notice) on or before which the payment required by the notice is to be made; and

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**T.N. OMANA**  
 Advocate & Notary  
 Thiruvananthapuram Revenue District  
 Kerala State South India

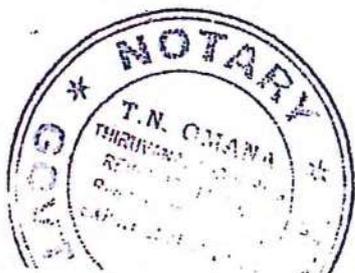


forfeited.

35. If the requirements of any such notice as aforesaid are not complied with, any share in respect of which the notice has been given may, at any time thereafter, before the payment required by the notice has been made, be forfeited by a resolution of the Board to that effect.
36. (i) A forfeited share may be sold or otherwise disposed of on such terms and in such manner as the Board thinks fit.  
 (ii) At any time before a sale or disposal as aforesaid, the Board may cancel the forfeiture on such terms as it thinks fit.
37. (i) A person whose shares have been forfeited shall cease to be a member in respect of the forfeited shares, but shall, notwithstanding the forfeiture, remain liable to pay to the company all monies which, at the date of forfeiture, were presently payable by him to the company in respect of the shares.  
 (ii) The liability of such person shall cease if and when the company shall have received payment in full of all such monies in respect of the shares.
38. (i) A duly verified declaration in writing that the declarant is a director, the manager or the secretary, of the company, and that a share in the company has been duly forfeited on a date stated in the declaration, shall be conclusive evidence of the facts therein stated as against all persons claiming to be entitled to the share;  
 (ii) The company may receive the consideration, if any, given for the share on any sale or disposal thereof and may execute a transfer of the share in favour of the person to whom the share is sold or disposed of;  
 (iii) The transferee shall thereupon be registered as the holder of the share; and  
 (iv) The transferee shall not be bound to see to the application of the purchase money, if any, nor shall his title to the share be affected by any irregularity or invalidity in the proceedings in reference to the forfeiture, sale or disposal of the share.
39. The provisions of these regulations as to forfeiture shall apply in the case of non payment of any sum which, by the terms of issue of a share, becomes payable at a fixed time, whether on account of the nominal value of the share or by way of premium, as if the same had been payable by virtue of a call duly made and notified.

ALTERATION OF CAPITAL

40. Subject to provisions of the Act the company may, from time to time, increase the share capital by such sum, to be divided into shares of such amount, as may be specified in the resolution.



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- (a) consolidate and divide all or any of its share capital into shares of larger amount than its existing shares;
- (b) convert all or any of its fully paid-up shares into stock, and reconvert that stock into fully paid-up shares of any denomination;
- (c) sub-divide its existing shares or any of them into shares of smaller amount than is fixed by the memorandum;
- (d) cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.

42. Where shares are converted into stock,-

- (a) the holders of stock may transfer the same or any part thereof in the same manner as, and subject to the same regulations under which, the shares from which the stock arose might before the conversion have been transferred, or as near thereto as circumstances admit:

Provided that the Board may, from time to time, fix the minimum amount of stock transferable, so, however, that such minimum shall not exceed the nominal amount of the shares from which the stock arose.

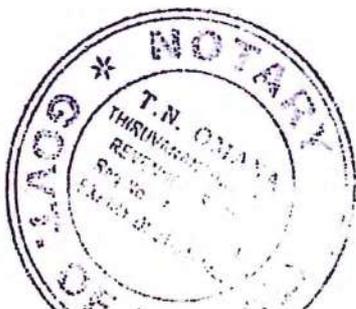
- (b) the holders of stock shall, according to the amount of stock held by them, have the same rights, privileges and advantages as regards dividends, voting at meetings of the company, and other matters, as if they held the shares from which the stock arose; but no such privilege or advantage (except participation in the dividends and profits of the company and in the assets on winding up) shall be conferred by an amount of stock which would not, if existing in shares, have conferred that privilege or advantage.
- (c) such of the regulations of the company as are applicable to paid-up shares shall apply to stock and the words "share" and "shareholder" in those regulations shall include "stock" and "stock-holder" respectively.

43. The company may, subject to provisions of the Act, reduce in any manner and with, and subject to, any incident authorised and consent required by law,-

- (a) its share capital;
- (b) any capital redemption reserve account; or
- (c) any share premium account.
- (d) any other reserve in the nature of share capital

#### CAPITALISATION OF PROFITS

44. (i) The company in general meeting may, upon the recommendation of the Board, resolve-



*T.N. Omana*  
 T.N. OMANA  
 Advocate & Notary  
 Thiruvananthapuram Revenue District  
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or to the credit of the profit and loss account, or otherwise available for distribution; and

- (b) that such sum be accordingly set free for distribution in the manner specified in clause (ii) amongst the members who would have been entitled thereto, if distributed by way of dividend and in the same proportions.
- (ii) The sum aforesaid shall not be paid in cash but shall be applied, subject to the provision contained in clause (iii), either in or towards-
- (a) paying up any amounts for the time being unpaid on any shares held by such members respectively;
  - (b) paying up in full, unissued shares of the company to be allotted and distributed, credited as fully paid-up, to and amongst such members in the proportions aforesaid;
  - (c) partly in the way specified in sub-clause (a) and partly in that specified in sub-clause (b);
  - (d) A securities premium account and a capital redemption reserve account may, for the purposes of this regulation, be applied in the paying up of unissued shares to be issued to members of the company as fully paid bonus shares;
  - (e) The Board shall give effect to the resolution passed by the company in pursuance of this regulation.
45. (i) Whenever such a resolution as aforesaid shall have been passed, the Board shall-
- (a) make all appropriations and applications of the undivided profits resolved to be capitalised thereby, and all allotments and issues of fully paid shares if any; and
  - (b) generally do all acts and things required to give effect thereto.
- (ii) The Board shall have power-
- (a) to make such provisions, by the issue of fractional certificates or by payment in cash or otherwise as it thinks fit, for the case of shares becoming distributable in fractions; and
  - (b) to authorise any person to enter, on behalf of all the members entitled thereto, into an agreement with the company providing for the allotment to them respectively, credited as fully paid-up, of any further shares to which they may be entitled upon such capitalisation, or as the case may require, for the payment by the company on their behalf, by the



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unpaid on their existing shares;

- (iii) Any agreement made under such authority shall be effective and binding on such members.

#### BUY-BACK OF SHARES

46. Notwithstanding anything contained in these articles but subject to the provisions of the Act or any other law for the time being in force, the company may purchase its own shares or other specified securities.

#### GENERAL MEETINGS

47. All General Meetings other than Annual General Meeting shall be called Extra ordinary General Meeting.  
48. The Board may, whenever it thinks fit, call an Extra ordinary General Meeting.

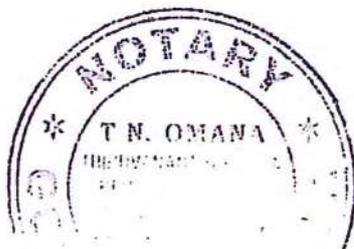
#### PROCEEDINGS AT GENERAL MEETINGS

49. (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.  
(ii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in the Act.
50. The chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.
51. 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.
52. 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.
53. On any business at any general meeting in the case of an equality of votes, whether on a show of hands, electronically or on a poll, the Chairman of the meeting shall have second or casting vote.

#### ADJOURNMENT OF MEETING

54. (i) The Chairperson may, suo motu and, in the absence of quorum shall 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.

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Advocate & Notary  
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- (iv) Save as aforesaid, and as provided in 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

55. 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 or through voting by electronic means, the voting rights of members shall be in proportion to his share in the paid-up equity share capital of the company.
56. A member may exercise his vote at a meeting by electronic means in accordance with the Act and shall vote only once.
57. (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.
- (ii) For this purpose, seniority shall be determined by the order in which the names stand in the register of members.
58. 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 or through voting by electronic means, by his nominee or other legal guardian, and any such nominee or guardian may, on a poll, vote by proxy.
59. Any business other than that upon which a poll has been demanded may be proceeded with, pending the taking of the poll.
60. 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.
61. (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.

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T.N. OMANA  
Advocate & Notary  
Thiruvananthapuram Revenue District  
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62. The instrument appointing a proxy and the power-of-attorney or other authority, if any, under which it is signed or a notarised 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 for taking of the poll; and in default the instrument of proxy shall not be treated as valid.

63. An instrument appointing a proxy shall be in the form as prescribed in the rules made under the Act.

64. 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.

#### BOARD OF DIRECTORS

65. (i) Until otherwise determined by a General Meeting of the Company and subject to the provisions of the Act, the number of Directors shall not be less than three nor more than fifteen.

(ii) The first Directors of the Company are:

1. Sudipta Bhattacharya (DIN: 06817333)
2. Karan Adani (DIN: 03088095)
3. Santosh Kumar Mohapatra (DIN: 00284280)

66. Subject to provisions of the Act, the Board shall have the power to determine the directors whose period of office is or is not liable to determination by retirement of directors by rotation.

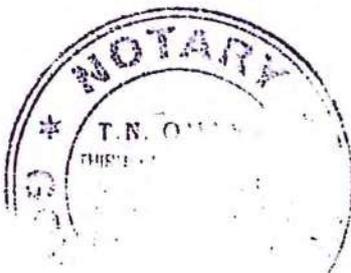
67. The same individual may, at the same time, be appointed as Chairman as well as Managing Director or Chief Executive Officer of the Company.

68. (i) The remuneration of the directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day-to-day.

(ii) In addition to the remuneration payable to them in pursuance of the Act, the directors may be paid all travelling, hotel and other expenses properly incurred by them-

(a) in attending and returning from meetings of the Board of Directors or any committee thereof or general meetings of the company; or

(b) in connection with the business of the company.



*T.N. Omana*

T.N. OMANA  
Advocate & District  
Thiruvananthapuram District

provisions of under the Act) make and vary such regulations as it may think fit respecting the keeping of any such register.

70. All cheques, promissory notes, drafts, hundis, bills of exchange and other negotiable instruments, and all receipts for monies paid to the company, shall be signed, drawn, accepted, endorsed or otherwise executed, as the case may be, by such person and in such manner as the Board shall from time to time by resolution determine.
71. Every director present at any meeting of the Board or of a committee thereof shall sign against his name in a book to be kept for that purpose.
72. (i) Subject to the provisions of the Act, the Board shall have power at any time, and from time to time, to appoint a person as an Additional Director, provided the number of the Directors and Additional Directors together shall not at any time exceed the maximum strength fixed for the Board by the articles.
- (ii) Such person shall hold office only up to the date of the next Annual General Meeting of the company but shall be eligible for appointment by the company as a Director at that meeting subject to the provisions of the Act.
73. (i) The Board may appoint an Alternate Director to act for a Director (herein after in this Article called "the Original Director") during his absence for a period not less than three months from India. No person shall be appointed as an Alternate Director for an Independent Director unless he is qualified to be appointed as an Independent Director under the provisions of the Act.
- (ii) An Alternate Director shall not hold office for a period longer than that permissible to the Original Director in whose place he has been appointed and shall vacate the office if and when Original Director returns to India.
- (iii) If the term of office of the Original Director is determined before he return to India the automatic reappointment of retiring directors in default of another appointment shall apply to the Original Director and not the Alternate Director.
74. (i) If the office of any director appointed by the Company in general meeting is vacated before his term of office expires in the normal course, the resulting casual vacancy may, be filled by the Board of Directors at a meeting of the Board.
- (ii) The Director so appointed shall hold office only upto the date till which the Director in whose place he is appointed would have held office if it had not been vacated.

#### NOMINEE DIRECTOR

75. Notwithstanding anything to the contrary contained in these Articles, so long as any moneys shall be owing by the Company to the any financial institutions, corporations, banks or such other financing entities, or so long as

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subscription or so long as any guarantee given by any of the aforesaid financial institutions or such other financing entities in respect of any financial obligation or commitment of the Company remains outstanding, then in that event any of the said financial institutions or such other financing entities shall, subject to an agreement in that behalf between it and the Company, have a right but not an obligation, to appoint one or more persons as Director(s) on the Board of Director as their nominee on the Board of Company. The aforesaid financial institutions or such other financing entities may at any time and from time to time remove the Nominee Director appointed by it and may in the event of such removal and also in case of the Nominee Director ceasing to hold office for any reason whatsoever including resignation or death, appoint other or others to fill up the vacancy. Such appointment or removal shall be made in writing by the relevant corporation and shall be delivered to the Company and the Company shall have no power to remove the Nominee Director from office. Each such Nominee Director shall be entitled to attend all General Meetings, Board Meetings and meetings of the Committee of which he is a member and he and the financial institutions or such other financing entities appointing him shall also be entitled to receive notice of all such meetings.

#### MANAGEMENT UNDER GENERAL CONTROL OF DIRECTORS

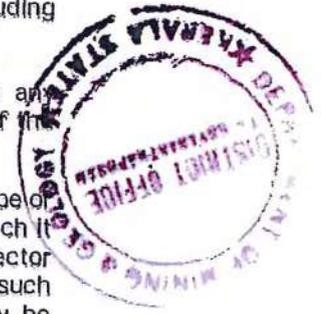
76. (i) The general control, management and supervision of the Company shall vest in the Board and the Board may exercise all such powers and do all such acts and things as the Company is by its Memorandum of Association or otherwise authorised except as are required to be exercised or done by the Company in General Meeting, but subject nevertheless to the provisions of the Act, and of these presents and to any regulations not being inconsistent with these presents from time to time made by the Company in General Meeting, provided that no such regulation shall invalidate any prior acts of the Directors which would have been valid if such regulation had not been made.
- (ii) Subject to the provisions of the Act, the Director may borrow, raise and secure the payment of such sum or sums in such manner and upon such terms and conditions in all respects as they may think fit and in particular by the issue of bonds, perpetual or redeemable, debenture or debenture-stock or any mortgage or charge or other security on the undertaking of the whole of any part of the property of the Company (both present and future) including its uncalled capital for the time being.
- (iii) Subject to the provisions of the Act, the Company may enter into any contract, arrangement or agreement in which a Director or Directors of the Company are, in any manner, interested.
- (iv) A Director, Managing Director, officer or employee of the Company may become a Director, of any company promoted by the Company or in which it may be interested as a vendor, member or otherwise, and no such Director shall be accountable for any benefits received as Director or member of such company except to the extent and under the circumstances as may be provided in the Act.

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*T.N. Omana*

T.N. OMANA  
Advocate & Notary  
Thiruvananthapuram Revenue District



subject to the provisions of the Act execute or cause to be executed any mortgage, charge or security over or affecting the whole or any part of the assets of the Company by way of Indemnity to secure the Directors or persons so becoming liable as aforesaid from any loss in respect of such liability.

- (vi) A Director may resign from his office upon giving notice in writing to the Company.

#### PROCEEDINGS OF THE BOARD

77. (i) The Board of Directors may meet for the conduct of business, adjourn and otherwise regulate its meetings, as it thinks fit.
- (ii) A Director may, and the manager or secretary on the requisition of a director shall, at any time, summon a meeting of the Board.
78. (i) Save as otherwise expressly provided in the Act, questions arising at any meeting of the Board shall be decided by a majority of votes.
- (ii) In case of an equality of votes, the Chairperson of the Board shall have a second or casting vote.
79. The continuing Directors may act notwithstanding any vacancy in the Board; but, if and so long as their number is reduced below the quorum fixed by the Act for a meeting of the Board, the continuing directors or director may act for the purpose of increasing the number of directors to that fixed for the quorum, or of summoning a general meeting of the company, but for no other purpose.
80. (i) The Board may elect a Chairperson of its meetings and determine the period for which he is to hold office.
- (ii) If no such Chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting, the directors present may choose one of their number to be Chairperson of the meeting.
81. (i) The Board may, subject to the provisions of the Act, delegate any of its powers to committees consisting of such member or members of its body as it thinks fit.
- (ii) Any committee so formed shall, in the exercise of the powers so delegated, conform to any regulations that may be imposed on it by the Board.
82. (i) A committee may elect a Chairperson of its meetings.
- (ii) If no such Chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting,



*T. N. Kumar*

T. N. Kumar  
 Secretary  
 Revenue District



officer so appointed may be removed by means of a resolution of the Board;

- (ii) A Director may be appointed as Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer.

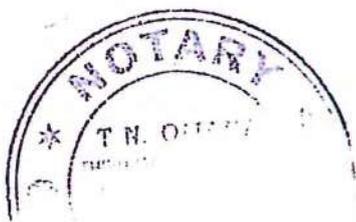
A provision of the Act or these regulations requiring or authorizing a thing to be done by or to a Director and Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer shall not be satisfied by its being done by or to the same person acting both as Director and as, or in place of, Chief Executive officer, Manager, Company secretary or Chief Financial Officer.

#### THE SEAL

88. (i) The Board shall provide for the safe custody of the seal.
- (ii) The seal of the company shall not be affixed to any instrument except by the authority of a resolution of the Board or of a committee of the Board authorised by it in that behalf, and except in the presence of at least one Director or of the Manager or secretary or such other person as the Board or Committee may appoint for the purpose; and the Director or Manager or Secretary or other person aforesaid shall sign every instrument to which the seal of the company is so affixed in his /her presence.

#### DIVIDENDS AND RESERVE

89. The company in general meeting may declare dividends, but no dividend shall exceed the amount recommended by the Board, but the Company in a general meeting may declare a lesser dividend.
90. Subject to the provisions of the Act, the Board may from time to time pay to the members such interim dividends of such amount on such class of shares as appear to it to be justified by the profits of the company.
91. (i) The Board may, before recommending any dividend, set aside out of the profits of the company such sums as it thinks fit as a reserve or reserves which shall, at the discretion of the Board, be applicable for any purpose to which the profits of the company may be properly applied, including provision for meeting contingencies or for equalising dividends; and pending such application, may, at the like discretion, either be employed in the business of the company or be invested in such investments (other than shares of the company) as the Board may, from time to time, thinks fit.
- (ii) The Board may also carry forward any profits which it may consider necessary not to divide, without setting them aside as a reserve.
92. (i) Subject to the rights of persons, if any, entitled to shares with special rights as to dividends, all dividends shall be declared and paid according to the amounts paid or credited as paid on the shares in respect whereof the



*T.N. Omana*  
**T.N. OMANA**  
 Advocate & Notary  
 Bangalore District

amounts of the shares.

- (ii) No amount paid or credited as paid on a share in advance of calls shall be treated for the purposes of this Article as paid on the share.
- (iii) All dividends shall be apportioned and paid proportionately to the amounts paid or credited as paid on the shares during any portion or portions of the period in respect of which the dividend is paid; but if any share is issued on terms providing that it shall rank for dividend as from a particular date such share shall rank for dividend accordingly.
93. The Board may deduct from any dividend payable to any member all sums of money, if any, presently payable by him to the company on account of calls or otherwise in relation to the shares of the company.
94. (i) Any dividend, interest or other monies payable in cash in respect of shares may be paid by electronic mode or by cheque or warrant sent through the post directed to the registered address of the holder or, in the case of joint holders, to the registered address of that one of the joint holders who is first named on the register or members, or to such person and to such address as the holder or joint holders may in writing direct.
- (ii) Every such cheque or warrant shall be made payable to the order of the person to whom it is sent.
- (iii) Payment in any way whatsoever shall be made at the risk of the person entitled to the money paid or to be paid. The Company will not be responsible for any payment which is lost or delayed. The Company will be deemed to having made a payment and received a good discharge for it if a payment using any of the foregoing permissible means is made.
95. Any one of two or more joint holders of a share may give effective receipts for any dividends, bonuses or other monies payable in respect of such share.
96. Notice of any dividend that may have been declared shall be given to the persons entitled to share therein in the manner mentioned in the Act.
97. The waiver in whole or in part of any dividend on any share by any document shall be effective only if such document is signed by the member (or the person entitled to the share in consequence of death or bankruptcy of the holder) and delivered to the Company and if or to the extent that the same is accepted as such or acted upon by the Board.
98. No dividend shall bear interest against the company.

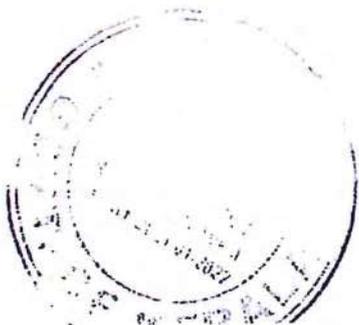
#### ACCOUNTS

99. (i) The books of accounts and books and papers of the Company, or any of them, shall be open to the inspection of Directors in accordance with the applicable



*T.N. Omana*

**T.N. OMANA**  
 Advocate & Notary  
 Thiruvananthapuram Revenue District  
 Kerala State South India



- (ii) No member (not being a director) shall have any right of inspecting any account or book or document of the company except as conferred by law or authorised by the Board or by the company in general meeting.

WINDING UP

100. Subject to the applicable provisions of the Act and rules made thereunder-
- (i) If the company shall be wound up, the liquidator may, with the sanction of a special resolution of the company and any other sanction required by the Act, divide amongst the members, in specie or kind, the whole or any part of the assets of the company, whether they shall consist of property of the same kind or not.
  - (ii) For the purpose aforesaid, the liquidator may set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members or different classes of members.
  - (iii) The liquidator may, with the like sanction, vest the whole or any part of such assets in trustees upon such trusts for the benefit of the contributories if he considers necessary, but so that no member shall be compelled to accept any shares or other securities whereon there is any liability.

INDEMNITY

101. 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.

GENERAL POWER

102. Wherever in the Act, it has been provided that the Company shall have any right, privilege or authority or that the Company could carry out any transaction only if the Company is authorised by its Articles, then in that case this Article authorises and empowers the Company to have such rights, privileges or authorities and to carry such transactions as have been permitted by the Act, without there being any specific Article in that behalf herein provided.



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*T.N. Omana*  
13-6-2016

**T.N. OMANA**  
Advocate & Notary  
Thiruvananthapuram Revenue District  
Kerala State South India

Photo	Sr. No.	Name, addresses, descriptions, occupation and signatures of the subscribers	Signature, names, addresses, descriptions and occupation of witnesses
	1	For and on behalf of M/s Adani Ports and Special Economic Zone Limited (CIN L63090GJ1998PLC034182) having its registered office at Adani House, Nr. Mithakhali Six Roads, Navrangpura, Ahmedabad - 380009 through its authorised person vide Board Resolution passed on 1 <sup>st</sup> May, 2015. Dipti Shah W/o Yogesh Shah residing at 601, Shalraj Tower, Nehru Park, Vastrapur, Ahmedabad-380015 Occupation: Service Sd/-	<p>Common witness for all 7 subscribers I, witness to subscribers who have subscribed and signed in my presence, Further, I have verified his/her/their identify details for their identification and satisfied myself of their identification particulars as filled in</p> <p>Hardik Sanghvi S/o. Shri Harshadkumar Sanghvi residing at 15, Parshwanathnagar Society, Nr. Police Chowki, Naranpura Char Rasta, Ahmedabad-380013, Occupation: Service Company Secretary FCS No. 7247 Sd/-</p>
	2	Malay Mahadevia [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Dr. Ramesh Mahadevia residing at 12-B, Gyankunj Society, Opp. St. Xavier's College, Navrangpura, Ahmedabad - 380009, Occupation: Service Sd/-	
	3	Ravi Bhamidipaty [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Srirama Murthy Bhamidipaty residing at 'Amrut' 26, Amrashrish Bungalows, Opp. Chimanbhai Patel Institute, Bh. Shapath 4, Prahaladnagar, Ahmedabad-380058 Occupation: Service Sd/-	
	4	Azad Kumar Somani [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Jwala Prasad Somani residing at 84, Star Apartments, Karnavatipagaraka Bazar, Ahmedabad-380001, Occupation: Service Sd/-	
	5	Manoj Kumar Chanduka [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Biswanath Lal Chanduka residing at B-401, Panchamrut Apartments, Opp. Nehru Foundation, Bodakdev, Ahmedabad-380054, Occupation: Service Sd/-	
	6	Anish Ashokkumar Shah [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Ashokkumar Amrutlal Shah residing at B-12, Keshav Apartments, Near Memnagar Talavdi, Memnagar, Ahmedabad-380052, Occupation: Service Sd/-	
	7	Kamlesh Bhagia [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Prabhudas Bhagia residing at A-203, Samarthy Residency, Nr. P. R. Patel School, D'cabin, Kalligam, Sabarmati, Ahmedabad-380019, Occupation: Service Sd/-	

Place: Ahmedabad

Dated: 22.07.2015



ATTESTED  
VERIFIED AND CERTIFIED  
THAT THIS IS THE TRUE COPY  
OF THE ORIGINAL

*[Handwritten Signature]*  
13-7-2015

Notary  
Thiruvananthapuram Revenue District  
Kerala State South India





EXTRACT OF MINUTES OF MEETING OF BOARD OF DIRECTORS OF ADANI VIZHINJAM PORT PRIVATE LIMITED HELD ON 30<sup>TH</sup> APRIL, 2018 AT THE REGISTERED OFFICE OF THE COMPANY

"RESOLVED THAT Mr. Rajesh Kumar Jha, Managing Director of the Company be delegated following powers:

- 1) To represent, negotiate and settle with Central Government authorities, State Government authorities, local bodies and other concerned authorities in respect of customs, central excise, Income-tax, service tax, sales tax, licensing and other related matters in connection with the business of the Company;
- 2) To represent and appear on behalf of the Company in any Court, Tribunal or Authority under different laws and rules, to appoint advocates, pleaders or specialists to represent the Company;
- 3) To sub-delegate and/or withdraw any of powers to any officer or officers working in the Company for the aforesaid authorities."

"RESOLVED FURTHER THAT Mr. Rajesh Kumar Jha, Managing Director of the Company be and is hereby authorized to sign deeds, documents, papers, MoUs, undertakings, execute agreements, to make correspondence, to represent on behalf of the Company and to do all such acts, deeds and things as may be necessary, desirable or expedient in connection therewith."

**Certified True Copy**  
For Adani Vizhinjam Port Private Limited

  
Daljeet Singh Sanda  
Company Secretary



  
**KANTHARAJ.K.**  
RQP/GOA/130/2000/A

Adani Vizhinjam Port Pvt Ltd  
Adani House  
Nr Mithakhali Six Roads, Navrangpura  
Ahmedabad 380 009  
Gujarat, India

Tel +91 79 2698 8888  
Fax +91 79 2698 8800  
info@adani.com  
www.adani.com  
CIN: U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Six Roads, Navrangpura, Ahmedabad 380 009, Gujarat, India



INCOME TAX DEPARTMENT  
 RAJESH KUMAR JHA  
 KRISHNA CHANDRA JHA  
 03/11/1965  
 Permanent Account Number  
 AAXPJ8308B  
 Signature



GOVT. OF INDI

UNIQUE IDENTIFICATION AUTHORITY OF INDIA

पता:  
 श्रीलोक: कुप्पा चंद्र झा,  
 हासन के एन 7-एच 8,  
 निशान्ट विहार, आशियान्ट  
 ट्रेड सेंटर के पास, जमशेदपुर,  
 आदित्यपुर, तराईकेला-  
 बरसात,  
 झारखण्ड - 831013

Address:  
 S/O: Krishna Chandra Jha,  
 House No-H 7-H 8, Nishant  
 Vihar, Near Aashiana Trade  
 Centre, Jamshedpur, Adityapur,  
 Sarakhela-Riharsawan,  
 Jharkhand - 831013

1947 1800 200 1947 help@uidai.gov.in www.uidai.gov.in P.O. Box No. 1947, Bangalore-560 091

*Rajesh*



भारत सरकार  
 GOVERNMENT OF INDIA

राजेश कुमार झा  
 Rajesh Kumar Jha  
 जन्म तिथि/ DOB: 03/11/1965  
 पुरुष / MALE

2712 6816 7724

मेरा आधार, मेरी पहचान



*Rajesh*

KANTHARAJ K.  
RQP/GOA/130/2000/A





കേരളം KERALA

BV 871067

**AFFIDAVIT**

I, **RAJESH JHA**, Managing Director & CEO, Adani Vizhinjam Port Private Limited, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram, Registration No. U61200GJ2015PTC083954 of Company, having registered office at Adani House, Nr. Mithakali Six Roads, Navarangpura, Ahmedabad -380009, Gujarat, India do hereby solemnly affirm and state as follows:

The Company have filed the upto, date income tax returns, paid the income tax assessed thereon and paid the income tax on the basis of self assessment as per the provisions contained in the Income Tax Act 1961.

What is stated above are true to the best of my knowledge and belief.

Dated this the 6<sup>th</sup> day of August 2018



Solemnly affirmed on this day Wednesday, the 6<sup>th</sup> day of August 2018 at Trivandrum, Kerala, India.

**JAHANGEER. A.**  
 ADVOCATE & DISTRICT NOTARY  
 'TARGET LEGAL CONSULTANTS'  
 VANCHIYOOR, TRIVANDRUM DIST.  
 KERALA STATE  
 MOBILE: 9779257300

**N. BALAKRISHNAN NAIR**  
 Venuor, Vanchiyoor  
 Thiruvananthapuram

NO-32059  
 6/8/18

*Handwritten signature*

27 JUL 2018

**KANTHARAJ.K.**  
 RQP/GOA/130/2000/A



## GOVERNMENT OF KERALA

## Abstract

Vizhinjam International Deep water Multipurpose Seaport Project - Bid submitted by M/s Adani Ports & Special Economic Zone Ltd - Approved - Orders issued.

## Fisheries &amp; Ports (E) Department

G.O(MS) No.35/2015/F&PD. Dated, Thiruvananthapuram, 13-07-2015.

- Read:-
- 1 G.O(MS) 69/2013/F&PD dated 29-11-2013
  - 2 G.O(MS) 21/2014/F&PD dated 01-03-2014
  - 3 G.O(MS) 26/2014/F&PD dated 31-03-2014
  - 4 G.O(MS) 28/2014/F&PD dated 22-04-2014
  - 5 Letters No. VISL/PPP/2014/420 dated 02-05-2015, VISL/PPP/2014/471 dated 14-05-2015, VISL/PPP/2014/497 dated 26-05-2015, VISL/2014-15/GOM/511 dated 28-05-2015, VISL/2014-15/GOM/519 dated 29-05-2015 of Managing Director, Vizhinjam International Seaport Ltd.
  - 6 G.O(MS)No.31/2015/F&PD dated 12-06-2015

## ORDER

As per Government Order read as 1st paper above Government have restructured Vizhinjam International Deep water Multipurpose Seaport Project as suggested by the Planning Board for availing Viability Gap Funding from Government of India. Based on the above order, Vizhinjam International Seaport Ltd issued Request for Qualification (RFQ).

Subsequently as per Government Order read as 2nd paper above, the Engineering Procurement Construction work for the construction of Breakwater and fishing harbour was included as Funded Works in the Public Private Partnership tender for the Vizhinjam International Deep water Multipurpose Seaport Project for which State would provide the funding.

As per Government Order read as 3rd paper above, all the 5 applicants who submitted the Request for Qualification were shortlisted, strictly based on the financial and technical qualification set in the Request for Qualification document. The Request For Proposal document in respect of Vizhinjam International Deep water Multipurpose Seaport Project was approved by Government vide Government Order read as 4th paper above and authorized Vizhinjam International Seaport Ltd



*Kantharaj K.*  
KANTHARAJ.K.  
RQP/GOA/130/2000/A

to issue the same to shortlisted applicants on behalf of Government of Kerala. Three bidders purchased the bid documents.

The Bid due date for the project was scheduled at 05:00 PM, 24<sup>th</sup> April 2015. Up to the closing time of bid submission, only one qualified bidder M/s Adani Ports & Special Economic Zone Limited submitted its bid. The Bid Opening Committee opened the bid at the scheduled bid opening time of 5:30 PM. The bids were evaluated by the Project Consultants. The bid documents / submissions were found to be in conformity with the Request For Proposal requirement and were hence found responsive. The authenticity of the bid bond submitted by the bidder was also confirmed with the bank which issued the bond.

The grant sought by the bidder M/s Adani Ports & Special Economic Zone Limited is INR 1,635 crore. This works out to around 39.985% of the Total Project Cost as mentioned in the Draft Concession Agreement (INR 4,089 crore) and hence is within the range permitted under the Viability Gap Funding (VGF) guidelines. The amount is within the range of 40.7% (Rs.1664 Cr) estimated in the revised Feasibility Report also.

Managing Director, Vizhinjam International Seaport Ltd, as per letter read as 5th paper above reported that the Minutes of bid opening meeting, bid evaluation report submitted by Transaction Advisors M/s Ernst & Young and Legal Consultant M/s HSA, Letter from Bank confirming the authenticity of the bid bond were submitted before the 23<sup>rd</sup> Meeting of the Empowered Committee.

The Empowered Committee noted that , in the current model, the cash outflow with respect to this particular concession from the State Government is limited to Rs. 2280.20 Cr (Rupees Two thousand two hundred and Eighty Crore Twenty Lakh only). This comprises of Rs.1463 Crore towards cost of funded works and Rs. 817.2 Crore towards Government of Kerala contribution of VGF. The cost of Funded Work will be adjusted for the Whole sale Price Index variation between the Bid Due Date and Appointed Date as per the provisions of DCA. The Committee noted that the current model offers considerable saving to State Government when compared to the earlier model on current price level.

Government vide orders read as 6<sup>th</sup> paper, ratified the amendment made by the Empowered Committee in the Draft Concession Agreement regarding the revision of project cost to Rs.4089 crore and cost of funded works to Rs.1463 crore. Empowered Committee also noted that no restrictive changes suiting any particular applicant or bidder were made during the selection process in respect of Project



Structure, DCA, qualification criteria and specification. The committee further noted that the certainty of cash outflow, potential savings and other merits of the current model. The Committee also felt that the chances of getting a better offer in a future bid is negligible considering the traffic risk involved, high investment needed and depressed market Internationally and Nationally. Therefore it is a situation where in the project may not materialise in future, if it does not materialise now ("Now or Never") This is particularly important in the light of the fact that this is the fourth attempt to bid the project and in the context of the development of the proposed nearby competing port locations.

The Committee after detailed discussions and based on the above, decided to recommend to the Board of Directors of VISL and Government of Kerala to accept the bid submitted by M/s Adani Ports and Special Economic Zone Ltd and to issue the Letter of Award (LOA) to M/s Adani Ports and Special Economic Zone Ltd.

Managing Director, Vizhinjam International Seaport Ltd in his letter dated 14-05-2015 has further reported that the recommendations of the Empowered Committee were placed before the Board of Directors of VISL at its 37th Meeting held on 13th May 2015. The decisions of Empowered Committee were discussed by Board of Directors and approved the above decisions and recommended Government of Kerala to approve the following:

- i) Approve and accept the bid submitted by M/s Adani Ports and Special Economic Zone Ltd for a grant of Rs.1635 crore (Rupees one thousand six hundred and thirty five crore)
- ii) Issue Letter of Award to M/s Adani Ports and Special Economic Zone Ltd.

Managing Director, Vizhinjam International Seaport Ltd has therefore requested Government to approve and accept the bid submitted by M/s Adani Ports and Special Economic Zone Ltd and to issue Letter of Award to the firm.

Government have examined the matter in detail. Vizhinjam International Deep water Multipurpose Seaport Project is a flagship project of the State. It is found that Development of this port is of great national importance considering the fact that the major share of Indian transshipment is currently handled by foreign ports of Colombo, Singapore and Dubai. The Project would shift these operations to India and thereby generate considerable saving in foreign exchange to the national economy. The port has the potential to become the transshipment hub serving the entire Indian Coast. The development of port and its allied facilities would



significantly contribute to the large scale growth of Industry and Economy in Kerala, besides generating employment opportunities. Retendering of the project will lead to further time delay and cost escalation resulting in loss to the State exchequer. Besides chances of getting a better offer in a future bid is negligible considering the traffic risk involved, high investment needed and depressed market Internationally and Nationally.

In the circumstance, Government are pleased to approve the bid submitted by M/s Adani Ports and Special Economic Zone Ltd for a grant of Rs.1635 crore (817.8 crores from Government of India and 817.2 crores from Government of Kerala ) for the development of Vizhinjam International Deep water Multipurpose Seaport Project. Accordingly, Letter of Award will be issued to M/s Adani Ports and Special Economic Zone Ltd

(By Order of the Governor)

**JAMES VARGHESE**  
Principal Secretary to Government

To

- 1) The Managing Director, Vizhinjam International Seaport Ltd, Thiruvananthapuram,
- 2) The Principal Accountant General (Audit), Kerala
- 3) The Accountant General (A&E), Kerala, Thiruvananthapuram.
- 4) The General Administration (SC) Department (Vide item No. 6787 dated 20-05-2013 and item No. 6885 dated 10-06-2015)
- 5) The Finance Department
- 6) The Law Department
- 7) SF/OC

Forwarded/By order

*[Signature]*  
Section Officer





GOVERNMENT OF KERALA

CONCESSION AGREEMENT

for

Development and Operation Of

Vizhinjam International Deepwater Multipurpose  
Seaport

between

Government of Kerala

and

Adani Vizhinjam Port Private Limited.

August 17, 2015





കേരളം കേരള KERALA

D 298990

**CONCESSION AGREEMENT**

THIS AGREEMENT is entered into on this the 17<sup>th</sup> day of August, 2015

BETWEEN

1 The Governor of Kerala, represented by the Principal Secretary, Ports, Government of Kerala and having its principal offices at Government Secretariat, Thiruvananthapuram - 695 001, Kerala, India (hereinafter referred to as the "Authority" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of One Part;

AND

2 Adani Vizhinjam Port Private Limited, a company incorporated under the provisions of the Companies Act, 2013 and having its registered office at Adani House, Nr. Mithakhali Six Roads, Navrangpura, Ahmedabad - 380009, Gujarat, India (hereinafter referred to as the "Concessionaire" which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns and substitutes) of the Other Part.

GL No. 15554 Value Rs. 500  
 Issued to 121815  
 Adani Vizhinjam port  
 Principal Secretary, LSG, Ports & Navigation, Government of Kerala, Secretariat, Thiruvandrum  
 Adani Vizhinjam Port Private Limited  
 Department of Mining & Geology, District Office, Thiruvananthapuram  
 Adani Vizhinjam Port Private Limited, Trivandrum



SCHEDULE - E  
(See Clause 4.1.3)

APPLICABLE PERMITS

1 Applicable Permits

- 1.1 The Concessionaire shall obtain, as required under Applicable Laws, the following Applicable Permits on or before the Appointed Date, save and except to the extent of a waiver granted by the Authority in accordance with Clause 4.1.3 of the Agreement:

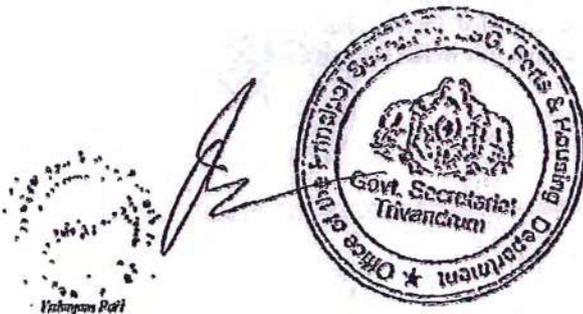
Part-I

- (a) Permission of the State Government for extraction of boulders from quarry; and  
(b) Permission of the Pollution Control Board for installation of crushers.

Part-II

- (a) Permission of the State Government for cutting of trees;  
(b) Notification in the Official Gazette appointing the Port as a customs port; and  
(c) Any other permits or clearances required under Applicable Laws.

- 1.2 Unless otherwise specified in this Agreement, Applicable Permits, as required, relating to environmental protection and conservation of the Licensed Premises, excluding Port Estate Development, shall have been procured by the Authority as a Condition Precedent.



ARTICLE I  
CONDITIONS PRECEDENT

4.1 Conditions Precedent

4.1.1 Save and except as expressly provided in Articles 4, 5, 6, 7, 8, 9, 10, 24, 35, 45 and 48, or unless the context otherwise requires, the respective rights and obligations of the Parties under this Agreement shall be subject to the satisfaction in full of the conditions precedent specified in this Clause 4.1 (the "Conditions Precedent"). Provided, however, that a Party may grant waiver from satisfaction of any Condition Precedent by the other Party in accordance with the provisions of Clauses 4.1.2 or 4.1.3, as the case may be, and to the extent of such waiver, that Condition Precedent shall be deemed to be fulfilled for the purposes of this Clause 4.1.1.

4.1.2 The Concessionaire may, upon providing the Performance Security to the Authority in accordance with Article 9, at any time after 90 (ninety) days from the date of this Agreement or on an earlier day acceptable to the Authority, by notice require the Authority to satisfy any or all of the Conditions Precedent set forth in this Clause 4.1.2 within a period of 30 (thirty) days of the notice, or such longer period not exceeding 60 (sixty) days as may be specified therein, and the Conditions Precedent required to be satisfied by the Authority prior to the Appointed Date shall be deemed to have been fulfilled when the Authority shall have:

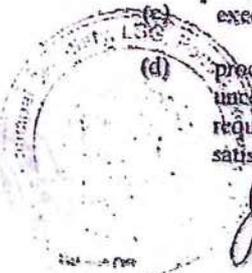
- (a) procured for the Concessionaire the Right of Way to the Site in accordance with the provisions of Clauses 10.3.1 and 10.3.2; and
- (b) procured all Applicable Permits relating to environmental protection and conservation of the Site.

Provided that upon request in writing by the Authority, the Concessionaire may, in its discretion, grant extension of time, not exceeding 180 (one hundred and eighty) days, for fulfilment of any of the Conditions Precedent set forth in this Clause 4.1.2.

4.1.3 The Conditions Precedent required to be satisfied by the Concessionaire within a period of 270 (two hundred and seventy) days from the date of this Agreement shall be deemed to have been fulfilled when the Concessionaire shall have:

- (a) provided Performance Security to the Authority;
- (b) executed and procured execution of the Escrow Agreement;
- (c) executed and procured execution of the Substitution Agreement;

(d) procured all the Applicable Permits specified in Part-I of Schedule-E unconditionally, or if subject to conditions, then all such conditions required to be fulfilled by the date specified therein shall have been satisfied in full and such Applicable Permits are in full force.



IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DAY, MONTH AND YEAR FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

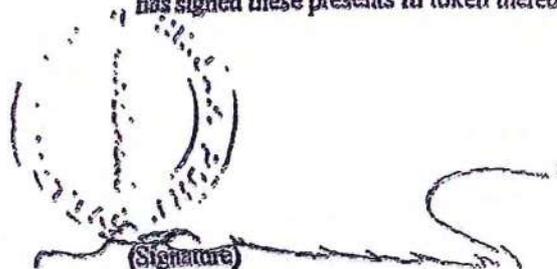
For and on behalf of the AUTHORITY by:



(Signature)

Mr. James Varghese IAS,  
Principal Secretary to Government  
Department of Ports  
Government of Kerala  
Government Secretariat,  
Thiruvananthapuram - 695001,  
Kerala, India  
Fax No. - +91-471-2320434  
e-mail address- prsecy@lsqd.kerala.gov.in

THE COMMON SEAL OF CONCESSIONAIRE has been affixed pursuant to the resolution passed by the Board of Directors of the Concessionaire at its meeting held on the 27<sup>th</sup> day of July, 2015 hereunto affixed in the presence of Mr. Santosh Kumar Mohapatra, Director, who has signed these presents in token thereof:



(Signature)

Mr. Santosh Kumar Mohapatra  
Director  
Adani Vizhinjam Port Private Limited,  
Adani House, Near Mithakali Six Roads,  
Navrangpura,  
Ahmedabad - 380 009,  
Gujarat, India Fax No. - +91-79-25555024  
(e-mail address  
Santosh.Mohapatra@adani.com)

In the presence of:



1. Mr. A S Suresh Babu  
Managing Director & CEO  
Vizhinjam International Seaport Ltd.  
1<sup>st</sup> Floor, Vipanchika Tower  
Thiruvananthapuram P.O.  
Thiruvananthapuram - 695014




2. Mr. Sumeet Agrawal  
Dy. GM - Business Development  
Adani Ports and Special Economic Zone  
Ltd., Adani House, Nr. Mithakali Circle  
Navrangpura  
Ahmedabad - 380009  
Gujarat, India



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provided the Financing Agreement and L...  
 three true copies thereof, duly attested by a Director of the  
 Concessionaire;

- (f) delivered to the Authority 3 (three) true copies of the Financial Package and the Financial Model, duly attested by a Director of the Concessionaire, along with 3 (three) soft copies of the Financial Model in MS Excel version or any substitute thereof, which is acceptable to the Senior Lenders;
- (g) delivered to the Authority, confirmation of the correctness of the representations and warranties set forth in Sub clauses (k), (l) and (m) of Clause 7.1 of this Agreement; and
- (h) delivered to the Authority a legal opinion from the legal counsel of the Concessionaire with respect to the authority of the Concessionaire to enter into this Agreement and the enforceability of the provisions thereof;

Provided that upon request in writing by the Concessionaire, the Authority may, in its discretion, waive any of the Conditions Precedent set forth in this Clause 4.1.3. For the avoidance of doubt, the Authority may, in its sole discretion, grant any waiver hereunder with such conditions as it may deem fit.

- 4.1.4 Each Party shall make all reasonable endeavours to satisfy the Conditions Precedent within the time stipulated and shall provide the other Party with such reasonable cooperation as may be required to assist that Party in satisfying the Conditions Precedent for which that Party is responsible.
- 4.1.5 The Parties shall notify each other in writing at least once a month on the progress made in satisfying the Conditions Precedent. Each Party shall promptly inform the other Party when any Condition Precedent for which it is responsible has been satisfied.

**4.2 Damages for delay by the Authority**

In the event that (i) the Authority does not procure fulfilment or waiver of any or all of the Conditions Precedent set forth in Clause 4.1.2 within the period specified in respect thereof, and (ii) the delay has not occurred as a result of breach of this Agreement by the Concessionaire or due to Force Majeure, the Authority shall pay to the Concessionaire Damages in an amount calculated at the rate of 0.1% (zero point one per cent) of the Performance Security for each day's delay until the fulfilment of such Conditions Precedent, subject to a maximum amount equal to the Bid Security.

**4.3 Damages for delay by the Concessionaire**

In the event that (i) the Concessionaire does not procure fulfilment or waiver of any or all of the Conditions Precedent set forth in Clause 4.1.3 within the period specified in that Clause, and (ii) the delay has not occurred as a result of failure to fulfil the obligations under Clause 4.1.2 or other breach of this Agreement by the Authority, or due to Force Majeure, the Concessionaire shall pay to the Authority



Damages in an amount equivalent to the rate of 3% (three per cent) of the Performance Security for each day's delay until the fulfilment of such Conditions Precedent, subject to a maximum amount equal to the Bid Security, and upon reaching such maximum, the Authority may, in its sole discretion and subject to the provisions of Clause 9.2, terminate the Agreement. Provided that in the event of delay by the Authority in procuring fulfilment of the Conditions Precedent specified in Clause 4.1.2, no Damages shall be due or payable by the Concessionaire under this Clause 4.3 until the date on which the Authority shall have procured fulfilment of the Conditions Precedent specified in Clause 4.1.2.

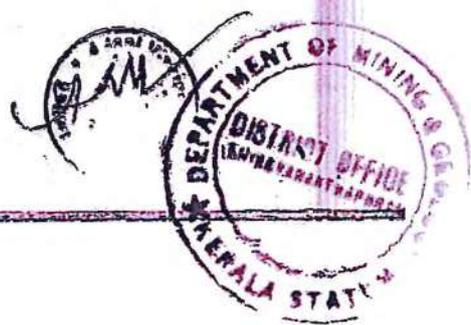
**4.4 Commencement of Concession Period**

The date on which Financial Close is achieved and all the Conditions Precedent specified in Clause 4.1 are satisfied or waived, as the case may be, shall be the Appointed Date which shall be the date of commencement of the Concession Period. For the avoidance of doubt, the Parties agree that the Concessionaire may, upon occurrence of the Appointed Date hereunder, by notice convey the particulars thereof to the Authority, and shall thereupon be entitled to commence construction on the Project.

**4.5 Deemed Termination upon delay**

Without prejudice to the provisions of Clauses 4.2 and 4.3, and subject to the provisions of Clause 9.2, the Parties expressly agree that in the event the Appointed Date does not occur, for any reason whatsoever, before the 1<sup>st</sup> (first) anniversary of the date of this Agreement or the extended period provided in accordance with this Agreement, all rights, privileges, claims and entitlements of the Concessionaire under or arising out of this Agreement shall be deemed to have been waived by, and to have ceased with the concurrence of the Concessionaire, and the Concession Agreement shall be deemed to have been terminated by mutual agreement of the Parties. Provided, however, that in the event the delay in occurrence of the Appointed Date is for reasons attributable to the Concessionaire, the Performance Security of the Concessionaire shall be unashed and appropriated by the Authority as Damages thereof.

  
\_\_\_\_\_  
Authority





No.310399/E1/2015/F&PD

GOVERNMENT OF KERALA

Fisheries & Ports (E) Department  
Thiruvananthapuram

Dated: 02-12-2015

From

Principal Secretary to Government

To

Sri. Santosh Kumar Mohapatra  
Director and Chief Executive Officer,  
Adani Vizhinjam Port Private Limited,  
Adani House, Near Mithakhali Circle,  
Navrangpura, Ahmedabad- 380 009,  
Gujarat, India



Dear Sir,

**Sub: Waiver of Conditions Precedent**

1. Please refer to your letter dated 12 October, 2015 requesting for waiver of certain Conditions Precedent set out in Clause 4.1.3 of the Concession Agreement.
2. We refer to the Concession Agreement dated 17 August, 2015 between the Concessionaire and the Authority. Please note that the terms defined in the Concession Agreement shall have the same meaning in this letter unless otherwise defined in this letter. We also refer to Clause 4.1 (*Conditions Precedent*) of the Concession Agreement.
3. We confirm that, subject to the Concessionaire signing and returning a copy of this letter to us, we agree to waive the following Conditions Precedent as requested by you, but subject to the conditions specified in this letter:
  - (a) Requested waiver of the Condition Precedent specified in Clause 4.1.3(b) in respect of execution of the Escrow Agreement, is granted, subject to the condition that the Escrow Agreement shall be executed by the Concessionaire, the Escrow Bank and the Authority in the first instance no later than the Appointed Date, and the Senior Lenders through the Lenders' Representative execute such Escrow Agreement no later than 16<sup>th</sup> May 2016;

- (b) Requested waiver of the Condition Precedent specified in Clause 4.1.3(c) is granted, subject to fulfilment of the said condition no later than 16<sup>th</sup> May 2016;
- (c) Requested waiver of the Conditions Precedent specified in Clause 4.1.3(d) in respect of (i) permission of State Government for extraction of boulders from quarries and (ii) permission of the Pollution Control Board for installation of crushers, is granted, subject to the condition that these permissions will be obtained by the Concessionaire as and when required in accordance with Applicable Laws;
- (d) Requested waiver of the Condition Precedent specified in Clause 4.1.3(e) is granted, subject to fulfilment of the said condition no later than 16<sup>th</sup> May 2016; and
- (e) Requested waiver of the Condition Precedent specified in Clause 4.1.3(f) is granted, subject to fulfilment of the said condition no later than 16<sup>th</sup> May 2016.
4. In consideration of the waivers contained in this letter, the Concessionaire shall agree and undertake that:
- (a) Clause 6.6 of the Concession Agreement shall be amended to read as follows: "The Authority shall no later than the 6th (sixth) anniversary of the date on which financial Close is achieved, provide or cause to be provided, a railway line connecting the Port to the nearest railway station on the regional railway network. For the avoidance of doubt, the Authority agrees and undertakes to acquire, no later than the 2nd (second) anniversary of the date on which Financial Close is achieved, the land required for construction of the railway line."
- (b) Clause 10.3.4 of the Concession Agreement shall be amended to read as follows: "The Authority shall make best efforts to procure and grant, no later than 365 (three hundred and sixty five) days from the date on which Financial Close is achieved, the Right of Way to the Concessionaire in respect of all land included in the Appendix, and in the event of delay for any reason other than Force Majeure or breach of this Agreement by the Concessionaire, it shall pay to the Concessionaire Damages in a sum calculated at the rate of Re. 2 (Rupee two) per day for every



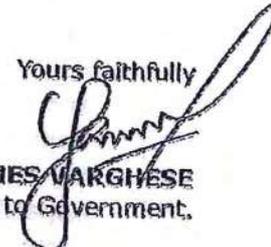
1 (one) square metre or part thereof, commencing from the 366th (three hundred and sixty sixth) day of the date on which Financial Close is achieved and until such Right of Way is procured."

- (c) Financial Close will be achieved no later than 16<sup>th</sup> May 2016.
- (d) The waivers will come into effect only if the Concessionaire agrees to the conditions in (a) and (d) above.

5. Subject to the other conditions specified in this letter and the satisfaction of the other Conditions Precedent specified in Clauses 4.1.2, 4.1.3(a), 4.1.3(g) and 4.1.3(h) no later than the Appointed Date, we confirm that the Appointed Date shall be 05<sup>th</sup> December 2015.
6. Save as expressly provided for in this letter, no provision of the Concession Agreement is waived, amended or otherwise modified and the waivers and amendments contemplated in this letter shall be without prejudice to the rights and remedies of the Authority with respect to any other matters.
7. By countersigning and acknowledging this letter, and in consideration of the waivers and amendments contained in it -
  - (a) you undertake to comply with its terms; and
  - (b) you confirm that failure to fulfil any of the conditions referred to in this letter including the conditions referred to in paragraph 3 and paragraph 4 above subject to the time limits set out in this letter, shall be deemed to constitute a Concessionaire Default under Clause 38.1.1 of the Concession Agreement.

This letter may be executed in two counterparts, and this has the same effect as if the signatures on the counterparts were on a single copy of this letter.

Yours faithfully

  
**JAMES VARGHESE**  
 Principal Secretary to Government.



ANNEXURE No. 7.

Ref: AVPPL/GoK/2018-19/515

07<sup>th</sup> August, 2018

The District Geologist  
District Office, Department of Mining and Geology  
Thiruvananthapuram

Sir,

Sub: Application for grant of Quarrying Lease- reg:

Submitting herewith duly filled Form - B in triplicate for the grant of Granite Building Stone quarrying lease in Re-Sy no.554/1, 554/5, 554/6, Block No. 37 over an extend of 09.5795 Ha at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District.

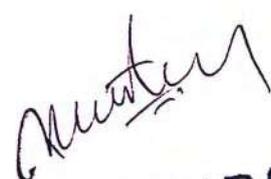
Kindly do the needful to issue the Letter of Intent to proceed further to prepare the mining plan and apply for environment clearance from DEIAA.

Thanking You,  
Yours Faithfully

  
Rajesh Jha  
Chief Executive Officer



Enclosures attached.

  
**KANTHARAJ.K.**  
**RQP/GOA/130/2000/A**

Adani Vizhinjam Port Private Limited  
2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud  
Thiruvananthapuram  
Kerala-695014

www.adani.com  
CIN -U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India



GOVERNMENT OF KERALA  
**DISTRICT TREASURY**  
 FORM T. R. 12  
 (S. Rules 102 (a) and 124 of Kerala Treasury Code)  
 Chalan for Payment of Money in the  
 District Treasury/Sub Treasury/  
 State Bank of India/State Bank of Mysore/State Bank of Travancore

ORIGINAL

Computer Seq. No. \_\_\_\_\_ Date \_\_\_\_\_

Head of Account 0893 + 102 + 99 (Cdn)

DDO Code: (Dept) 450 (DDO) 892

DDO Code: \_\_\_\_\_

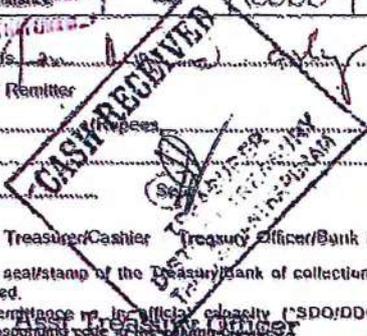
By whom paid and name and address of the person on whose behalf money is paid	Purpose of remittance and authority, if any.	Amount in ₹	Order to the Bank
C.E.O. Adham Vithayalil 271 floor V.P. Panchayath Changanassery Travancore	Application fee for O/L - C.E.S.	10000	Direct Passes and grant receipt  Treasury Officer
Signature & Designation of the Departmental Officer countersigning the remittance		Total	10000

Total in words \_\_\_\_\_

Signature of Remitter \_\_\_\_\_

Received ₹ \_\_\_\_\_

Date \_\_\_\_\_ only)



Signature of Treasurer/Cashier \_\_\_\_\_ Treasury Officer/Bank Manager

Note: 1. The seal/stamp of the Treasury/bank of collection shall be affixed.  
 2. If remittance is in official capacity (SDO/DDO), write corresponding code of the Government.  
 3. If loan remittance, write the loan number in purpose column.

Thiruvananthapuram. (P.T.O.)

KL. 004933602018 (911)



FORM B (See Rule 27)

## APPLICATION FOR GRANT/RENEWAL OF QUARRYING LEASE

(For all types of lands)

(To be submitted in triplicate)

From

Mr Rajesh Kumar Jha

Chief Executive Officer- Adani Vizhinjam Port Private Limited

Adani House, Nr.Mithakhali Six Roads, Navrangpura, Ahmedabad, Gujrat, India.

Pin: 380009

To

The Director of Mining and Geology

Thiruvananthapuram

Through

The Geologist, District Office,

Thiruvananthapuram

Sir,

1. I/we /am/are submitting this application for the grant/renewal of a

Quarrying lease under the Kerala Minor Mineral Concession Rules, 2015.

2. A sum of ~~Rs10,000 or 20,000~~ being the application fee in respect of this application payable under sub-rule (1) of Rule 28 / sub-rule (2) of Rule 28 of the said rules has been deposited (Strike off which is not applicable).

3. The required particulars are given below:	
(i) Name and complete address of the applicant	Rajesh Kumar Jha Chief Executive Officer- Adani Vizhinjam Port Private Limited Adani House, Nr.Mithakhali Six Roads, Navrangpura, Ahmedabad, Gujrat, India.  Pin: 380009



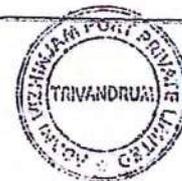
(ii) Is the applicant a private individual/private company /Public company/firm or association	Private Limited Company
(iii) In case the applicant is	
(a) an individual, his nationality	Not Applicable
(b) a private company, the names and nationality of all members and place of registration	1. Mr Karan Adani - Indian 2. Dr Malay Mahadevia - Indian 3. Mr Rajesh Kumar Jha - Indian 4. Dr Chitra Bhatnagar - Indian Place of Registration - Ahmedabad
(c) a public company, the names and nationality of the Directors, the percentage of share capital held by Indian National and place of incorporation.	Not Applicable
(d) a firm or association, the names and nationality of all the partners of the firm or members of the Association and place of registration.	Not Applicable
(iv) Profession or nature of business of the applicant.	Port Development
(v) Whether the application is for a fresh lease or for renewal of a lease previously granted.	Fresh Lease
(vi) Minor Mineral or minerals which the applicant intends to mine.	Granite Building Stone
(vii) Period for which the quarrying lease required.	10 years
(viii) Approximate quantity of mineral Expected to be raised per year.	50,00,00MT per year
(ix) Manner in which the minor mineral raised is to be utilized.	



(a) for manufacture	Yes (Own Metal crusher unit) and the products will utilize for Breakwater Construction of Vizhinjam Port Project.									
(b) for sale	No. Purely for Vizhinjam Port Breakwater Construction Purpose. Government of Kerala work.									
(c) any other purpose	Nil									
In case of manufacture, the industries in connection with which it is required should be specified.	Purely for Vizhinjam Port Breakwater Construction Purpose. Government of Kerala work.									
(x) Details of the area in respect of which quarrying lease is required.  Attested copies of the survey map of the area with survey numbers clearly marked should be attached to each copy of the application	<p>District : Thiruvananthapuram</p> <p>Taluk : Chirayinkeezhu</p> <p>Panchayat : Nagaroor</p> <p>Village : Nagaroor</p> <p>Re-Sy no: 554/1, 554/5, 554/6</p> <p>Block No : 37</p> <table border="1"> <thead> <tr> <th>Re SURVEY NO</th> <th>SUB DIVISION NO</th> <th>AREA IN HECTARES</th> </tr> </thead> <tbody> <tr> <td>554</td> <td>1,5,6</td> <td>02.4706</td> </tr> <tr> <td colspan="2">Total</td> <td>02.4706</td> </tr> </tbody> </table> <p>Total area applied: 02.4706 Ha survey map certified by Tahasildar enclosed.</p>	Re SURVEY NO	SUB DIVISION NO	AREA IN HECTARES	554	1,5,6	02.4706	Total		02.4706
Re SURVEY NO	SUB DIVISION NO	AREA IN HECTARES								
554	1,5,6	02.4706								
Total		02.4706								
(xi) Nature of tenure of the land over which quarrying lease is applied for (Documentary proof to show the land owners right if any, over the mineral should be submitted in the case of lands in which the minerals vest partly with the Government and partly with the registered holder of the land	<p>Government Land, NOC reference no B7-17779/2018 dated 20.07.2018 issued by District Collector Thiruvananthapuram.</p> <p>NOC enclosed as attachment.</p>									
	1. Copy of TPR									
	2. Copy of BTR									



	3. Blockmap ( Field No.554) of the area certified by Village officer, . . . . .
	4. Demarcation Certificate No. 1102/2018 dated 04/08/2018 issued by the Village Officer, Nagroor
	5. Non Assignment Certificate Certificate No. 1101/2018 dated 04/08/2018 of Village Officer, Nagroor
	6. Copy of NOC No. B7-17779/2018 dated 20.07.2018 of the District Collector, Thiruvananthapuram
(xii) No. and date of the income-tax clearance certificate attached.	Affidavit on Income Tax enclosed.
(xiii) Financial resources of the Applicant.	Own Fund
(xiv) Particulars of receipted treasury chalan attached for the Amount referred to at 2 above.	Chalan No. KL0049336002018L9M dated 08/08/2018 of District Treasury, Thiruvananthapuram
(xv) Any other particulars which the Applicant wishes to furnish.	NIL

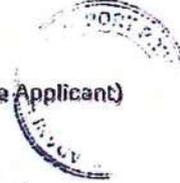


I/We do hereby declare that the particulars furnished above are correct and am/are ready to furnish any other details including security deposit etc, as may be required by you.

Yours Faithfully



(Signature of the Applicant)



Place: Thiruvananthapuram

Date:

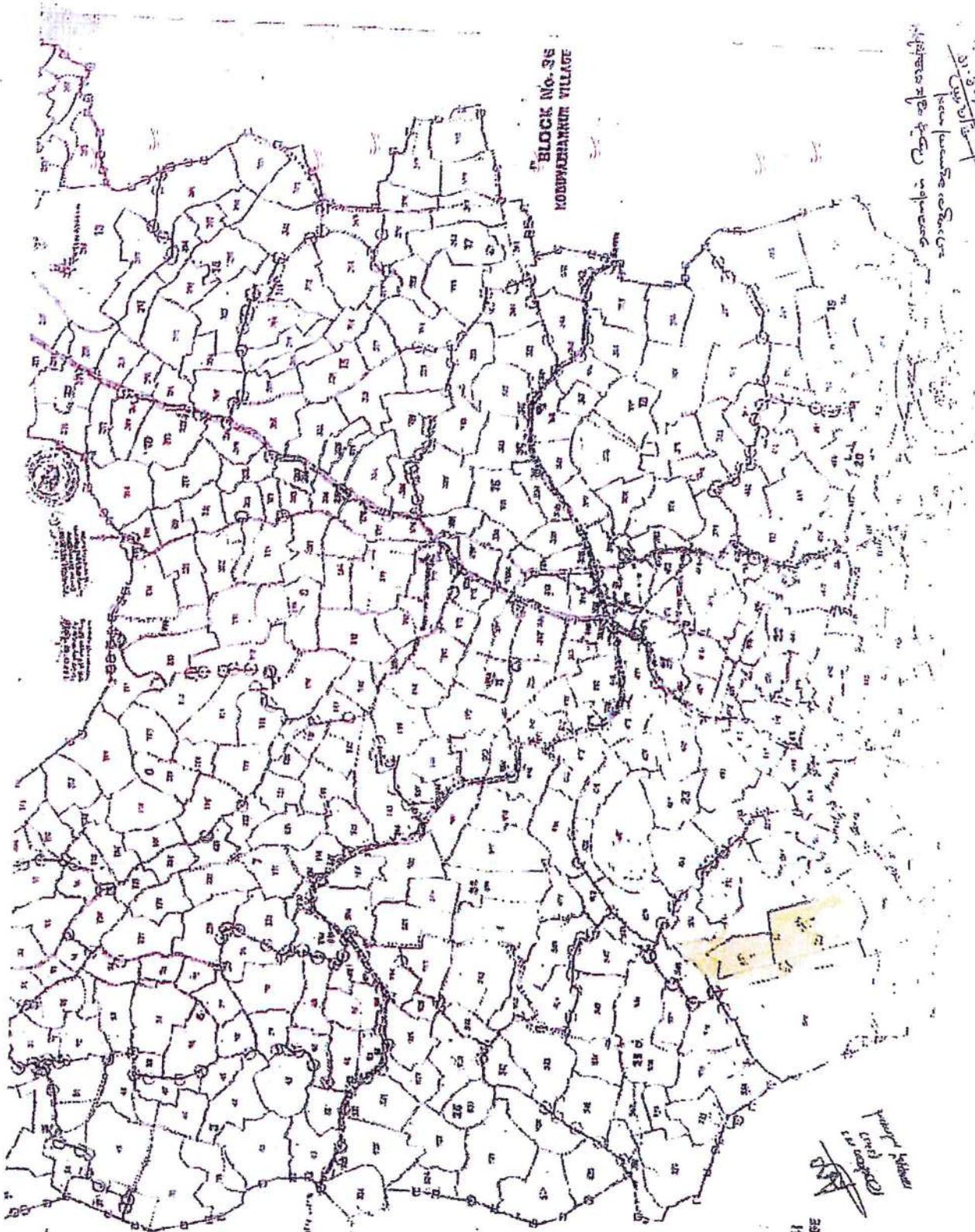
Received at (place).....

On (date).....

at (hour).....

Initials of Receiving Officer





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KODUPPACHUR VILLAGE

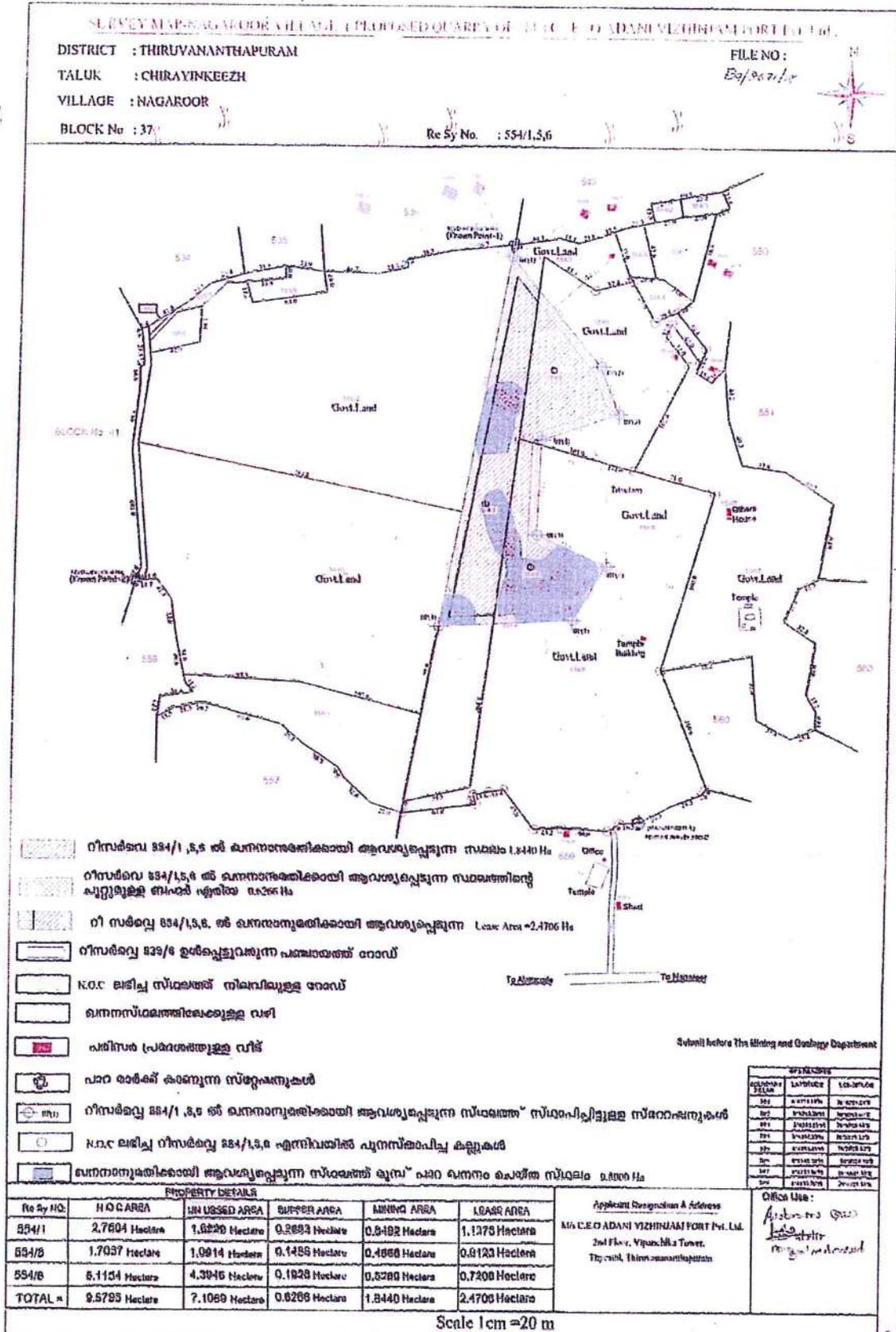
BLOCK No. 38  
SARRIPATI VILLAGE

BLOCK No. 41  
ALAKHODE VILLAGE



11/02/1918

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TAKSILDAR  
 CHIRAYINKEEZH  
 NIRMAL KUMAR, G  
 TAKSILDAR  
 CHIRAYINKEEZHU



നം. ബീ7-17779/18

കളക്ടറേറ്റ്, സിവിൽ സൂപ്പർവൈസർ,  
കുടുംബകാര്യം, തിരുവനന്തപുരം,  
തീയതി : 20-07-2018

നിരപേക്ഷ സാഹചര്യം

വിഴിഞ്ഞം ഇറമുഖ നിർമ്മാണത്തിന് ആവശ്യമായ ഹാറ്റയും ഹാറ്റ ഉല്പന്നങ്ങളും ലഭ്യമാക്കുന്ന സാഹചര്യത്തിൽ തിരുവനന്തപുരം ജില്ലയിൽ ചിറയിൻകീഴ് താലൂക്കിൽ നഗരൂർ വില്ലേജിൽ ബ്ലോക്ക് നമ്പർ 37-ൽ റിസർവ്വെ 554/1,554/5,554/6 എന്നിവയിൽ ഉൾപ്പെട്ട സർക്കാർ ഹാറ്റ ലിസിന് ഏടുത്ത് ഖനനം ചെയ്യുന്നതിന് NOC അനുവദിക്കുന്നതിലേയ്ക്കായി അഭ്യർത്ഥിച്ചിട്ടുള്ളതും ഹോർട്ടിക്യൂൾട്ടറൽ ഡിവിഷൻ അപേക്ഷ സമർപ്പിച്ചിട്ടുള്ളതാണ് . അപേക്ഷയിന്മേൽ ചിറയിൻകീഴ് ഹാറ്റസംരക്ഷണ അന്വേഷണം നടത്തി റിപ്പോർട്ട് സമർപ്പിച്ചിട്ടുണ്ട്. പ്രസ്തുത റിപ്പോർട്ട് പ്രകാരവും ഡെപ്യൂട്ടി കളക്ടർ (എൽ.ആർ.)ന്റെ നേതൃത്വത്തിൽ സ്ഥല പരിശോധന നടത്തിയതിന്റെ അടിസ്ഥാനത്തിലും ടി ഭൂമി മറ്റേതെങ്കിലും സർക്കാർ ആവശ്യങ്ങൾക്ക് പരിഗണനയിൽ ഉള്ളതല്ലെന്നും ഹാറ്റക്കെട്ടായുള്ള സ്ഥലം പതിച്ചു കൊടുക്കുന്നതിന് ഉപയുക്തമല്ലെന്നും ബോധ്യപ്പെടുത്തുകയാണ് . കൂടാതെ സർക്കാർ പങ്കാളിത്തത്തോടടുത്തുള്ള വിഴിഞ്ഞം ഇറമുഖ പദ്ധതിയുടെ സമയബന്ധിതമായ പൂർത്തീകരണത്തിന് ഹാറ്റ ലഭ്യമാക്കേണ്ടതിനാൽ വിഴിഞ്ഞം ഇറമുഖ പദ്ധതിയുമായി ബന്ധപ്പെട്ട അപേക്ഷകളെല്ലാം 10 ദിവസത്തിനുള്ളിൽ പരിശോധിച്ച് NOC നൽകുന്നതിനുള്ള നടപടി സ്വീകരിക്കുന്നതിനും, ഒന്നിലധികം അപേക്ഷകൾക്കിടയിൽ വിഴിഞ്ഞം പദ്ധതിക്ക് " സർക്കാരിന്റെ പ്രധാനപ്പെട്ട പദ്ധതി" എന്ന പരിഗണന നൽകി ടി അപേക്ഷകന് അനുമതി നൽകേണ്ടതാണെന്ന് 03/07/2018 ൽ ബഹു.മുഖ്യമന്ത്രിയുടെ അദ്ധ്യക്ഷതയിൽ ചേർന്ന ഉന്നതതല യോഗത്തിൽ തീരുമാനമായിട്ടുള്ളതാണ്. ഈ സാഹചര്യത്തിൽ നഗരൂർ വില്ലേജിൽ ബ്ലോക്ക് നമ്പർ 37-ൽ റിസർവ്വെ 554/1,554/5,554/6 എന്നിവയിൽ ഉൾപ്പെട്ട 09.57.95 ഹാറ്റർ വിസ്തീർണ്ണമുള്ള സർക്കാർ തരിശിലെ ഹാറ്റ ചുവടെ ചേർത്തിരിക്കുന്ന നിബന്ധനകൾക്ക് വിധേയമായി നിയമാനുസൃതമായി ഖനനം ചെയ്യുന്നതിന്



*Kantharaj K.*

**KANTHARAJ.K.**  
RQP/GOA/130/2000/A

ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ : അദാനി വിഴിഞ്ഞം പോർട്ട്സ് പ്രൈവറ്റ് ലിമിറ്റഡിന് നിരാക്ഷേപ സാക്ഷ്യപത്രം അനുവദിക്കുന്നു.

നിബന്ധനകൾ

- 1) ഈ NOC പ്രകാരം ഖനനം ചെയ്യുന്ന പാറ വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിന് മാത്രം വിനിയോഗിക്കേണ്ടതാണ്. ഖനനം ചെയ്യുന്ന പാറ വിപണനം ചെയ്യാൻ പാടുള്ളതല്ല.
- 2) NOC അനുവദിച്ച തീയതി മുതൽ 6 മാസത്തിനുള്ളിൽ പാരിസ്ഥിതിക അനുമതി നേടിയിരിക്കേണ്ടതാണ്.
- 3) സർക്കാരിന്റെയോ മറ്റ് പൊതുവായ ആവശ്യങ്ങൾക്കോ സർക്കാർ/ജില്ലാ ഭരണ കൂടം നിയമിച്ചിട്ടുള്ള നിരക്കിൽ പാറയും പാറ ഉൽപ്പന്നങ്ങളും നൽകേണ്ടതാണ്.
- 4) NOC അനുവദിച്ച തീയതി മുതൽ രണ്ട് വർഷത്തിനുള്ളിൽ ഖനനം ചെയ്യുന്ന പ്രവർത്തനങ്ങൾ ആരംഭിച്ചിട്ടില്ലെങ്കിൽ ഈ NOC അസാധുവാകുന്നതാണ്.
- 5) ഖനന പ്രവർത്തനങ്ങൾ അദാനി ഗ്രൂപ്പിന്റെ നേരിട്ടുള്ള നിയന്ത്രണത്തിൽ ആയിരിക്കേണ്ടതാണ്.
- 6) പാരിസ്ഥിതിക അനുമതിയും നിയമപരമായ ആവശ്യമുള്ള മറ്റ് എല്ലാ അനുമതിയും നേടിയ ശേഷം മാത്രമേ ഖനനം ആരംഭിക്കാൻ പാടുള്ളൂ.
- 7) 2015-ലെ കെ.എം.എം.സി ചട്ടങ്ങളിലെയും 1957-ലെ കെ. എൽ.സി ആക്റ്റിലെയും വ്യവസ്ഥകൾ കർശനമായി പാലിക്കേണ്ടതാണ്.
- 8) ജനവാസമുള്ള കെട്ടിടങ്ങളിൽ നിന്നും നിയമപ്രകാരമുള്ള അകലം പാലിച്ചും അപകടരഹിതമായും മാത്രമേ ഖനനം നടത്തുവാൻ പാടുള്ളൂ.
- 9) പാറ ഖനനം നടത്തുന്ന പ്രവൃത്തിക്കായി വിനിയോഗിക്കുന്ന ജോലിക്കാരുടെ വിവരങ്ങൾ അടങ്ങിയ ഒരു രജിസ്റ്റർ സൂക്ഷിക്കേണ്ടതാണ്.
- 10) എക്സിക്യൂട്ടീവ് ആക്ട് പ്രകാരമുള്ള നിബന്ധനകൾ കർശനമായി പാലിക്കേണ്ടതും മറ്റ് അടിസ്ഥാന സൗകര്യങ്ങൾ ടി സ്ഥലത്ത് ലഭ്യമാക്കേണ്ടതുമാണ്.
- 11) ഖനനം നിർത്തം ഉണ്ടാകുന്ന കഴികൾ മണ്ണിട്ട് മൂടി അപകടരഹിതമാക്കേണ്ടതും കമ്പി വേലി കെട്ടി സംരക്ഷിക്കേണ്ടതുമാണ്.
- 12) നിരാക്ഷേപ സാക്ഷ്യ പത്രത്തിന്റെ കാലാവധി മൈനിംഗ് & ജിയോളജി വകുപ്പ് ലിസ്റ്റ് നൽകുന്ന തീയതി മുതൽ 10 വർഷത്തേയ്ക്കോ, വിഴിഞ്ഞം പദ്ധതിയുടെ നിർമ്മാണ പ്രവർത്തനങ്ങൾ തീരുന്നത് വരെയോ ഏതാണോ ആദ്യം അതുവരെയായിരിക്കുന്നതാണ്.
- 13) തൊഴിൽദാർ അംഗീകരിച്ച് നൽകുന്ന സ്പെഷ് പ്രകാരമുള്ള ഭൂമിയിൽ മാത്രമേ ഖനനം നടത്താൻ പാടുള്ളൂ.



14) പ്രസ്തുത സ്ഥലം പാറ ഖനനത്തിന് അനുയോജ്യമല്ലായെന്ന് മൈനിംഗ് & ജിയോളജി ഡയറക്ടർക്ക് ബോധ്യപ്പെടുകയാണെങ്കിൽ ഈ നിരാക്ഷേപ സാക്ഷ്യപത്രം പ്രാബല്യത്തിൽ വരുന്നതല്ല.

ജേൽ വിവരിച്ച നിബന്ധനകൾ ലംഘിക്കപ്പെടുന്ന പക്ഷം ഈ നിരാക്ഷേപ സാക്ഷ്യപത്രം റദ്ദാക്കി തുടർനടപടികൾ സ്വീകരിക്കുന്നതായിരിക്കും.

(ഒപ്പ്)

ജില്ലാ കളക്ടർ

സ്വീകർത്താവ്

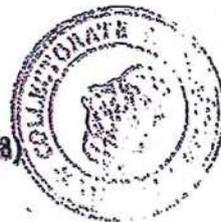
✓ ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ, അടാനി പൊർട്ട്സ് പ്രൈവറ്റ് ലിമിറ്റഡ്.

പകർപ്പ്

1. പ്രിൻസിപ്പൽ സെക്രട്ടറി മത്സ്യബന്ധനവും ഇറച്ചിലും (ഇ) വകുപ്പ് (ആമുഖ കത്ത് സഹിതം)
2. ഡയറക്ടർ, മൈനിംഗ് & ജിയോളജി, തിരുവനന്തപുരം.
3. തഹസീൽദാർ, ചിറയിൻകീഴ് (സ്വീനിയറേഷ് തുക അടയ്ക്കൽ എന്നത് ഉറപ്പാക്കേണ്ടതാണ്.)
4. വില്ലേജ് ഓഫീസർ, നഗരൂർ.
5. ജില്ലാ ജിയോളജിസ്റ്റ്, തിരുവനന്തപുരം.
6. MD & CEO, VISL.

അംഗീകാരത്തോടെ,

ഡെപ്യൂട്ടി കളക്ടർ (എൽ.ആർ)



No. 12118/M3/2018

Directorate of Mining & Geology  
 Kesavadasapuram, Pattam Palace .P.O.,  
 Thiruvananthapuram - 4  
 Tel Fax : 0471 2447429  
 e-mail: [director.dir.dmg@kerala.gov.in](mailto:director.dir.dmg@kerala.gov.in)  
[www.dmg.kerala.gov.in](http://www.dmg.kerala.gov.in)  
 Date : 23-11-2018

From

The Director of Mining &amp; Geology

To

M/s. Adani Vizhinjam Port Private Limited,  
 2<sup>nd</sup> Floor, Vipanchika Tower,  
 Thycaud, Thiruvananthapuram District - 695 014  
 (Registered Office at: Adani House, Near Mithakhali Six Roads,  
 Navrangpura, Ahmedabad, Gujrat State - 380 009)  
 (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Sir,

Sub:- Mines and Minerals - Minor Mineral - Granite (Building Stone) -  
 Application for quarrying lease under KMMC Rules 2015 - Letter of  
 Intent - forwarding of- reg.

- Ref:- 1. Your application for quarrying lease dated 07.08.2018.  
 2. NOC No. B7-17779/18 dt. 20.07.2018 issued by District Collector,  
 Thiruvananthapuram.  
 3. Letter No. 2304/DOT/ML/2018 dtd. 12/11/2018 of the Geologist, District  
 Office, Thiruvananthapuram.  
 4. Kerala Minor Mineral Concession Rules 2015.

Please refer to the references cited above . As per the reference 1<sup>st</sup> cited, you have applied for a quarrying lease for a period of 10 years from this office for the extraction of granite building stone from an area of 2.4706 Hectares in Re-Survey Block No. 37, Re - Survey Nos. 554/1, 554/5, 554/6 of Nagaroor Village of Chirayinkeezhu Taluk of Thiruvananthapuram District [as shown in the Survey Map No. B9/8671/18 issued by Tahsildar, Chirayinkeezhu enclosed]. Vide reference cited 2 above, District Geologist, Thiruvananthapuram forwarded your application to this office with recommendations to issue Letter of Intent. On scrutiny of application and other documents received from the Geologist, it is seen that a quarrying lease can be granted to the precise area shown in the map under the provisions contained in the KMMC Rules 2015. However, for granting quarrying lease you have to produce following documents through District Geologist to the satisfaction of this office in accordance with the relevant statutes.

*Kantharaj K.*  
**KANTHARAJ.K.**  
 RQP/GOA/130/2000/A



## DOCUMENTS TO BE PRODUCED

1. Mining plan approved by the District Geologist as stipulated in the KMMC Rules 2015, for the precise area as per the survey map.
2. Environmental Clearance as stipulated in EIA Notification 2006 for the precise area.
3. Consent to operate quarry from the Kerala State Pollution Control Board for the precise area.
4. Explosive licence from the authorities concerned for appropriate quantity of explosives required for extraction of mineral as mentioned in the approved mining plan.
5. D & O Licence from the Local Self Government authorities concerned for operating quarry in the precise area.

In addition, you shall make arrangements for the survey and demarcation by erection of boundary pillars of the said area by the revenue authority not below the rank of a Tahsildar or Asst. Director of the Department of Survey and Land Records and shall produce a certificate in this regard issued by authorities concerned.

It is further informed that the duration of lease as well as annual production of mineral will be decided based on the approved mining plan and documents submitted.

It is also informed that as per the provisions contained in the KMMC Rules 2015 this letter of intent shall be sufficient for the purpose of issuing necessary licenses/consents/Clearances/NOCs etc. by the other statutory authorities concerned. In the event of granting of quarrying lease you may also need to produce new Possession & Enjoyment Certificate at the time of grant of quarrying lease.

It is further informed that this letter of intent is valid for a period of one year from the date of issue. In case you have any valid reason for seeking extension of period of this LOI, the same may be obtained before the expiry of this LOI. Your application for Quarrying Lease shall deemed to have been rejected, if you fail to produce above mentioned documents before the expiry of LOI.

Yours faithfully,

*gale*  
23/10/2018

ADDITIONAL DIRECTOR OF MINING & GEOLOGY

Encl: Photocopy of Survey Map showing precise area

Copy to:-

1. The District Collector & Chairman, DEIAA, Thiruvananthapuram.
2. The Deputy Chief Controller of Explosives, CSEZ, CGO Complex, Kakkanad, Ernakulam
3. Kerala State Pollution Control Board, District Office, Thiruvananthapuram District.



-3-

4. The Secretary, Nagaroor Grama Panchayath, Thiruvananthapuram District
5. The Tahsildar, Taluk Office, Chirayinkeezhu

For kind attention of statutory authorities

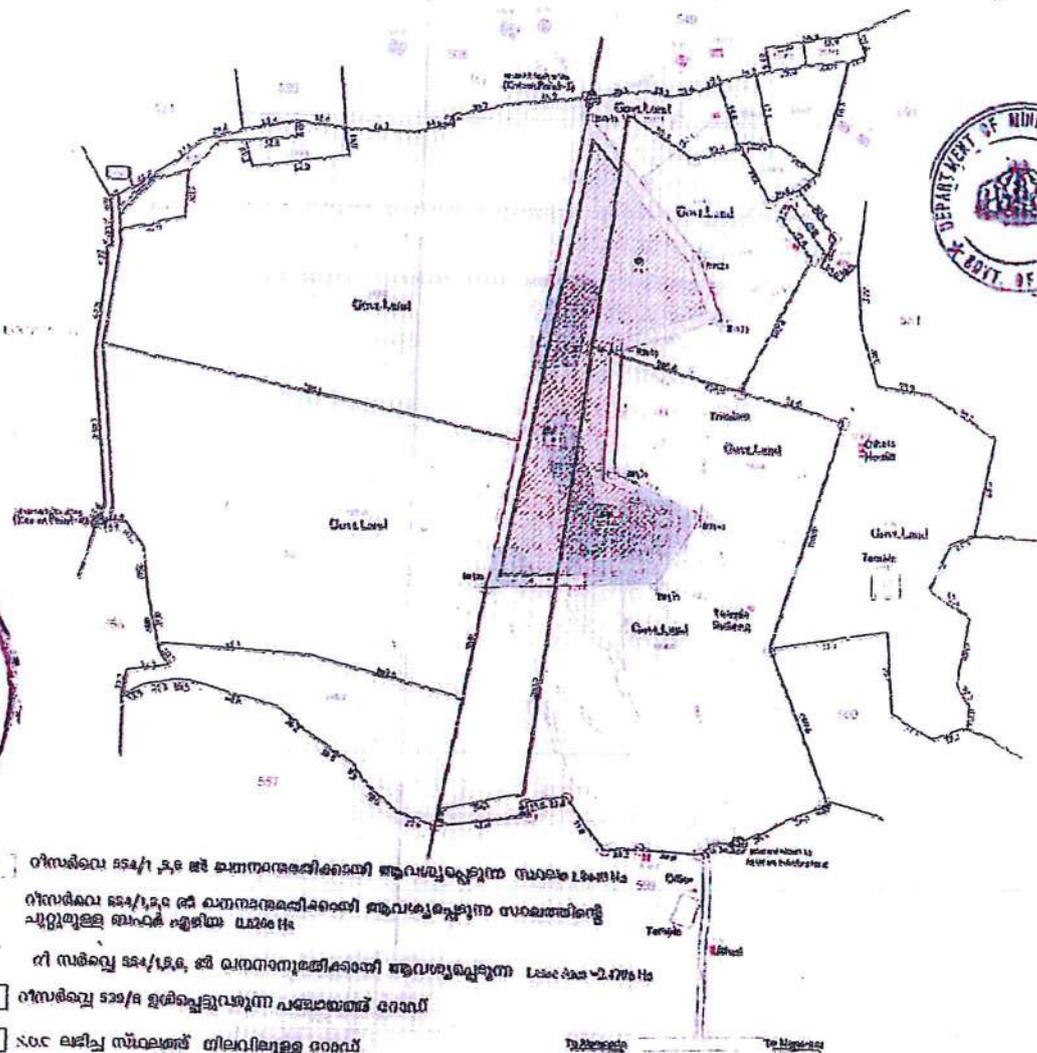
[The statutory authorities while issuing licence/consents/NOCs based on this letter of intent may refer this letter of intent in the respective licence/consent/clearance /NOC while issuing the same. The statutory authorities may refer the survey map and consider the extent of applied area, quantity of mineral proposed to extract and the period of lease applied for while issuing such documents. The authorities may note that the operation as per their licence shall start only after execution and registration of quarrying lease granted by this office. All the Survey Nos./Re-Survey numbers with Block No. included in the survey map submitted in this connection shall be included in all the aforesaid documents.]

6. The Geologist, District Office, Thiruvananthapuram (The Geologist shall forward all the above said documents to this office for grant of quarrying lease with recommendations).



DISTRICT : THIRUVANANTHAPURAM  
 TALUK : CHIRAYINKREZH  
 VILLAGE : NAGAROOR  
 FILE NO :  
 Pp/53/1/2

BLUCK No : 37  
 Re Sy No. : 534/1,5,6



റിസർവ്വെ 534/1, 5, 6 ആ ഭാഗത്തുവെച്ചിരിക്കുന്ന ആവശ്യപ്പെടുന്ന സ്ഥലം 1.8440 Ha  
 റിസർവ്വെ 534/1, 5, 6 ആ ഭാഗത്തുവെച്ചിരിക്കുന്ന ആവശ്യപ്പെടുന്ന സ്ഥലത്തിന്റെ പുറമ്പറ്റുള്ള സ്ഥലം 0.8286 Ha  
 റി സർവ്വെ 534/1, 5, 6 ആ ഭാഗത്തുവെച്ചിരിക്കുന്ന ആവശ്യപ്പെടുന്ന Lease Area = 2.4796 Ha

- റിസർവ്വെ 534/6 ഉൾപ്പെടുത്തുന്ന പശ്ചാത്തത്ത് ഭാഗം
- N.O.C ലഭിച്ച സ്ഥലത്ത് തിരുവിലുള്ള ഭാഗം
- ഭരണസ്ഥലത്തിലുള്ള വഴി
- പതിനേഴ് ലക്ഷത്തോളം വീട്
- പാറ മേൽക്കൽ കെട്ടുന്ന സിറ്റേഷനുകൾ
- റിസർവ്വെ 534/1, 5, 6 ആ ഭാഗത്തുവെച്ചിരിക്കുന്ന ആവശ്യപ്പെടുന്ന സ്ഥലങ്ങൾ സിറ്റേഷനുള്ള സ്ഥലങ്ങൾ
- N.O.C ലഭിച്ച റിസർവ്വെ 534/1, 5, 6 എങ്ങിനെയെങ്കിലും പുനർവിട്ട കല്ലുകൾ
- ഭരണസ്ഥലത്തിലുള്ള ആവശ്യപ്പെടുന്ന സ്ഥലത്തിൽ കൃത്യം പാറ മെൽക്കൽ സ്ഥലം 0.8286 Ha

Refer to The Mining and Geology Department

Sl. No.	Area	Remarks
1	1.8440	Reserve Area
2	0.8286	Area outside Reserve
3	2.4796	Lease Area
4	0.8286	Area outside Reserve
5	0.8286	Area outside Reserve
6	0.8286	Area outside Reserve
7	0.8286	Area outside Reserve
8	0.8286	Area outside Reserve

PROPERTY DETAILS						Approved Respective Address	Other Use:
Re Sy No.	N O C AREA	UN LERGED AREA	BUFFER AREA	MINEG AREA	LEASE AREA		
BSJ/1	2.7604 Hectare	1.6228 Hectare	0.2886 Hectare	0.8482 Hectare	1.1278 Hectare	M. C. O. ADANI VISUVAIDYAS PVT. LTD. 2nd Floor, Vigneshwara Palace, Thiruv. Thiruvananthapuram	Other Use: Residential R. S. S. S. S. S.
534/5	1.7037 Hectare	1.0814 Hectare	0.1458 Hectare	0.4628 Hectare	0.8722 Hectare		
534/6	5.1154 Hectare	4.3848 Hectare	0.1928 Hectare	0.5280 Hectare	0.7288 Hectare		
TOTAL =	9.5795 Hectare	7.1089 Hectare	0.6286 Hectare	1.8440 Hectare	2.4796 Hectare		

Scale 1cm = 20 m



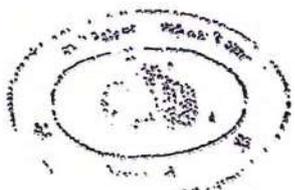
M. S. S. S. S. S.  
 TAHSILDAR: MURALI KUNAR, G  
 CHIRAYINKREZH

No: 1102/18

അപേക്ഷാ സ്ഥലം ഫീൽഡിൽ പ്രത്യേകം അടയാളപ്പെടുത്തിയിരിക്കുന്നു എന്ന വില്ലേജ് ഓഫീസറുടെ സർട്ടിഫിക്കറ്റ് (Demarcation Certificate)

ശ്രീ/ശ്രീമതി CEO അഥവാ വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ് (പേരും വിലാസവും രേഖപ്പെടുത്തുക) എന്നയാളുടെ \_\_\_\_\_ സ്ഥാപനത്തിന്റെ/കമ്പനിയുടെ മാനേജിങ് പാർട്ണറുടെ/ മാനേജിങ് ഡയറക്ടറുടെ പേരിൽ \_\_\_\_\_ സബ് രജിസ്ട്രാഫീസിൽ \_\_\_\_\_ നമ്പറിൽ രജിസ്റ്റർ ചെയ്ത ആധാരപ്രകാരം ചിറയിൻകീഴ് താലൂക്കിൽ നഗരൂർ വില്ലേജിൽ 354/1, 354/5, 354/6, സർവ്വേ നമ്പർ പ്രകാരമുള്ള 09.3795 ഹെക്ടർ സർക്കാർ ഭൂമി (കൂടുതൽ സർവ്വേ നമ്പറുകൾ എഴുതാനുണ്ടെങ്കിൽ താഴെ പട്ടികയിൽ വിവരിച്ചിട്ടുള്ള ഭൂമി എന്ന് രേഖപ്പെടുത്തി വിവരങ്ങൾ രേഖപ്പെടുത്താനുണ്ടെങ്കിൽ താഴെ പട്ടികയിൽ കൊടുക്കുക) ഭൂമിയിൽ ക്വാറിയിങ് ലിസിനായി അപേക്ഷിക്കാൻ ഉദ്ദേശിച്ചിരിക്കുന്ന 2.4708 ഹെക്ടർ ഭൂമി പ്രത്യേകം അളന്ന് /വേർതിരിച്ച് ആയതിന്റെ അതിർത്തികളിൽ കോൺക്രീറ്റ്/കരിങ്കല്ല്/അയേൺ പില്ലറുകൾ സ്ഥാപിച്ച് പ്രത്യേകം വേർതിരിച്ചിട്ടുണ്ടെന്ന് സാക്ഷ്യപ്പെടുത്തുന്നു.

ഈ സർട്ടിഫിക്കറ്റ് മൈനിംഗ് & ജിയോളജി, തിരുവനന്തപുരം ഹാജരാക്കാൻ വേണ്ടി മാത്രം.



*[Handwritten Signature]*  
4.8.18  
Village Officer  
Nagorur

*[Handwritten Signature]*  
**KANTHARAJ.K.**  
RQP/GOA/130/2000/A







കേരളം കേര KERALA

BV 871065

അഫിലവിറ്റ്

2018 ആഗസ്റ്റ് മാസം 6-ാം തീയതി മൈനീങ് ആന്റ് ജിയോളജി ഡയറക്ടർ മുന്മാകെ അഭിമാനി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ്, 2<sup>nd</sup> floor വിപണനിക ടവർ, തൈക്കാട്, തിരുവനന്തപുരം കമ്പനിയുടെ/സ്ഥാപനത്തിന്റെ മാനേജിംഗ് ഡയറക്ടർ ആന്റ് ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസറായ രാജേഷ് ജി, 52 വയസ്സ്, തിരുവനന്തപുരം ജില്ലയിൽ, തിരുവനന്തപുരം താലൂക്കിൽ, ശാസ്തമംഗലം വില്ലേജിൽ, ഹീരാ ഗോൾഡൻഹിൽസ്, കമ്പനം നഗർ, വെള്ളയമ്പലം എന്ന സ്ഥലത്ത് താമസം, കൃഷ്ണചന്ദ്ര ജി എന്നയാളുടെ മകൻ രാജേഷ് ജി ടി കമ്പനിയ്ക്കുവേണ്ടി/സ്ഥാപനത്തിനുവേണ്ടി ബോധിപ്പിക്കുന്ന സത്യവാങ്മൂലം.



*Jahangeer M*  
 JAHANGEER M  
 ADVOCATE & DISTRICT NOTARY  
 TARGET LEGAL CONSULTANTS  
 VANCHIYOOR, TRIVANDRUM DIST.  
 KERALA STATE, INDIA - 695 035

CEO Delani Vizhjanam  
 Post Office, Thiruvananthapuram  
 27 JUL 2018

*N. Balakrishnan*  
 N. BALAKRISHNAN NAIR  
 Vendor, Vanchiyoor  
 Thiruvananthapuram

no. 32057  
 6/8/18

*Kantharaj K.*  
 KANTHARAJ.K.  
 RQP/GOA/130/2000/A



കേരളം KERALA

BV 871066



തിരുവനന്തപുരം ജില്ലയിൽ, ചിറയിൻകീഴ് താലൂക്കിൽ, നഗർ വില്ലേജിൽ, ബ്ലോക്ക് നമ്പർ 37, റീ സർവ്വേ 554/1, 554/5, 554/6 നമ്പരുകളിൽപ്പെട്ട 09.5795 ഹെക്ടർ സ്ഥലത്തു നിന്നും കുരികുളി ഖനനം ചെയ്യുന്നതിന് അനു മതി നൽകുന്ന പക്ഷം താഴെ പറയുന്ന കാര്യങ്ങൾ നിർവ്വഹിക്കുമെന്ന് ഞാൻ സമ്മതിക്കുകയും ഉറപ്പുനൽകുകയും ചെയ്യുന്നു.



അംഗീകരിച്ച മെനിങ് പ്ലാൻ പ്രകാരം മെനിങ് നടത്തുന്നതാണ്. ഖനനപ്രവർത്തനം മൂലം പരിസര മലിനീകരണവും പാരിസ്ഥിതിക പ്രശ്നങ്ങളും ഉണ്ടാകാതിരിക്കാൻ വേണ്ട ക്രമീകരണങ്ങൾ നടത്തുന്ന താണ്. ഇക്കാര്യത്തിൽ ബന്ധപ്പെട്ട അധികാരികളുടെ നിർദ്ദേശങ്ങൾ പാലിക്കുന്നതാണ്.

N. BALAKRISHNAN NAIR  
Vendor, Vanchyodor  
Thiruvananthauram

M-32058  
6/8/18

J. HANSEER  
ADVOCATE & DISTRICT NOTARY  
TARGET LEGAL CELL  
VANCHYODOR, TRIVANDRUM  
KERALA STATE, PIN-695 033

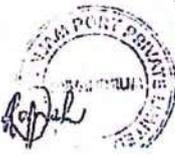
27 JUL 2018

3. സ്പോടക വസ്തുക്കളുടെ അമിതമായ ഉപയോഗം മൂലം പരിസരവാസികൾക്ക് പ്രയാസം ഉണ്ടാക്കുകയില്ല, എന്റെ / കമ്പനിയുടെ / സ്ഥാപനത്തിന്റെ പേരിലുള്ള എക്സ്പ്ലോസീവ് ലൈസൻസ് പ്രകാരം വാങ്ങിക്കുന്ന സ്പോടക വസ്തുക്കൾ ഉപയോഗിച്ചു മാത്രമേ ഞാൻ ഖനനം നടത്തുകയുള്ളൂ.

4. സമീപവാസികളിൽ നിന്നും പരാതിക്ക് ഇടവരാത്തവിധത്തിൽ മാത്രമേ ഖനന പ്രവർത്തനം നടത്തുകയുള്ളൂ.

5. ക്വാറിയിൽ ജോലി ചെയ്യുന്ന തൊഴിലാളികൾക്കും ക്വാറിയുമായി ബന്ധപ്പെട്ട് പ്രവർത്തിക്കുന്നവർക്കും മറ്റ് പൊതുജനങ്ങൾക്കും ക്വാറി പ്രവർത്തനം മൂലം അപകടങ്ങൾ സംഭവിക്കാതിരിക്കുന്നതിനുവേണ്ടിയുള്ള സുരക്ഷാ ക്രമീകരണങ്ങൾ ക്വാറിയിലും പരിസരത്തും നടത്തുന്നതാണ്. ക്വാറിക്ക് ചുറ്റും ഫെൻസിംഗ് ആവശ്യമുള്ള പക്ഷം ഫെൻസിംഗ് നടത്തുന്നതാണ്.

6. അപേക്ഷയോടൊപ്പം ഹാജരാക്കിയിരിക്കുന്ന രേഖകളിൽ ഒന്നും തന്നെ തെറ്റായ വിവരങ്ങളോ വ്യാജരേഖകളോ ഇല്ലാത്തതാണ്. അപേക്ഷയോടൊപ്പം ഹാജരാക്കിയ സമ്മതപത്രങ്ങൾക്കും/പവർഓഫ് അറ്റോർണിക്കും ഇപ്പോഴും നിയമസാധ്യതയുള്ളതാണെന്ന് ഞാൻ ഉറപ്പ് നൽകുന്നു. ഈ രേഖകളിൽ ഒപ്പിട്ടിരിക്കുന്നത് ഇതുമായി ബന്ധപ്പെട്ട വ്യക്തികൾ മാത്രമാണ്. സമ്മതപത്രം/പവർഓഫ് അറ്റോർണിക്കും നൽകിയ വ്യക്തികൾക്ക് ഇപ്പോഴും ഇന്ത്യൻ പൗരത്വമുള്ളതാണ്. കമ്പനി/പാർട്ട്ണർഷിപ്പ് ഫോം എന്നിവ സംബന്ധിച്ച് ഞാൻ ഹാജരാക്കിയ എല്ലാ രേഖകളും നിയമാനുസൃതമായി നിലവിൽ സാധ്യതയുള്ളതുമാണ്. ക്വാറിയോട് ചേർന്ന് കിടക്കുന്ന റവന്യൂ പുറംപോക്കിൽ നിന്നും ഞാൻ/ഞങ്ങൾ അനധികൃതഖനനം നടത്തുന്നതല്ല. അപ്രകാരം ഖനനം നടത്തുന്ന പക്ഷം എനിക്ക് എതിരെ ഉണ്ടായേക്കാവുന്ന ഏതൊരു നടപടിയ്ക്കും ഞാൻ തടസ്സം നിൽക്കുന്നതല്ല. അപേക്ഷയോടൊപ്പം ഹാജരാക്കിയിരിക്കുന്ന രേഖകളിൽ തെറ്റായ വിവരങ്ങൾ ഉണ്ടെന്ന് ഏതെങ്കിലും രേഖകൾ വ്യാജമാണെന്നോ തെളിയുന്ന പക്ഷം ആയതിന്റെ പൂർണ്ണ ഉത്തരവാദിത്വം എനിക്കു തന്നെയാണെന്ന് എനിക്ക് ബോധ്യപ്പെട്ടിട്ടുണ്ട്. അപ്രകാരമുള്ള



JAHANGEER A.  
ADVOCATE & DISTRICT NOTARY  
'TARGET LEGAL CONSULTANTS'



എന്റേതായ പ്രവൃത്തിക്ക് എതിരെ എന്ത് നിയമനടപടിയും സ്വീകരിക്കുന്നതിന് തടസ്സമില്ലാത്തതും തെറ്റായ വിവരങ്ങൾ നൽകിയോ, വ്യാജരേഖകൾ നൽകിയോ ആണ് തൊൻ/ത്തങ്ങൾ അനുഭവി സമ്പാദിച്ചതെന്ന് തെളിയുന്ന പക്ഷം എനിക്ക്/കമ്പനിയ്ക്ക്/സ്ഥാപനത്തിന് അനുവദിച്ച അനുഭവികൾ റദ്ദ് ചെയ്യുന്നതിനും എനിക്ക്/തങ്ങൾക്ക് പൂർണ്ണസമ്മതവുമാണ്. അപേക്ഷയിലും അപേക്ഷയോടൊപ്പം ഹാജരാക്കിയ രേഖകളിലും ബന്ധപ്പെട്ട ഉദ്യോഗസ്ഥരോ, ബന്ധപ്പെട്ട വ്യക്തികളോ മാത്രമാണ് ഒപ്പിട്ടിരിക്കുന്നത്. മേൽ വിവരങ്ങൾ സത്യമാണ്.

ഒപ്പും

*Rajesh*



പേരും  
Rajesh Iha

സാക്ഷികൾ

1. പൂർണ്ണമായ പേരും Akum Mohan  
 വിചാരസവും ഒപ്പും Flat 3-A, Fort Union, Kattanamad P.O, Kochi - 682030



പൂർണ്ണമായ പേരും Muneeb et  
 വിചാരസവും ഒപ്പും Flat No 7D Horizon Park Althara Road Trivandrum 695010

*Jahanjeer*  
 JAHANGEER  
 ADVOCATE & DISTRICT NOTARY  
 'TARGET LEGAL CONSULTANCY'  
 VANCHIYOOR, TRIVANDRUM DIST.  
 KERALA STATE, INDIA - 695 035





**CERTIFICATE OF RECOGNITION AS  
QUALIFIED PERSON TO PREPARE MINING PLANS**

(Under Rule 22C of Mineral Concession Rules, 1960)

Shri KANTHARAJ K resident  
of SURLA - GOA, son  
of KEMPANNA K, having given satisfactory  
evidence of his qualifications and experience is hereby granted recognition  
under Rule 22C of the Mineral Concession Rules, 1960 as a Qualified  
Person to prepare Mining Plans.

His registration number is RQP/GOA/130/2000/A

This recognition is valid for a period of two years  
ending 5.10.2002

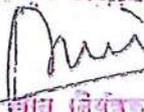


*Kantharaj K*  
Regional Controller of Mines  
Indian Bureau of Mines  
Goa Regional Office

Place : Margao  
Date : 6.10.2000.

*Kantharaj K*  
KANTHARAJ K  
RQP/GOA/130/2000/A



27/10/2019 നവംബർ 27, 2019  
 Received on 27<sup>th</sup> OCTOBER, 2019  
  
 28/10/2019  
 റീജിയണൽ കൺട്രോളർ ഓഫ് മൈൻസ്  
 Regional Controller of Mines  
 भारतीय खान भूखंड  
 Indian Bureau of Mines  
 മാർഗ്ഗം - മിഷൻ  
 Margao - Goa

5<sup>th</sup> OCTOBER 2022  
 Received on 5<sup>th</sup> OCTOBER 2022  
  
 11/10/2022  
 റീജിയണൽ കൺട്രോളർ ഓഫ് മൈൻസ്  
 Regional Controller of Mines  
 भारतीय खान भूखंड  
 Indian Bureau of Mines  
 മാർഗ്ഗം - മിഷൻ  
 Margao - Goa





**TABLE SHOWING THE DETAILS OF CALCULATION OF AREA, VOLUME AND TONNAGE OF PRODUCTION PROGRAMME FOR 1ST YEAR  
OF NAGAROOR QUARRY OF M/s. ADANI VIZHINJAM PORT PVT. LTD.**

ABSTRACT - CROSS SECTION WISE								
BETN. CR. SEC.		AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
N : 2050	N : 2000	-	50.00	-	2.50	-	-	-
N : 2000	N : 1950	45.00	50.00	2,250.00	2.50	5,625.00	5,625.00	-
N : 1950	N : 1900	100.00	50.00	5,000.00	2.50	12,500.00	12,500.00	-
N : 1900	N : 1850	102.50	50.00	5,125.00	2.50	12,812.50	12,812.50	-
N : 1850	N : 1800	47.50	50.00	2,375.00	2.50	5,937.50	5,937.50	-
N : 1800	upto L B	-	35.00	-	2.50	-	-	-
<b>TOTAL</b>		<b>295.00</b>	<b>50.00</b>	<b>14,750.00</b>	<b>2.50</b>	<b>36,875.00</b>	<b>36,875.00</b>	<b>-</b>

ABSTRACT - BENCH WISE							
BENCH RL	AV. AREA	Ave. Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
-	-		-		-	-	-
118.00	20.00	50.00	1,000.00	2.50	2,500.00	2,500.00	-
112.00	275.00	50.00	13,750.00	2.50	34,375.00	34,375.00	-
106.00	-		-	2.50	-	-	-
<b>TOTAL</b>	<b>295.00</b>	<b>50.00</b>	<b>14,750.00</b>	<b>2.50</b>	<b>36,875.00</b>	<b>36,875.00</b>	<b>-</b>



*Kantharaj K.*  
**KANTHARAJ.K.**  
RQP/GOA/130/2000/A



TABLE SHOWING THE DETAILS OF CALCULATION OF AREA, VOLUME AND TONNAGE OF PRODUCTION PROGRAMME FOR 2ND YEAR  
OF NAGAROOOR QUARRY OF M/s. ADANI VIZHINIAM PORT PVT. LTD.

ABSTRACT - CROSS SECTION WISE								
BETN. CR. SEC.		AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
N : 2050	N : 2000	25.00	50.00	1,250.00	2.50	3,125.00	3,125.00	-
N : 2000	N : 1950	470.00	50.00	23,500.00	2.50	58,750.00	58,750.00	-
N : 1950	N : 1900	645.00	50.00	32,250.00	2.50	80,625.00	80,625.00	-
N : 1900	N : 1850	450.00	50.00	22,500.00	2.50	56,250.00	56,250.00	-
N : 1850	N : 1800	250.00	50.00	12,500.00	2.50	31,250.00	31,250.00	-
N : 1800	upto L B	-	35.00	-	2.50	-	-	-
<b>TOTAL</b>		<b>1,840.00</b>	<b>50.00</b>	<b>92,000.00</b>	<b>2.50</b>	<b>230,000.00</b>	<b>230,000.00</b>	<b>-</b>

ABSTRACT - BENCH WISE							
BENCH RL	AV. AREA	Ave. Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
106.00	865.00	50.00	43,250.00	2.50	108,125.00	108,125.00	-
100.00	925.00	50.00	46,250.00	2.50	115,625.00	115,625.00	-
94.00	50.00	50.00	2,500.00	2.50	6,250.00	6,250.00	-
<b>TOTAL</b>	<b>1,840.00</b>	<b>50.00</b>	<b>92,000.00</b>	<b>2.50</b>	<b>230,000.00</b>	<b>230,000.00</b>	<b>-</b>

**TABLE SHOWING THE DETAILS OF CALCULATION OF AREA, VOLUME AND TONNAGE OF PRODUCTION PROGRAMME FOR 3RD YEAR  
OF NAGAROOR QUARRY OF M/s. ADANI VIZHINJAM PORT PVT. LTD.**

ABSTRACT - CROSS SECTION WISE								
BETN. CR. SEC.		AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
N : 2050	N : 2000	182.50	50.00	9,125.00	2.50	22,812.50	22,812.50	-
N : 2000	N : 1950	532.50	50.00	26,625.00	2.50	66,562.50	66,562.50	-
N : 1950	N : 1900	522.50	50.00	26,125.00	2.50	65,312.50	65,312.50	-
N : 1900	N : 1850	245.00	50.00	12,250.00	2.50	30,625.00	30,625.00	-
N : 1850	N : 1800	240.00	50.00	12,000.00	2.50	30,000.00	30,000.00	-
N : 1800	upto LB	167.50	35.00	5,862.50	2.50	14,656.25	14,656.25	-
<b>TOTAL</b>		<b>1,890.00</b>	<b>50.00</b>	<b>91,987.50</b>	<b>2.50</b>	<b>229,968.75</b>	<b>229,968.75</b>	<b>-</b>

ABSTRACT - BENCH WISE							
BENCH RL	AV. AREA	Ave. Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
94.00	1,010.00	48.6705	49,157.21	2.50	122,893.01	122,893.01	-
86.00	880.00	48.6705	42,830.04	2.50	107,075.10	107,075.10	-
<b>TOTAL</b>	<b>1,890.00</b>	<b>48.6705</b>	<b>91,987.25</b>	<b>2.50</b>	<b>229,968.11</b>	<b>229,968.11</b>	<b>-</b>



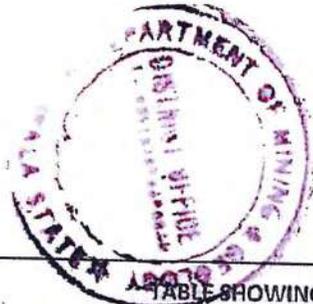


TABLE SHOWING THE DETAILS OF CALCULATION OF AREA, VOLUME AND TONNAGE OF PRODUCTION PROGRAMME FOR 4TH YEAR  
OF NAGAROOR QUARRY OF M/s. ADANI VIZHINJAM PORT PVT. LTD.

ABSTRACT - CROSS SECTION WISE								
BETN. CR. SEC.		AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
N : 2050	N : 2000	321.50	50.00	16,075.00	2.50	40,187.50	40,187.50	-
N : 2000	N : 1950	481.50	50.00	24,075.00	2.50	60,187.50	60,187.50	-
N : 1950	N : 1900	230.00	50.00	11,500.00	2.50	28,750.00	28,750.00	-
N : 1900	N : 1850	70.00	50.00	3,500.00	2.50	8,750.00	8,750.00	-
N : 1850	N : 1800	430.00	50.00	21,500.00	2.50	53,750.00	53,750.00	-
N : 1800	upto L B	430.00	35.00	15,050.00	2.50	37,625.00	37,625.00	-
<b>TOTAL</b>		<b>1,963.00</b>	<b>50.00</b>	<b>91,700.00</b>	<b>2.50</b>	<b>229,250.00</b>	<b>229,250.00</b>	<b>-</b>

ABSTRACT - BENCH WISE							
BENCH RL	AV. AREA	Ave. Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
86.00	130.00	46.7142	6,072.85	2.50	15,182.12	15,182.12	-
82.00	790.00	46.7142	36,904.22	2.50	92,260.55	92,260.55	-
76.00	803.00	46.7142	37,511.50	2.50	93,778.76	93,778.76	-
70.00	240.00	46.7142	11,211.41	2.50	28,028.52	28,028.52	-
<b>TOTAL</b>	<b>1,963.00</b>	<b>46.7142</b>	<b>91,699.97</b>	<b>2.50</b>	<b>229,249.94</b>	<b>229,249.94</b>	<b>-</b>

TABLE SHOWING THE DETAILS OF CALCULATION OF AREA, VOLUME AND TONNAGE OF PRODUCTION PROGRAMME FOR 5TH YEAR  
OF NAGAROOR QUARRY OF M/s. ADANI VIZHINJAM PORT PVT. LTD.

ABSTRACT - CROSS SECTION WISE								
BETN. CR. SEC.		AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
N : 2050	N : 2000	145.00	50.00	7,250.00	2.50	18,125.00	18,125.00	-
N : 2000	N : 1950	202.50	50.00	10,125.00	2.50	25,312.50	25,312.50	-
N : 1950	N : 1900	75.00	50.00	3,750.00	2.50	9,375.00	9,375.00	-
N : 1900	N : 1850	17.50	50.00	875.00	2.50	2,187.50	2,187.50	-
N : 1850	N : 1800	-	50.00	-	2.50	-	-	-
N : 1800	upto L B	-	35.00	-	2.50	-	-	-
<b>TOTAL</b>		<b>440.00</b>	<b>50.00</b>	<b>22,000.00</b>	<b>2.50</b>	<b>55,000.00</b>	<b>55,000.00</b>	<b>-</b>

ABSTRACT - BENCH WISE							
BENCH RL	AV. AREA	Ave. Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
70.00	235.00	50.00	11,750.00	2.50	29,375.00	29,375.00	-
64.00	205.00	50.00	10,250.00	2.50	25,625.00	25,625.00	-
<b>TOTAL</b>	<b>440.00</b>	<b>50.00</b>	<b>22,000.00</b>	<b>2.50</b>	<b>55,000.00</b>	<b>55,000.00</b>	<b>-</b>





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# METAMORPHOSIS<sup>SM</sup>

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TEST REPORT

ANNEXURE No. 16

No.20181842

### AMBIENT AIR QUALITY DATA

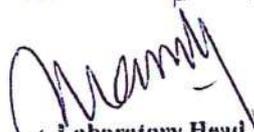
- |                                  |  |
|----------------------------------|--|
| 1. Name of the Project           | : M/s. Adani Vizhinjam Port Pvt. Ltd   |
| 2. Location Name                 | : Quarry Area - 2.4706 Ha  |
| 3. Name of the project Proponent | : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala |
| 4. Month of sampling             | : May - 2018   |
| 5. Duration of sampling          | : 8 Hours  |
| 6. Date of reporting             | : 30.05.2018   |

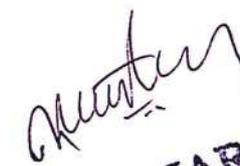
Parameter	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	Ammonia µg/m <sup>3</sup>
Sample no.	0818214B	0818213B	0818211B	0818212B	--
Date of Sampling					
06.05.2018	9.52	12.01	18.18	14.70	--
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP44 - Gravimetric method	MLPL/SOP41 - Indophenol blue method
NAAQ Standards	80	80	100	60	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorized Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah

  
KANTHARAJ.K.  
RQP/GOA/130/2000/A



JAS-ANZ



TC-5841

"PRAKRUTI BHAVAN", #200, 1<sup>st</sup> & 2<sup>nd</sup> Floor, 40<sup>th</sup> Cross,  
BTM Layout II Stage, Behind Central Silk Board,  
Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
Email: mail@metamorphosis-india.com.



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### TEST REPORT

No.20181274

#### AMBIENT AIR QUALITY DATA

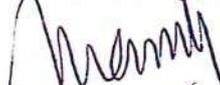
- |                                  |   |
|----------------------------------|---|
| 1. Name of the Project           | : Building Stone Quarry at Nagaroor village (Kadavila)  |
| 2. Location Name                 | : Near Human Settlement @ 450 Mtrs (Kadavila Bus stop)  |
| 3. Name of the project Proponent | : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkezhi Taluk, Thiruvananthapuram District, Kerala State. |
| 4. Month of sampling             | : May-2018  |
| 5. Duration of sampling          | : 8 Hours   |
| 6. Date of reporting             | : 30.03.2018  |

Parameter	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	Ammonia µg/m <sup>3</sup>
Sample no.	08182828	08182827	0070	PT0570034	--
Date of Sampling	06.05.2018	06.05.2018	06.05.2018	06.05.2018	06.05.2018
06.05.2018	7.67	12.06	24.12	16.49	--
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hechheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP/44 - Gravimetric method	MLPL/SOP/41 - Indophenol blue method
NAAQ Standards	80	80	100	60	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorized Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmiah



JAS-ANZ



"PRAKRUTI BHAVAN", #200, 1<sup>st</sup> & 2<sup>nd</sup> Floor, 40<sup>th</sup> Main, 1<sup>st</sup> Cross,  
BTM Layout II Stage, Behind Central Silk Board,  
Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
Email: mail@metamorphosis-india.com.



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### TEST REPORT

No.20181275

#### AMBIENT AIR QUALITY DATA

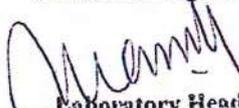
1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavilla)
2. Location Name : Near Human Settlement @ 900 Mtrs
3. Name of the project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavilla), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Month of sampling : May-2018
5. Duration of sampling : 8 Hours
6. Date of reporting : 30.05.2018

Parameter	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	Ammonia µg/m <sup>3</sup>
Sample no.	08182830	08182829	0256	P10628886	--
Date of Sampling					
06.05.2018	8.10	12.69	23.36	16.18	--
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP/44 - Gravimetric method	MLPL/SOP/41 - Indophenol blue method
NAAQ Standards	80	80	100	60	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorized Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah



TC-5841

JAS-ANZ



"PRAKRUTI BHAVAN", #200, 1<sup>st</sup> & 2<sup>nd</sup> Floor, 40<sup>th</sup> Main, 1<sup>st</sup> Cross,  
BTM Layout II Stage, Behind Central Silk Board,  
Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
Email: mail@metamorphosis-india.com.



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## LABORATORY PRIVATE LIMITED

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### TEST REPORT

No.20181370

### AMBIENT AIR QUALITY DATA

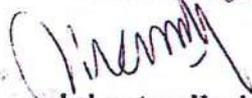
1. Name of the Project : Building Stone Quarry at Nagareor village (kadavila)
2. Location Name : Near Human Settlement @ 330 Mtrs
3. Name of project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagareor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State
4. Month of sampling : May-2018
5. Duration of sampling : 8 Hours
6. Date of reporting : 30.05.2018

Parameter	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	Ammonia µg/m <sup>3</sup>
Sample no.	0818210B	0818209B	0818207B	0818208B	..
Date of Sampling	06.05.2018	06.05.2018	06.05.2018	06.05.2018	..
06.05.2018	7.56	13.6	24.18	15.6	..
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP/44 - Gravimetric method	MLPL/SOP/41 - Indophenol blue method
NAAQ Standards	80	80	100	60	400

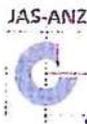
INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorized Signatory



Laboratory Head  
Dr. Shanth A. Thimmaiah



"PRAKRUTI BHAVAN", #200, 1<sup>st</sup> & 2<sup>nd</sup> Floor, 40<sup>th</sup> Main, 1<sup>st</sup> Cross,  
BTM Layout II Stage, Behind Central Silk Board,  
Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
Email: mail@metamorphosis-india.com.



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### TEST REPORT

No.20181276

#### AMBIENT AIR QUALITY DATA

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 825 Mtrs
3. Name of the project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Month of sampling : May-2018
5. Duration of sampling : 8 Hours
6. Date of reporting : 30.05.2018

Parameter	SO <sub>2</sub> µg /m <sup>3</sup>	NO <sub>2</sub> µg /m <sup>3</sup>	PM <sub>10</sub> µg /m <sup>3</sup>	PM <sub>2.5</sub> µg /m <sup>3</sup>	Ammonia µg /m <sup>3</sup>
Sample no.	08182832	08182831	0123	PT0569932	--
Date of Sampling					
06.05.2018	8.52	11.85	22.74	13.72	--
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP/44 - Gravimetric method	MLPL/SOP/41 - Indophenol blue method
NAAQ Standards	80	80	100	60	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorized Signatory

Laboratory Head  
Dr. Shanth A. Thimmaiah



TC-5841

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BTM Layout II Stage, Behind Central Silk Board,  
Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
Email: mail@metamorphosis-india.com.

ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)  
 2. Location Name : Near Human Settlement @ 450 Mtrs(Kadavila Bus stop)- Open well water  
 3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.  
 4. Date of Sampling : 10.05.2018  
 5. Particulars of Sample Collected : Ground water  
 6. Sample Number : 08182970  
 7. Date of Sample Receipt : 16.05.2018  
 8. Analysis Started On : 16.05.2018  
 9. Date of Reporting : 30.05.2018

Sr. No.	Parameters	Protocol	Unit	Result	Standard IS 10500: 2012 (2 <sup>nd</sup> Revision)mdt.1	
					Acceptable Limit	Permissible limit in the absence of alternate source
<b>A. PHYSICAL PARAMETERS</b>						
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	pH@ 25°C	IS:3025 (Part 11)	-	6.33	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	BDL	1	5
<b>B. CHEMICAL PARAMETERS</b>						
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	328.0	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	183.6	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (Part 21)	mg/L	95.12	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	31.58	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	3.93	30	100
10.	Total Alkalinity as CaCO <sub>3</sub>	IS:3025 (Part 23)	mg/L	95.88	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	0.67	1	1.5
12.	Chlorides as Cl	IS:3025 (Part 32)	mg/L	19.0	250	1000
13.	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24)	mg/L	4.42	200	400
14.	Nitrate as NO <sub>3</sub>	IS 3025 (Part 60)	mg/L	3.04	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand(COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/L	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition, 4500-H+,B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
<b>C. MICROBIOLOGICAL PARAMETERS</b>						
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	-	NA		

Note : The tests marked with an \* are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the request of the client. BDL: Below Detection Limit; NA= Not Analyzed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorized Signatory

*Shanth A. Thimmiah*  
 Laboratory Head  
 Dr. Shanth A. Thimmiah



*Kantharaj K.*  
**KANTHARAJ.K.**  
**RQP/GOA/130/2000/A**



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"PRAKRUTI BHAVAN", #200, 1<sup>st</sup> & 2<sup>nd</sup> Floor, 40<sup>th</sup> Main, 1<sup>st</sup> Cross,  
 BTM Layout II Stage, Behind Central Silk Board,  
 Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
 Email: mail@metamorphosis-india.com.



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### TEST REPORT

No.20181266

#### ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 900 Mtr towards West- Open well water
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Ground water
6. Sample Number : 08182971
7. Date of Sample Receipt : 15.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

Sr. No.	Parameters	Protocol	Unit	Result	Standard IS 10500: 2012 (2 <sup>nd</sup> Revision)mdt.1	
					Acceptable Limit	Permissible limit in the absence of alternate source
<b>A. PHYSICAL PARAMETERS</b>						
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	pH@ 25°C	IS:3025 (Part 11)	--	6.44	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	BDL	1	5
<b>B. CHEMICAL PARAMETERS</b>						
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	79.0	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	62.0	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (Part 21)	mg/L	10.12	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	2.42	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	1.0	30	100
10.	Total Alkalinity as CaCO <sub>3</sub>	IS:3025 (Part 23)	mg/L	14.28	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	0.69	1	1.5
12.	Chlorides as Cl	IS:3025 (Part 32)	mg/L	7.60	250	1000
13.	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24)	mg/L	4.52	200	400
14.	Nitrate as NO <sub>3</sub>	IS 3025 (Part 60)	mg/L	0.60	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand(COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/L	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition, 4500-H <sub>2</sub> B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
<b>C. MICROBIOLOGICAL PARAMETERS</b>						
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note : The tests marked with an \* are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requirement of the client. BDL: Below Detection Limit NA= Not Analysed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorised Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah



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"PRAKRUTI BHAVAN", #200, 1<sup>st</sup> & 2<sup>nd</sup> Floor, 40<sup>th</sup> Main, 1<sup>st</sup> Cross, BTM Layout II Stage, Behind Central Silk Board, Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
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### TEST REPORT

No.20181267

#### ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila).
2. Location Name : Near Human Settlement @ 330 Mtr towards NNW - open well water
3. Name of Project Propouent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila),  
Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Ground water
6. Sample Number : 08182972
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

Sr. No.	Parameters	Protocol	Unit	Result	Standard IS 10500: 2012 (2 <sup>nd</sup> Revision)mt.1	
					Acceptable Limit	Permissible limit in the absence of alternate source
<b>A. PHYSICAL PARAMETERS</b>						
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	pH@ 25°C	IS:3025 (Part 11)	--	6.94	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	1.2	1	5
<b>B. CHEMICAL PARAMETERS</b>						
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	32.9	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	26.8	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (Part 21)	mg/L	10.12	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	3.24	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	BDL	30	100
10.	Total Alkalinity as CaCO <sub>3</sub>	IS:3025 (Part 23)	mg/L	14.28	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	BDL	1	1.5
12.	Chlorides as Cl	IS:3025 (Part 32)	mg/L	9.50	250	1000
13.	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24)	mg/L	1.36	200	400
14.	Nitrate as NO <sub>3</sub>	IS 3025 (Part 60)	mg/L	1.06	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand(COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/L	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition, 4500-H+B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
<b>C. MICROBIOLOGICAL PARAMETERS</b>						
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20..	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note : The tests marked with an \* are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL: Below Detection Limit; NA= Not Analysed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorized Signatory

*Shanth A. Thimmaiah*  
Laboratory Head

Dr. Shanth A. Thimmaiah



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"PRAKRUTI BHAVAN", #200, 1<sup>st</sup> & 2<sup>nd</sup> Floor, 40<sup>th</sup> Main, 1<sup>st</sup> Cross,  
BTM Layout II Stage, Behind Central Silk Board,  
Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
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### TEST REPORT

No.20181268

### ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 825 Mtr towards NNE- Open well water
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Ground water
6. Sample Number : 08182973
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

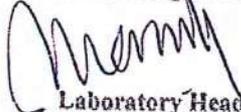
Sr. No.	Parameters	Protocol	Unit	Result	Standard IS 10500: 2012 (2 <sup>nd</sup> Revision) mdt. I	
					Acceptable Limit	Permissible limit in the absence of alternate source
<b>A. PHYSICAL PARAMETERS</b>						
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	nH@ 25°C	IS:3025 (Part 11)	--	8.06	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	9.2	1	5
<b>B. CHEMICAL PARAMETERS</b>						
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	129.5	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	94.4	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (Part 21)	mg/L	54.64	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	17.81	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	2.45	30	100
10.	Total Alkalinity as CaCO <sub>3</sub>	IS:3025 (Part 23)	mg/L	59.16	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	BDL	1	1.5
12.	Chloride as Cl	IS:3025 (Part 32)	mg/L	7.60	250	1000
13.	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24)	mg/L	8.31	200	400
14.	Nitrate as NO <sub>3</sub>	IS 3025 (Part 60)	mg/L	BDL	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand (COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/L	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition, 4300-H+ B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
<b>C. MICROBIOLOGICAL PARAMETERS</b>						
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note : The tests marked with an \* are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requirement of the client. BDL: Below Detection Limit; NA= Not Analyzed

<b>INFERENCE</b>	
Sample Collected by	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorized Signatory



Laboratory Head  
Dr. Shanath A. Thimmatah



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### TEST REPORT

No.20181269

#### ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Yamanapuram River water (Near Sri. Krishna Temple)-Surface water
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Surface water
6. Sample Number : 08182974
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

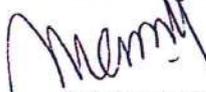
Sr. No.	Parameters	Protocol	Unit	Result	Standard IS 10500: 2012 (2 <sup>nd</sup> Revision)mdt. I	
					Acceptable Limit	Permissible limit in the absence of alternate source
<b>A. PHYSICAL PARAMETERS</b>						
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	pH@ 25°C	IS:3025 (Part 11)	--	7.83	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	BDL	1	5
<b>B. CHEMICAL PARAMETERS</b>						
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	90.0	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	36.4	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (Part 21)	mg/L	20.24	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	6.47	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	1.0	30	100
10.	Total Alkalinity as CaCO <sub>3</sub>	IS:3025 (Part 23)	mg/L	42.84	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	0.92	1	1.5
12.	Chlorides as Cl	IS:3025 (Part 32)	mg/L	11.40	250	1000
13.	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24)	mg/L	1.26	200	400
14.	Nitrate as NO <sub>3</sub>	IS 3025 (Part 60)	mg/L	0.89	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand(COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/l.	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d @ 27°C (BOD)	APHA 22nd Edition, 4500-H+ B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
<b>C. MICROBIOLOGICAL PARAMETERS</b>						
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note : The tests marked with an \* are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL: Below Detection Limits; NA= Not Analyzed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorised Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah



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"PRAKRUTI BHAVAN", #200, 1<sup>st</sup> & 2<sup>nd</sup> Floor, 40<sup>th</sup> Main, 1<sup>st</sup> Cross,  
BTM Layout II Stage, Behind Central Silk Board,  
Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
Email: mail@metamorphosis-india.com.



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TEST REPORT

ANNEXURE No. 18

No.20181844

### AMBIENT NOISE MEASUREMENT

- |                                  |   |
|----------------------------------|---|
| 1. Name of the project           | : M/s. Adani Vizhinjam Port Pvt. Ltd.   |
| 2. Location name                 | : Quarry Area - 2,4706 Ha   |
| 3. Name of the project proponent | : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,<br>Nagaroor Village (Kadavila), Chirayinkeezhi Taluk,<br>Thiruvananthapuram District, Kerala State. |
| 4. Date of Measurement           | : 14.05.2018  |
| 5. Name of instrument            | : Digital sound level meter Equinox & EQ-107  |
| 6. Date of reporting             | : 30.05.2018  |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Quarry Area - 2.4706 Ha	0818216B	IS:9989 -1981	65.2	72.6	69.0	-	-	-

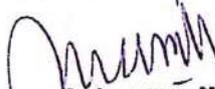
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

INFERENCE	Report Status as per KSPCB Standards: - Values are found to be within the permissible limits applicable to industrial area.
Sample Collected By	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.

\*\*End of Report\*\*

Authorized Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah



  
KANTHARAJ K.  
RQP/GOA/130/2000/A



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### TEST REPORT

No.20181278

#### AMBIENT NOISE MEASUREMENT

1. Name of the project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location name : Near Human Settlement @ 450 Mtrs (Kadavila Bus stop)
3. Name of the project proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Measurement : 14.05.2018
5. Name of instrument : Digital sound level meter Equinox & EQ-107
6. Date of reporting : 30.05.2018

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Near Human Settlement @ 450 Mtrs (Kadavila Bus stop)	08182986	IS:9989-1981	69.8	79.3	74.3	-	-	-

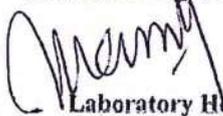
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

INFERENCE	Report Status as per KSPCB Standards: - Values are found to be higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
Sample Collected By	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.

\*\*End of Report\*\*

Authorized Signatory

  
Laboratory Head  
Dr. Shanth A. Thiimmaiah



TC-5841

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NO. 100/2015  
CALIBRATED ON 14/05/2018  
CERTIFIED ON 14/05/2018

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### TEST REPORT

No.20181279

#### AMBIENT NOISE MEASUREMENT

- |                                  |  |
|----------------------------------|--|
| 1. Name of the project           | : Building Stone Quarry at Nagaroor village (Kadavila)   |
| 2. Location name                 | : Near Human Settlement @ 900 Mtrs   |
| 3. Name of the project proponent | : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State. |
| 4. Date of Measurement           | : 14.05.2018   |
| 5. Name of instrument            | : Digital sound level meter Equinox & EQ-107   |
| 6. Date of reporting             | : 30.05.2018   |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Near Human Settlement @ 900 Mtrs	08182985	IS:9989 -1981	64.3	78.3	70.3	-	-	-

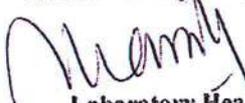
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

<b>INFERENCE</b>	Report Status as per KSPCB Standards: - Values are found to be higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
<b>Sample Collected By</b>	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.

\*\*End of Report\*\*

Authorized Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah



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### TEST REPORT

No. 20181280

#### AMBIENT NOISE MEASUREMENT

- |                                  |  |
|----------------------------------|--|
| 1. Name of the project           | : Building Stone Quarry at Nagaroor village (Kadavila)   |
| 2. Location name                 | : Near Human Settlement @ 330 Mtr  |
| 3. Name of the project proponent | : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State. |
| 4. Date of Measurement           | : 14.05.2018   |
| 5. Name of instrument            | : Digital sound level meter Equinox & EQ-107   |
| 6. Date of reporting             | : 30.05.2018   |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Near Human Settlement @ 330 Mtr	08182984	IS:9989 -1981	60.0	76.4	70.8	-	-	-

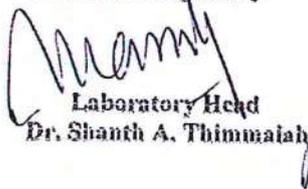
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

INFERENCE	Report Status as per KSPCB Standards: - Values are found to be higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
Sample Collected By	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.

\*\*End of Report\*\*

Authorized Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah



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Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
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### TEST REPORT

No.20181281

#### AMBIENT NOISE MEASUREMENT

- |                                  |  |
|----------------------------------|--|
| 1. Name of the project           | : Building Stone Quarry at Nagaroor village (Kadavila)   |
| 2. Location name                 | : Near Human Settlement @ 825 Mtrs   |
| 3. Name of the project proponent | : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State. |
| 4. Date of Measurement           | : 14.05.2018   |
| 5. Name of instrument            | : Digital sound level meter Equinox & EQ-107   |
| 6. Date of reporting             | : 30.05.2018   |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Near Human Settlement @ 825 Mtrs	08182983	IS:9989 -1981	60.1	78.9	74.1	-	-	-

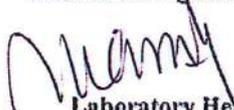
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

<b>INFERENCE</b>	Report Status as per KSPCB Standards: - Values are found to be higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
<b>Sample Collected By</b>	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.

\*\*End of Report\*\*

Authorized Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah



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TEST REPORT

ANNEXURE No. 19

No.20181843

### ANALYSIS REPORT OF SOIL SAMPLE

1. Name of the Project	: M/s. Adani Vizhinjam Port Pvt. Ltd.
2. Location Name	: Soil @ Quarry Area - 2.4706 Ha
3. Name of Project Proponent	: Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavilla), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling	: 10.05.2018
5. Particulars of Sample Collected	: Soil Sample
6. Sample Number	: 0818215B
7. Date of Sample Receipt	: 16.05.2018
8. Analysis Started On	: 16.05.2018
9. Date of Reporting	: 30.05.2018

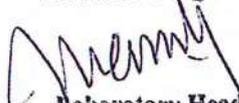
Sr. No.	Parameters	Protocol	Unit	Result
<b>Sample Number</b>				
1	pH @ 25°C	IS:2720 (Part 26)	--	5.10
2	Conductivity @ 25°C	IS:1476:2000	µs/cm	22.6
3	Total Organic Matter	IS:2720 (Part 23)	%	1.65
4	Moisture	IS:2720 (Part II)	%	18.20
5	Available Nitrogen as N	IS:14686:1999	%	4.54
6	Available potassium as K	MLPL/SOP/32	K/ha	-
7	Available Phosphorus as PO <sub>4</sub>	IS:10158-1982	%	BDL
8	Sand*	IS:1498-1970	%	-
9	Silt*	IS:1498-1970	%	-
10	Clay*	IS:1498-1970	%	-
11	Soil Type	Nil	Nil	-

Note: The tests marked with an \* are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL= Below Detection Limit; NA= Not Analysed

<b>INFERENCE</b>	Report Status: All parameters meet the requirements and are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorised Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmaiah





**KANTHARAJ.K.**  
RQP/GOA/130/2000/A



TC-5841

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### TEST REPORT

No.20181271

#### ANALYSIS REPORT OF SOIL SAMPLE (52)

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Soil Near Human Settlement @ 450 Mtrs(Kadavila Bus stop)
3. Name of Project Propenent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila),  
Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Soil Sample
6. Sample Number : 08182979
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

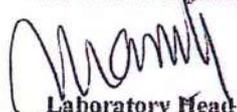
Sr. No.	Parameters	Protocol	Unit	Result
<b>Sample Number</b>				
1	pH @ 25°C	IS:2720 (Part 26)	--	5.61
2	Conductivity @ 25°C	IS:1476:2000	µs/cm	70.0
3	Total Organic Matter	IS:2720 (Part 23)	%	0.60
4	Moisture	IS:2720 (Part II)	%	16.51
5	Available Nitrogen as N	IS:14696:1999	%	3.36
6	Available potassium as K	MLPL/SOP/32	Kg/ha	-
7	Available Phosphorus as P <sub>2</sub> O <sub>5</sub>	IS:10158-1982	%	BDL
8	Sand*	IS:1498-1970	%	-
9	Silt*	IS:1498-1970	%	-
10	Clay*	IS:1498-1970	%	-
11	Soil Type	Nil	Nil	-

Note: The tests marked with an \* are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL= Below Detection Limit; NA= Not Analysed

INFERENCE	Report Status: All parameters meet the requirements and are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorised Signatory

  
Laboratory Head

Dr. Shanth A. Thimmaiah



JAS-ANZ



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### TEST REPORT

No.20181272

#### ANALYSIS REPORT OF SOIL SAMPLE

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavilu)
2. Location Name : Soil Near Human Settlement @ 330 Mtr
3. Name of Project PropONENT : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Soil Sample
6. Sample Number : 08182980
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

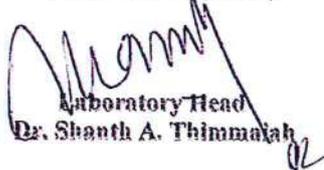
Sr. No.	Parameters	Protocol	Unit	Result
<b>Sample Number</b>				
1	pH @ 25°C	IS:2720 (Part 26)	--	6.11
2	Conductivity @ 25°C	IS:1476 :2000	µs/cm	98.8
3	Total Organic Matter	IS:2720 (Part 22)	%	0.99
4	Moisture	IS:2720 (Part II)	%	23.77
5	Available Nitrogen as N	IS:14686:1999	%	2.52
6	Available potassium as K	MLPL/SOP/32	Kg/ha	-
7	Available Phosphorus as P <sub>2</sub> O <sub>5</sub>	IS:10158-1982	%	0.08
8	Sand*	IS:1498-1970	%	-
9	Silt*	IS:1498-1970	%	-
10	Clay*	IS:1498-1970	%	-
11	Soil Type	Nil	Nil	-

Note: The tests marked with an \* are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL= Below Detection Limit; NA= Not Analysed

<b>INFERENCE</b>	Report Status: All parameters meet the requirements and are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

Authorised Signatory

  
Laboratory Head  
Dr. Shanth A. Thimmiah



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Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006  
Email: mail@metamorphosis-india.com.

» » » » » » » » » »

# PLATES

U U U U U U U U U U U

Department of Mining & Geology  
Government of Kerala  
District Office, Thiruvananthapuram,  
Kesavadasapuram, Pattom Palace P. O.,  
Thiruvananthapuram 695004,  
Phone 0471-2442055  
eMail: [geo.thi.dmg@kerala.gov.in](mailto:geo.thi.dmg@kerala.gov.in)  
Dated 14.01.2019.

From  
Geologist.

To  
M/s. Adani Vizhinjam Port Pvt Limited  
2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud  
Thiruvananthapuram

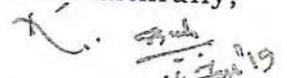
Sir,  
Sub:- Approval of Eco-friendly Mining Plan – Granite Building Stone quarry in  
Block no. 37 Re. survey nos. 554/1, 554/5, 554/6 of Nagaroor Village,  
Chrirayinkeezhu Taluk, Thiruvananthapuram District - reg.

Ref:- 1. Kerala Minor Mineral Concession Rules 2015  
2. Your application dated 07.08.2018  
3. Site inspection dated 29.12.2018

The mining plan for the Granite Building Stone quarry of M/s. Adani Vizhinjam Port Pvt Limited, 2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District in Block no. 37 Re. survey nos. 554/1, 554/5, 554/6 of Nagaroor Village, Chrirayinkeezhu Taluk, Thiruvananthapuram District, Kerala for an extent of 2.4706 Hectares is hereby approved vide the powers delegated to the District geologist for the approval of mining plan for the minor minerals issued under Rule 66 of Kerala Minor Mineral Concession Rules 2015, with the following conditions:

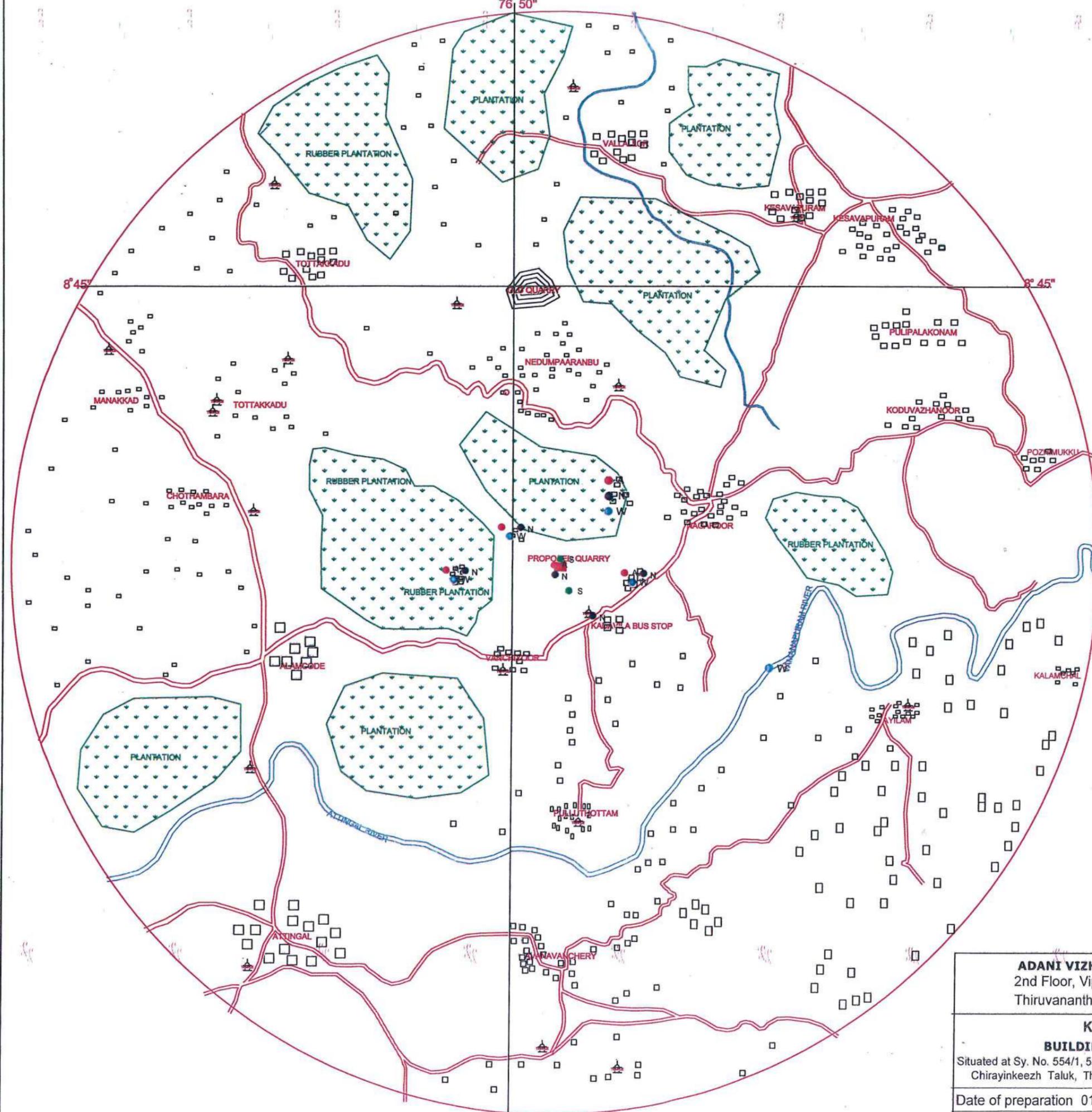
1. That you will follow the prescribed Rules & Regulations of Central Government and State Government issued from time to time in regard to mining.
2. That you will follow the Mines Safety Rules & Regulations.
3. That you will store the mining waste in the earmarked location/ dumping yard only as specified in the plan.
4. That you will carry out the plantation as committed in the plan.
5. That provision shall be made for the housing facility for the labour with all basic infrastructure facilities including safe drinking water, toilets etc., within the site.
6. That the yearly production (1<sup>st</sup> year 36,875MT, 2<sup>nd</sup> year 2,30,000MT, 3<sup>rd</sup> year 2,29,969MT, 4<sup>th</sup> year 2,29,250MT, 5<sup>th</sup> year 55,000 MT respectively) approved in the plan shall be strictly adhered to and if any deviation is required the same shall be intimated in advance.

Yours faithfully,

  
14 Jan 19  
Geologist



*Kantharaj.K.*  
**KANTHARAJ.K.**  
 RQP/GOA/130/2000



**REFERENCE**

- 5.0 kms radius
- Quarry area
- settlements
- Road
- River / nallah
- plantation

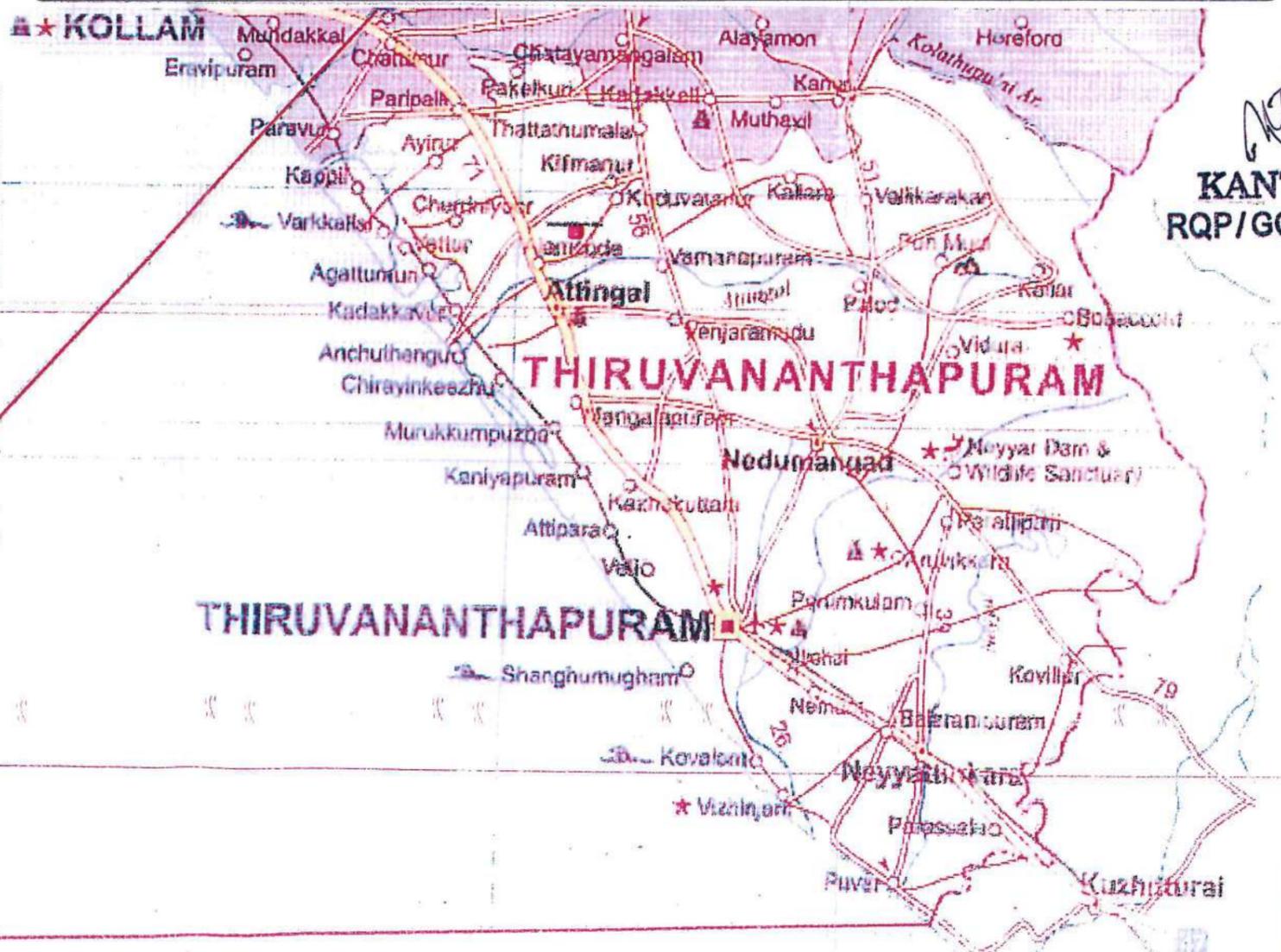
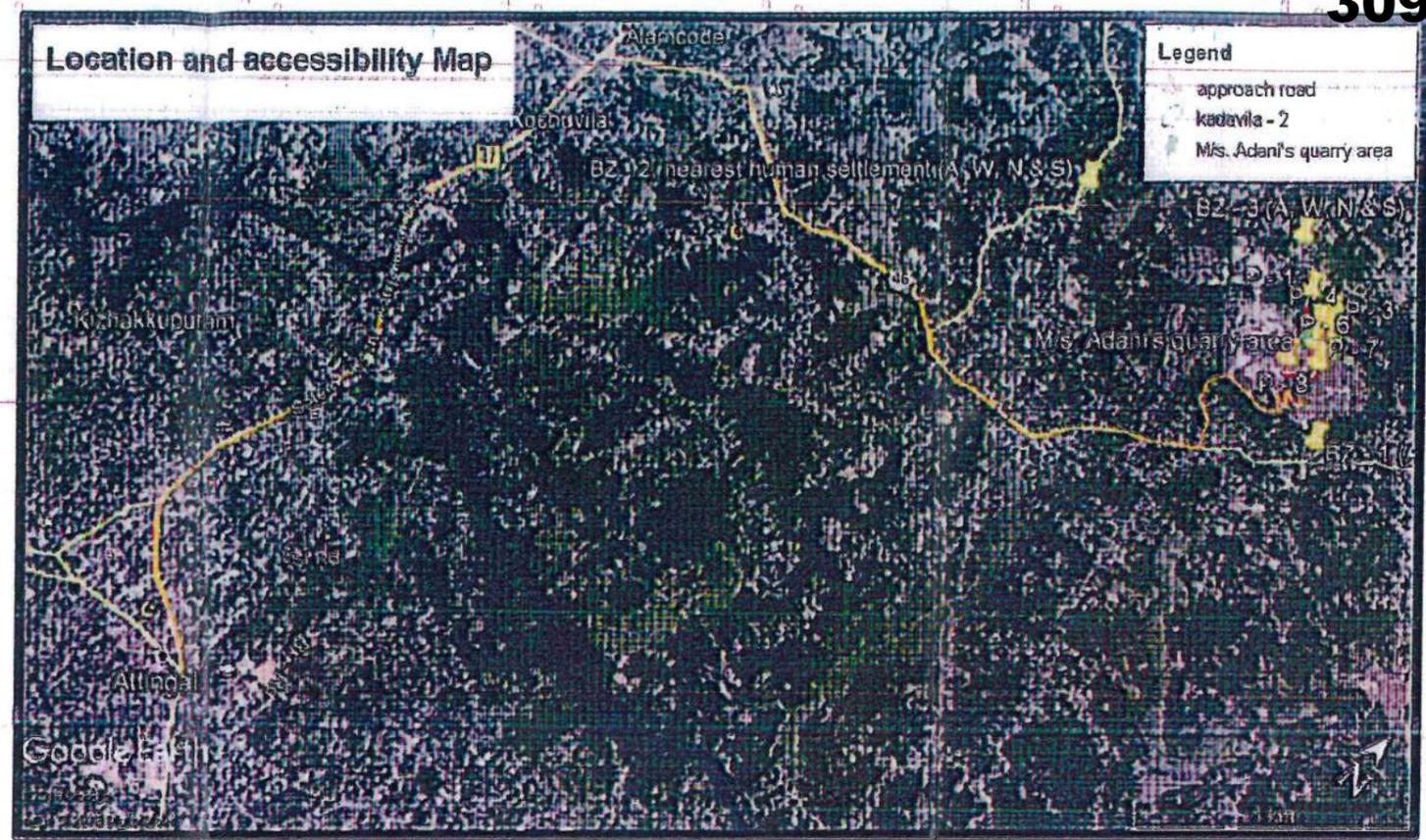
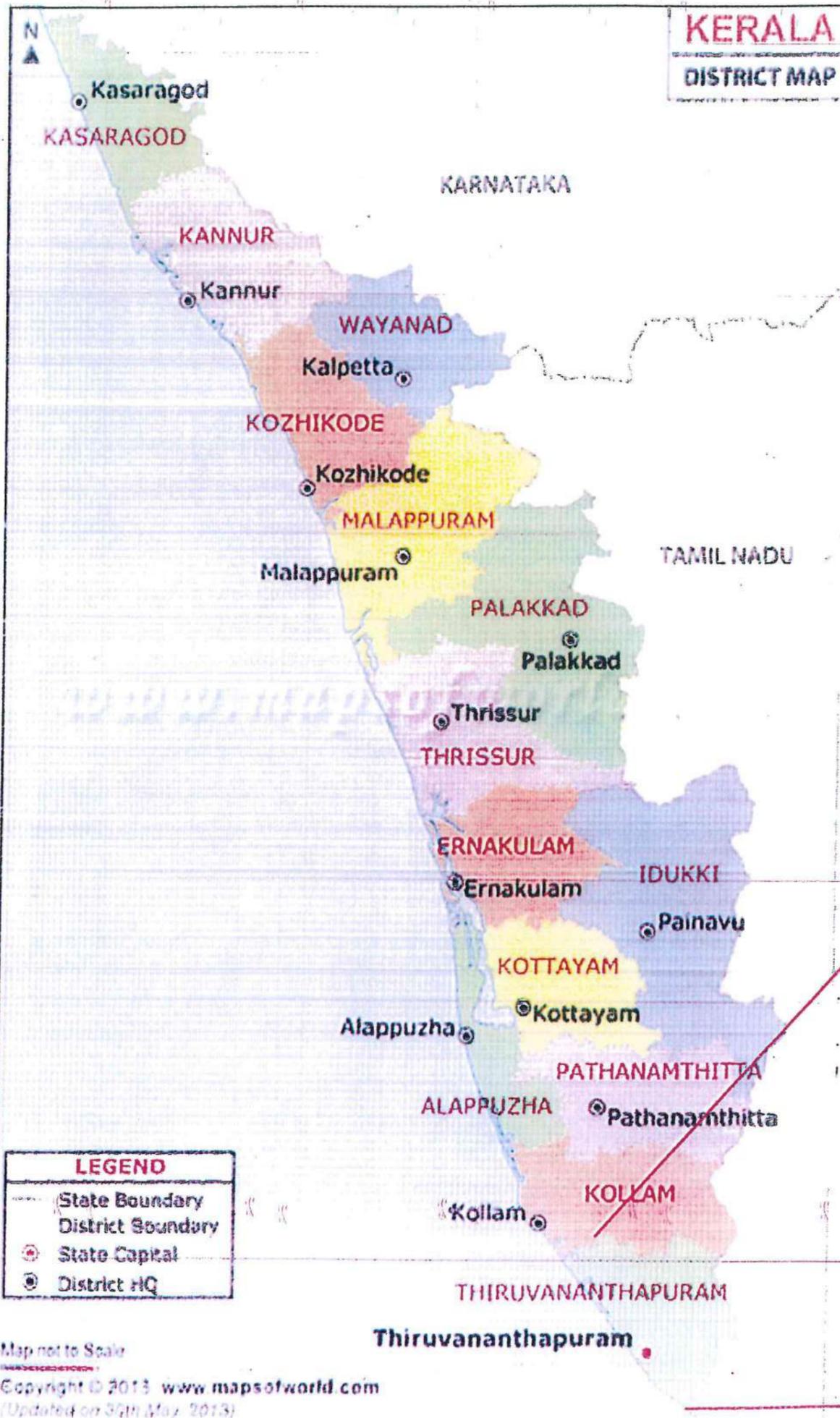
**ENVIRONMENTAL MONITORING LOCATION**

- A AIR
- N NOISE
- W WATER
- S SOIL

**ADANI VIZHINJAM PORT PVT. LTD.**  
 2nd Floor, Vipanchika Tower, Thycaud,  
 Thiruvananthapuram - 695 014, Kerala

**KEY PLAN**  
**BUILDING STONE QUARRY**  
 Situated at Sy. No. 554/1, 554/5 & 554/6 Nagaroor Village (kadavila),  
 Chirayinkeezh Taluk, Thiruvananthapuram Dist, Kerala State.

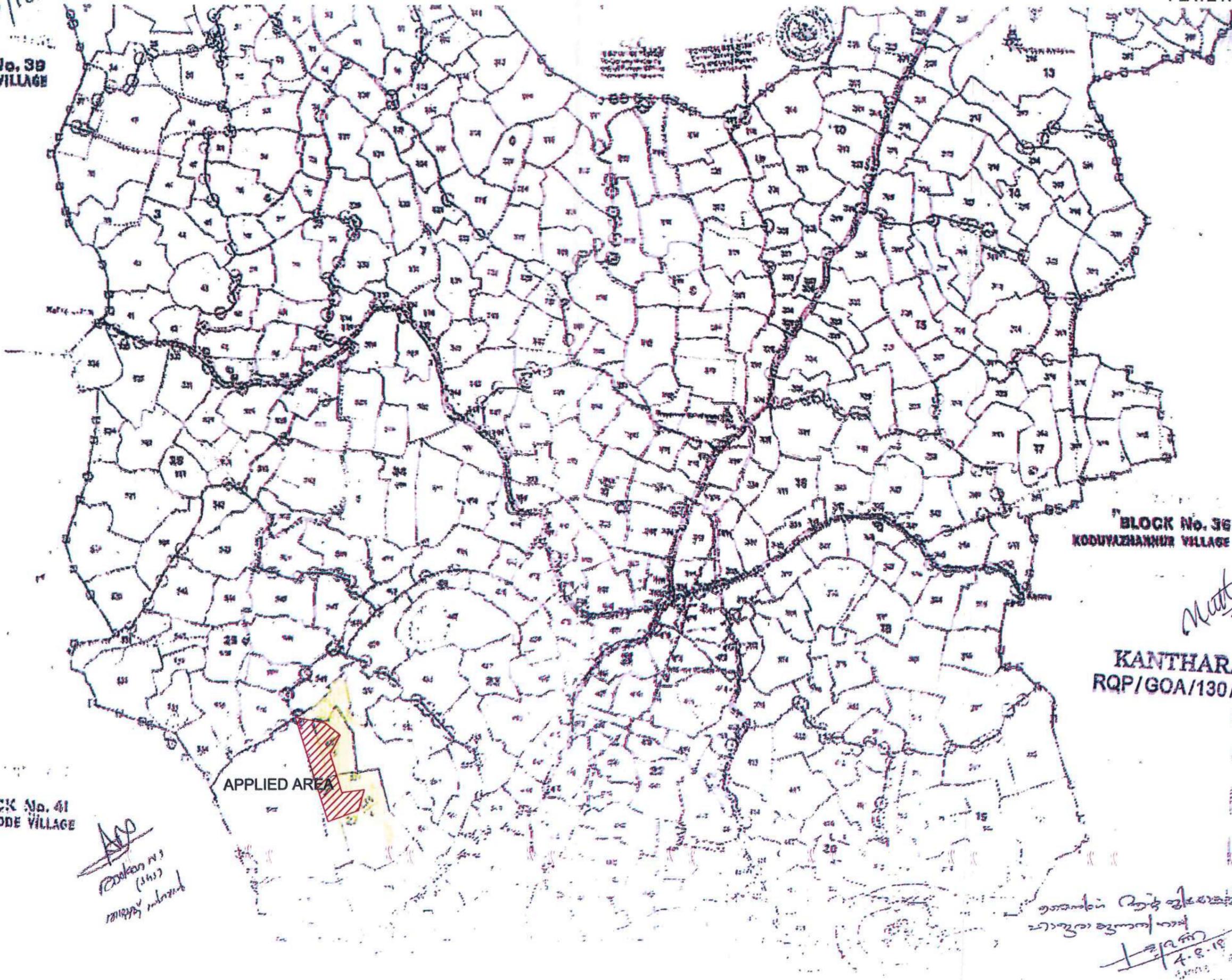
Date of preparation 01-11-2018      Scale 1 : 13500  
 TOPO MAP NO. 58/D/13 & 58/D/14      EXTENT : 2.4706 Ha



KANTHARAJ.I  
RQP/GOA/130/200

No. 1103/18.

BLOCK No. 39  
KARAVARAM VILLAGE



BLOCK No. 36  
KODUVAZHANNUR VILLAGE

*Muthan*  
KANTHARAJ.K.  
RQP/GOA/130/2000/A

BLOCK No. 41  
ALANKODE VILLAGE

*Adani*  
P.O. Karavaram  
(11/11/18)  
M/s. Adani Vizhijam Port Pvt. Ltd.

APPLIED AREA

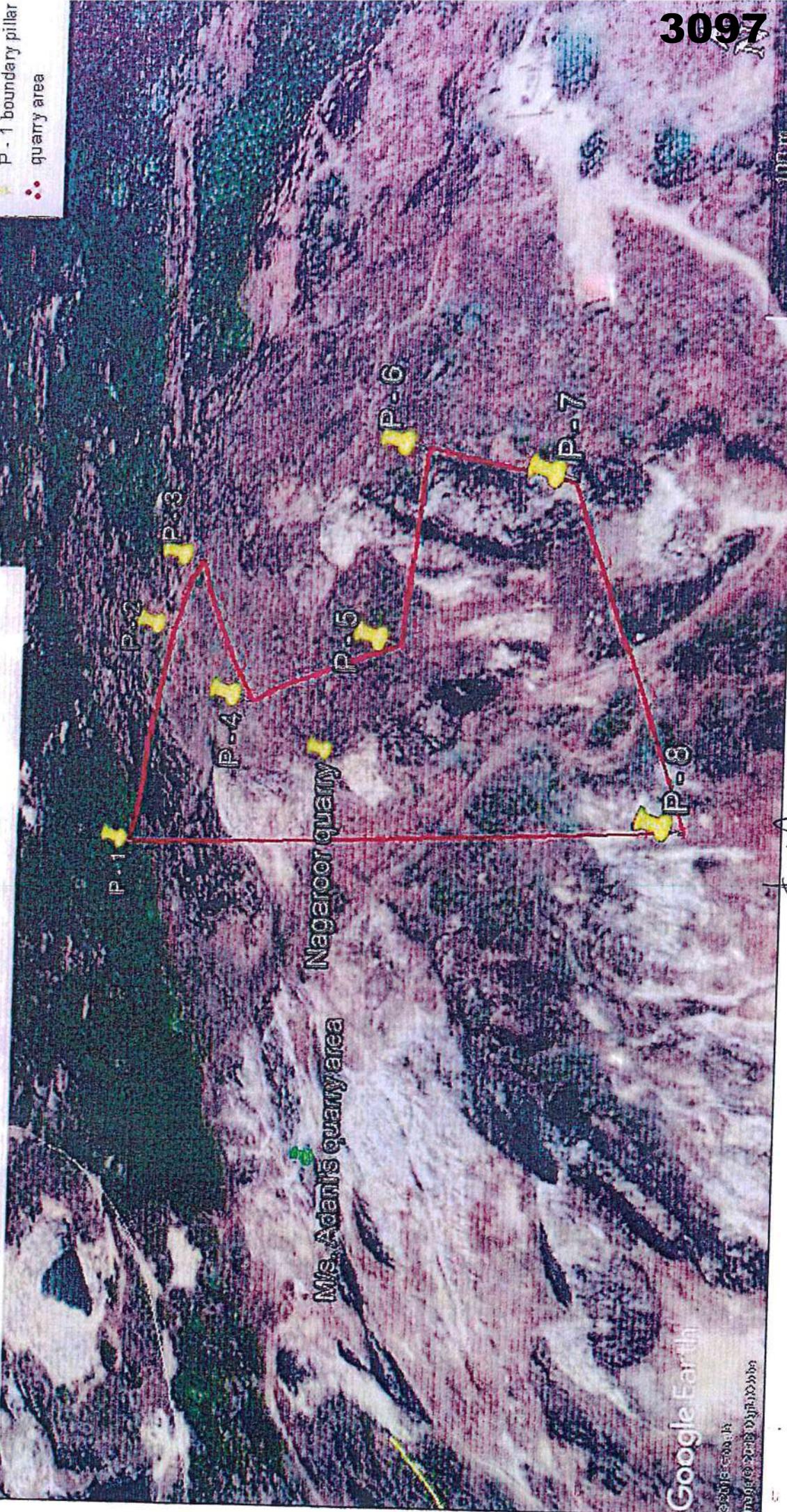
*Adani Vizhijam Port Pvt. Ltd.*  
4.8.18



Google Image showing the proposed quarry area of M/s. Adani.

Legend

- P - 1 boundary pillar
- quarry area



3097

51

KANTHARAJ.K.  
RQP/GOA/130/2000/A

*Handwritten signature*

Google Earth

© 2018 Google  
Image © 2018 DigitalGlobe

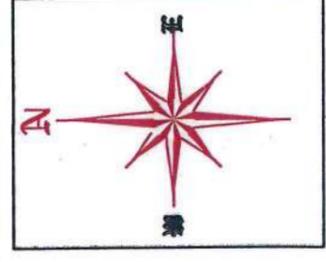
PLATE No. 6

E2450

E2400

E2350

E2300



LEGEND

	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	SERVICE/PRIVATE ROAD
	WORKED OUT AREA / OLD WORKINGS

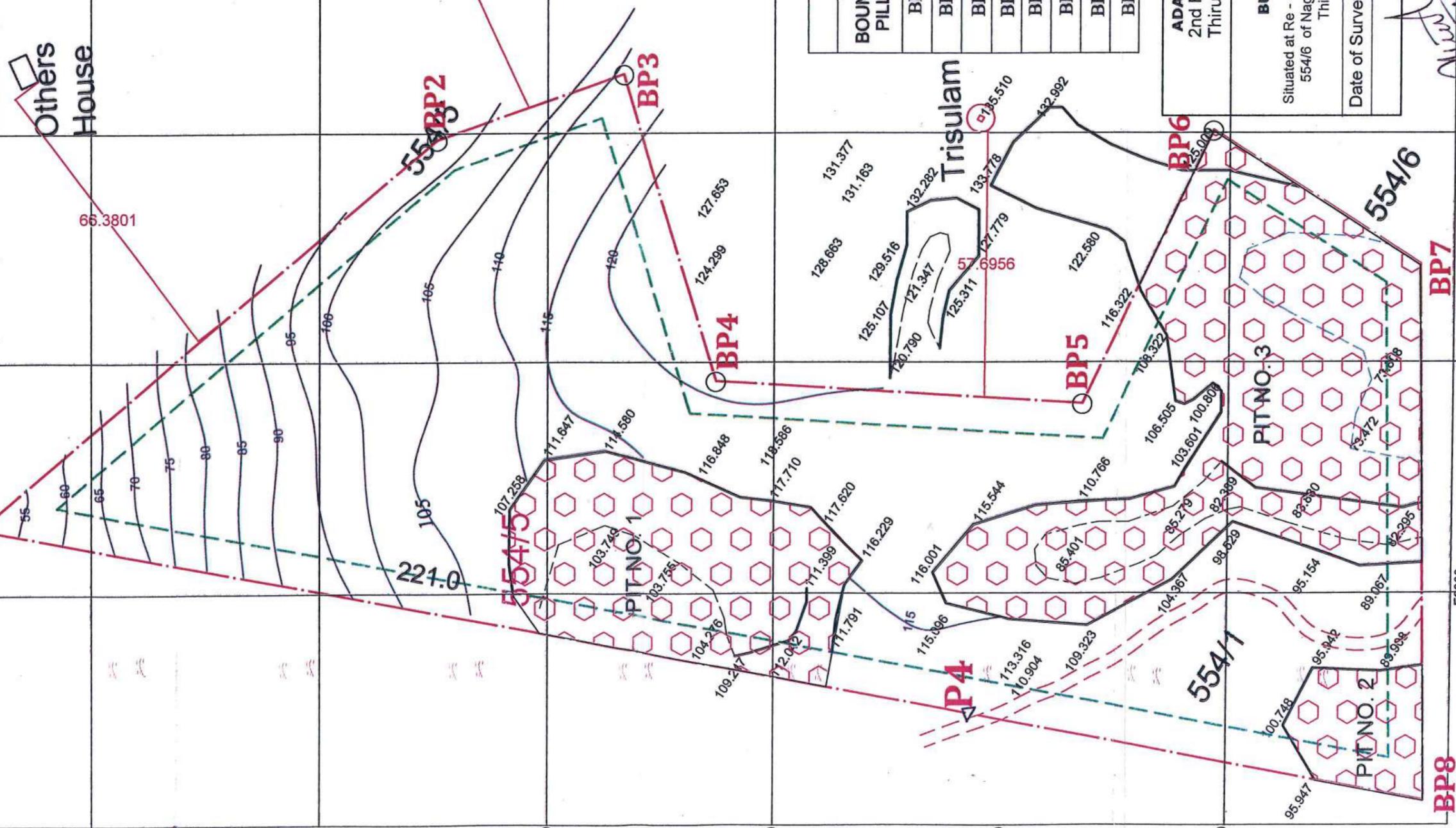
PROPERTY DETAILS

Re. Sy. No.	NOC AREA	UNUSED AREA	BUFFER AREA	MINING AREA	LEASE AREA	NOC ISSUED BY COLLECTOR
554/1	2.7604 ha.	1.6229 ha	0.2883 ha	0.8492 ha	1.1375 ha	C 7 - 17779 dated 27-07-2018
554/5	1.7037 ha.	1.0914 ha	0.1455 ha	0.4668 ha	0.6123 ha	
554/6	5.1154 ha.	4.3964 ha	0.1928 ha	0.5280 ha	0.7208 ha	
Total	9.5795 ha.	7.1089 ha	0.6266 ha	1.8440 ha	2.4706 ha	

KNOWNS POINT

Others House

Others House



GPS READING

BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP1	8°43'51.74"N	76°50'21.24"E
BP2	8°43'50.16"N	76°50'24.90"E
BP3	8°43'49.21"N	76°50'25.94"E
BP4	8°43'47.59"N	76°50'24.33"E
BP5	8°43'45.21"N	76°50'25.43"E
BP6	8°43'45.30"N	76°50'27.59"E
BP7	8°43'43.54"N	76°50'27.45"E
BP8	8°43'41.70"N	76°50'24.14"E

**ADANI VIZHINJAM PORT PVT. LTD.**  
 2nd Floor, Vipanchika Tower, Thycaud,  
 Thiruvananthapuram - 695 014, Kerala

**SURFACE PLAN**  
**BUILDING STONE QUARRY**  
 Situated at Re - Survey Block No. 37, Re - Sy. No. 554/1, 554/5, & 554/6 of Nagaroor Village (Kadavila), Chirayinkeezh Taluk, Thiruvananthapuram Dist, Kerala State.

Date of Survey 01-11-2018 Scale 1 : 1000  
 EXTENT : 2.4706 Ha

*(Signature)*

**KANTHARAJ.K.**  
 RQP/GOA/130/2000/A

N2050

N2000

N1950

N1900

N1850

N1800

N2050

N2000

N1950

N1900

N1850

N1800

E2500

E2400

E2350

E2300

PLATE No. 7

E2450

E2400

E2350

E2300

E2450

E2400

E2350

E2300

E2450

E2400

E2350

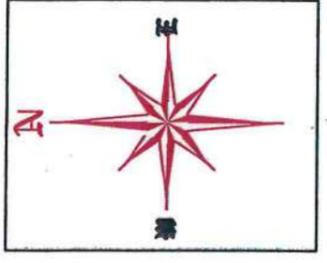
E2300

E2450

E2400

E2350

E2300



LEGEND

	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	SERVICE/PRIVATE ROAD
	WORKED OUT AREA / OLD WORKINGS

GEOLOGY INDEX

	Building Stone Material
	Soil cover
	Dip & Strike

GPS READING

BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP1	8°43'51.74"N	76°50'21.24"E
BP2	8°43'50.16"N	76°50'24.90"E
BP3	8°43'49.21"N	76°50'25.94"E
BP4	8°43'47.59"N	76°50'24.33"E
BP5	8°43'45.21"N	76°50'25.43"E
BP6	8°43'45.30"N	76°50'27.59"E
BP7	8°43'43.54"N	76°50'27.45"E
BP8	8°43'41.70"N	76°50'24.14"E

**ADANI VIZHINJAM PORT PVT. LTD.**  
 2nd Floor, Vipanchika Tower, Thycaud,  
 Thiruvananthapuram - 695 014, Kerala

**GEOLOGICAL PLAN**  
**BUILDING STONE QUARRY**

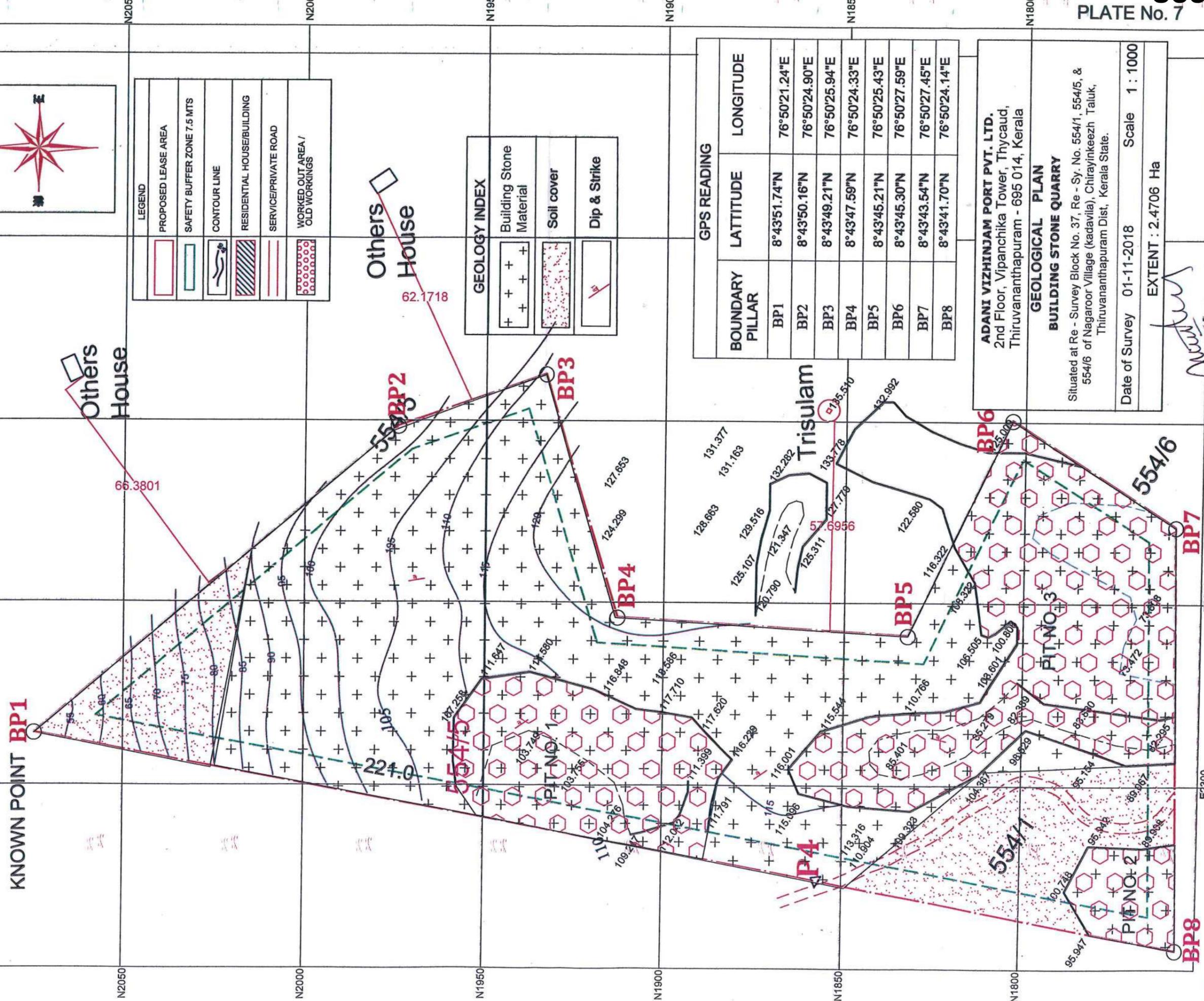
Situated at Re - Survey Block No. 37, Re - Sy. No. 554/1, 554/5, & 554/6 of Nagaroor Village (kadavilla), Chirayinkeezh Taluk, Thiruvananthapuram Dist, Kerala State.

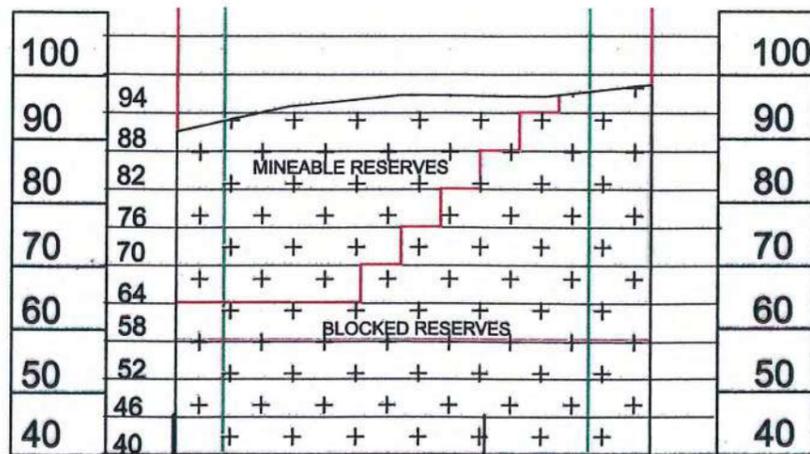
Date of Survey 01-11-2018 Scale 1 : 1000  
 EXTENT : 2.4706 Ha

KNOWN POINT BP1

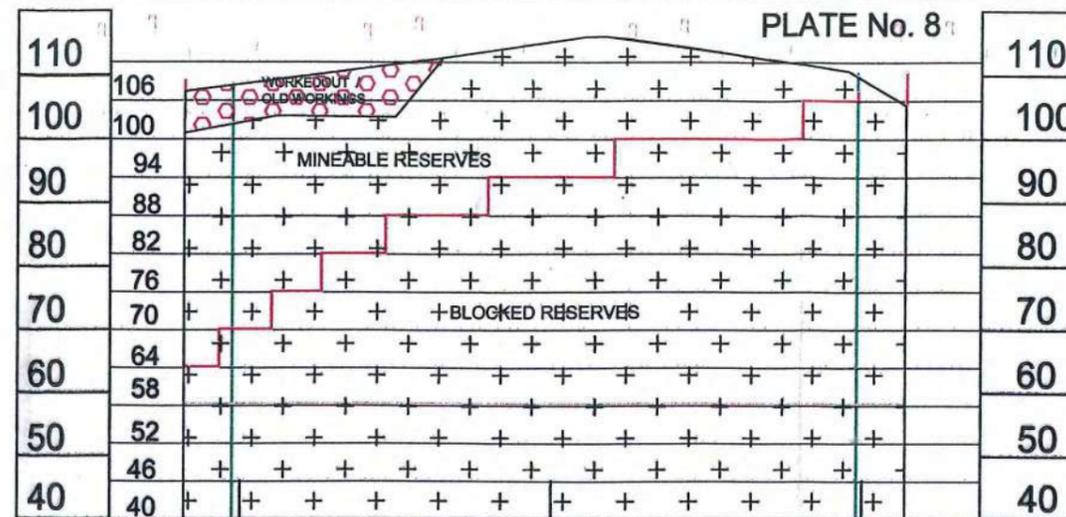
Others House

Others House

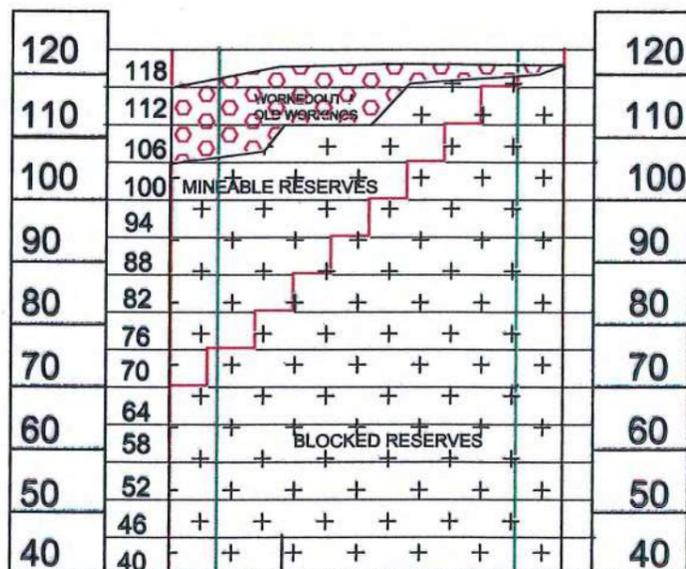




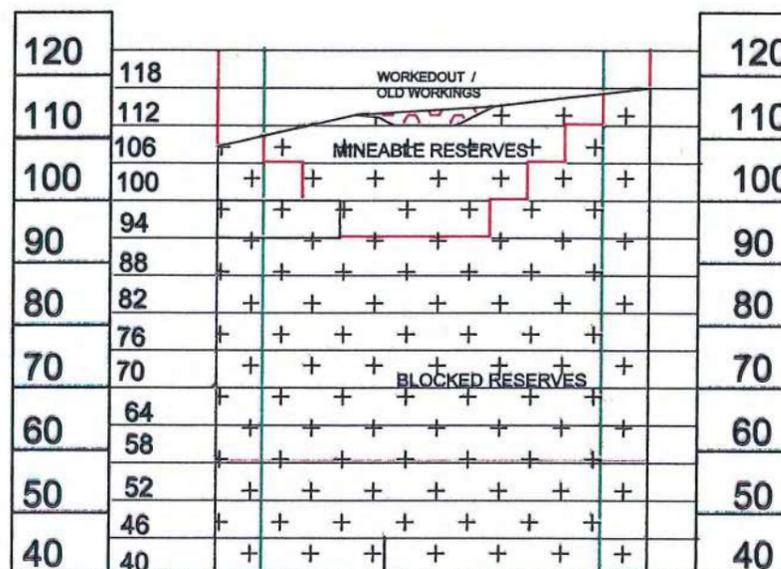
E - 2300 E - 2350  
SECTION ALONG - N : 2000



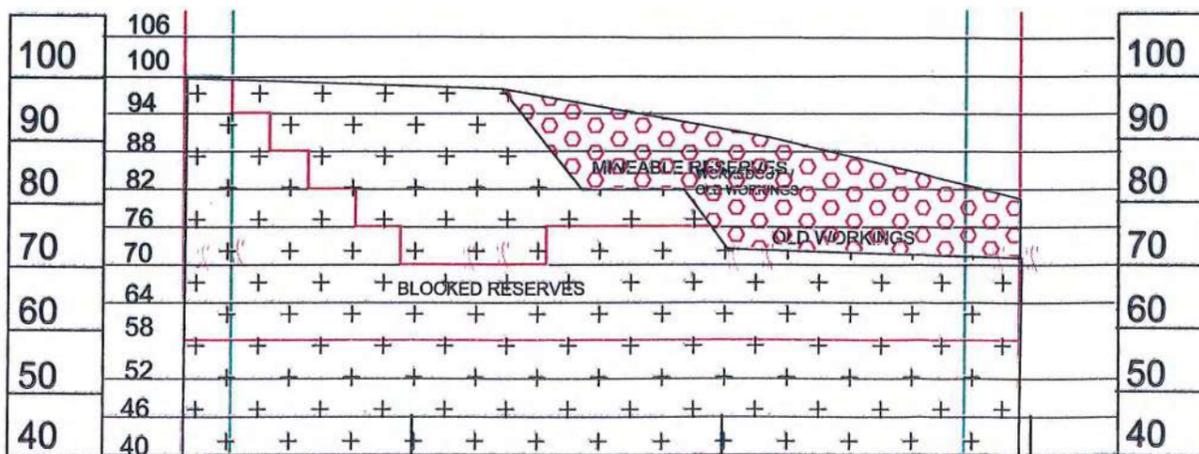
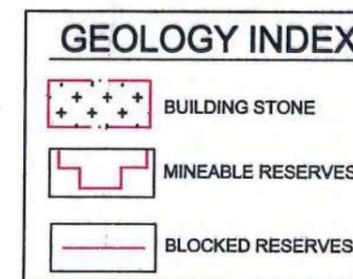
E - 2300 E - 2350 E - 2400  
SECTION ALONG - N : 1950



E - 2300  
SECTION ALONG - N : 1900



E - 2300  
SECTION ALONG - N : 1850



E - 2300 E - 2350 E - 2400  
SECTION ALONG - N : 1800

**ADANI VIZHINJAM PORT PVT. LTD.**  
2nd Floor, Vipanchika Tower, Thycaud,  
Thiruvananthapuram - 695 014, Kerala

**GEOLOGICAL CROSS SECTION**  
**BUILDING STONE QUARRY**

Situated at Re - Block No. 37. Re - Sy. No. 554/1, 554/5, & 554/6  
Nagaroor Village (kadavila), Chirayinkeezh Taluk,  
Thiruvananthapuram Dist, Kerala State.

Updated as on : 01-11-2018 Scale 1 : 1200

EXTENT : 2.4706 Ha

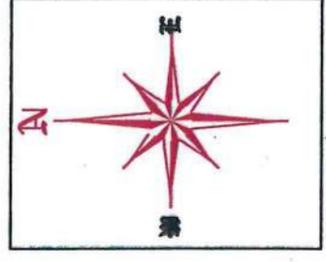
*Kantharaj K.*  
**KANTHARAJ.K.**  
RQP/GOA/130/2000/A

E2450 PLATE No. 9

E2400

E2350

E2300



LEGEND

	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	OLD QUARRY WORKINGS
	SERVICE/PRIVATE ROAD
	WORKED OUT AREA / OLD WORKINGS

**BP1 KNOWN POINT**

**REFERENCE**

PRODUCTION

	1ST YR.
	2ND YR.
	3RD YR.
	4TH YR.
	5TH YR.

N2050

N2000

N1950

N1900

N1850

N1800

Others House

Others House

62.1718

66.3801

554/5

BP2

PIT NO. 1

Trisulam

BP5

BP6

PIT NO. 3

554/6

BP7

PIT NO. 2

BP8

GPS READING

BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP1	8°43'51.74"N	76°50'21.24"E
BP2	8°43'50.16"N	76°50'24.90"E
BP3	8°43'49.21"N	76°50'25.94"E
BP4	8°43'47.59"N	76°50'24.33"E
BP5	8°43'45.21"N	76°50'25.43"E
BP6	8°43'45.30"N	76°50'27.59"E
BP7	8°43'43.54"N	76°50'27.45"E
BP8	8°43'41.70"N	76°50'24.14"E

ADANI VIZHINJAM PORT PVT. LTD.  
2nd Floor, Vipanchika Tower, Thycaud,  
Thiruvananthapuram - 695 014, Kerala

**PRODUCTION PLAN**

**BUILDING STONE QUARRY**

Situated at Re - Block No. 37, Re - Sy. No. 554/1, 554/5, & 554/6  
Nagaroor Village (kadavilla), Chirayinkeezh Taluk,  
Thiruvananthapuram Dist, Kerala State.

Date of Survey 01-11-2018 Scale 1 : 1000  
EXTENT : 2.4706 Ha

E2500

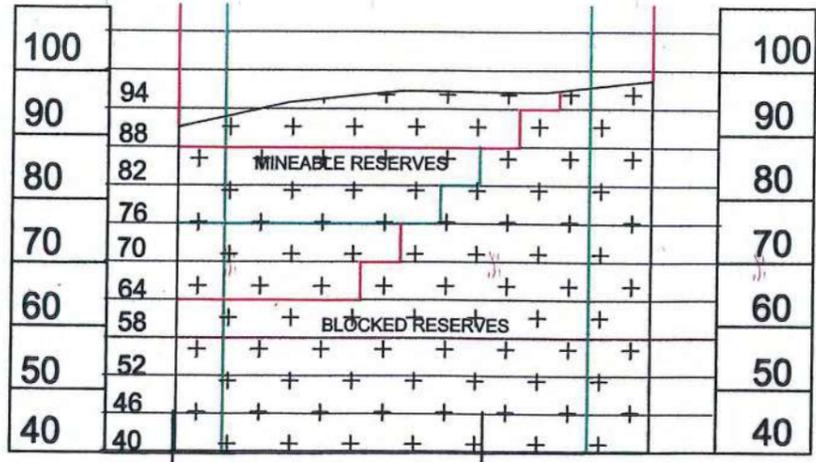
E2450

E2400

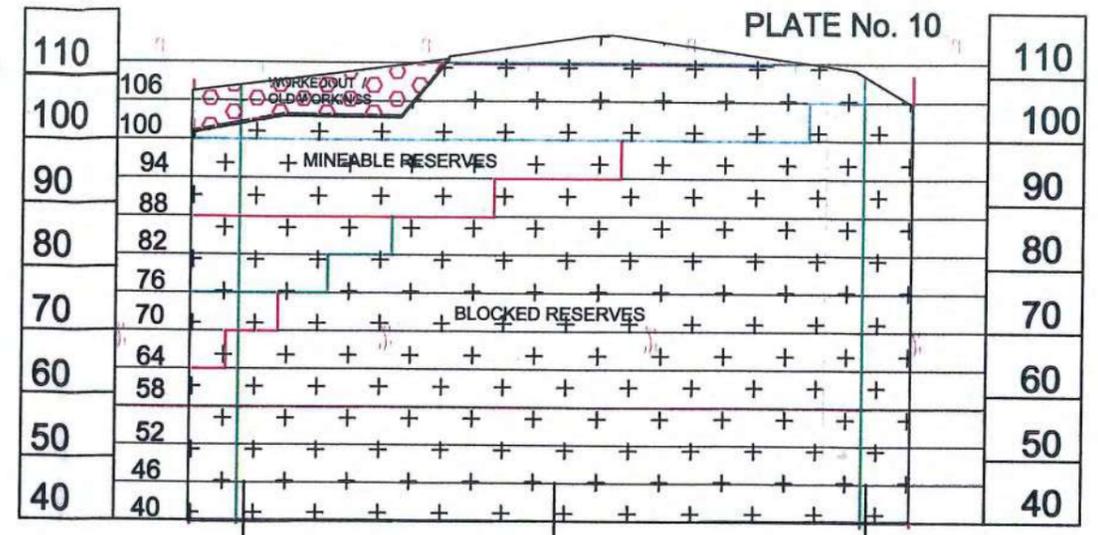
E2350

E2300

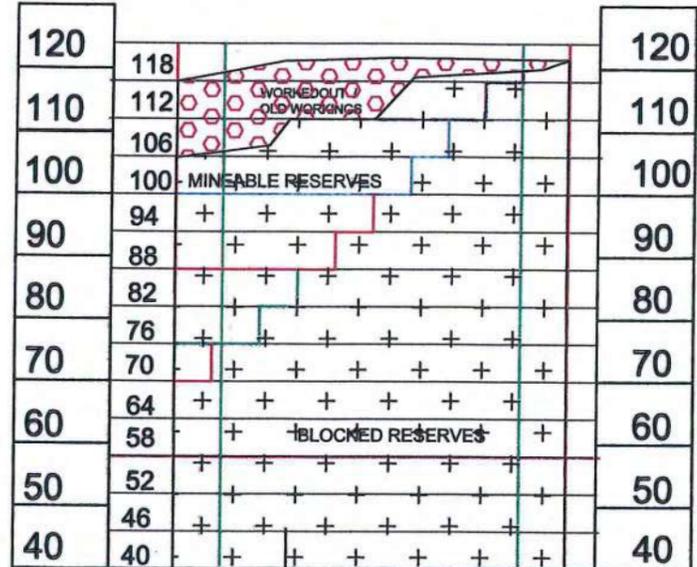
KANTHARAJ.K.  
RQP/GOA/130/2000/A



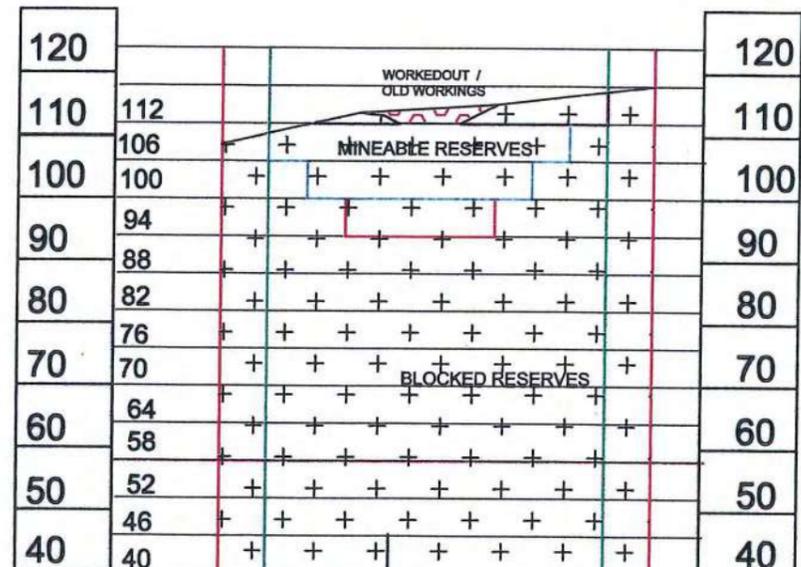
E - 2300 E - 2350  
SECTION ALONG - N : 2000



E - 2300 E - 2350 E - 2400  
SECTION ALONG - N : 1950



E - 2300  
SECTION ALONG - N : 1900



E - 2300  
SECTION ALONG - N : 1850

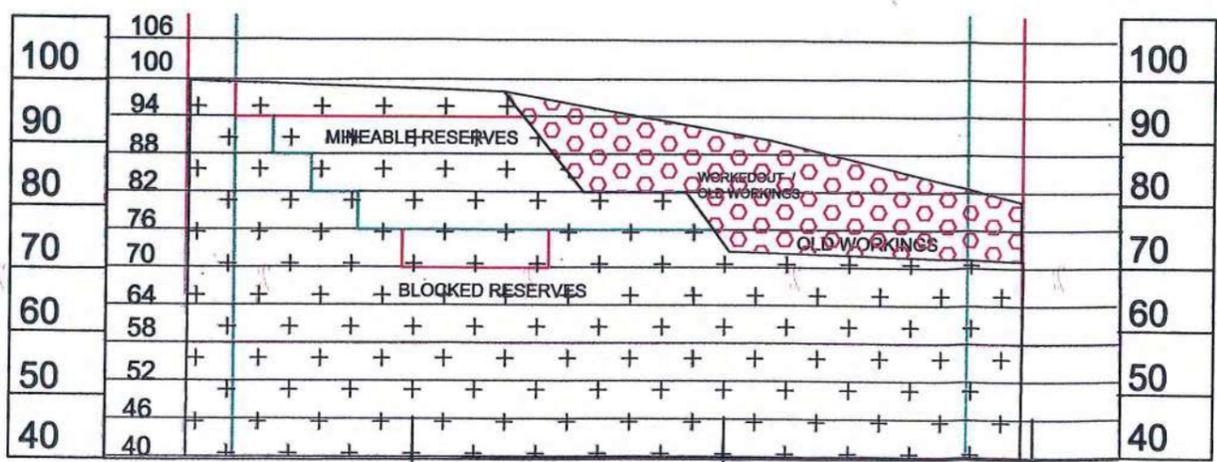
**GEOLOGY INDEX**

- BUILDING STONE
- MINEABLE RESERVES
- BLOCKED RESERVES

**REFERENCE**

PRODUCTION

- 1ST YR.
- 2ND YR.
- 3RD YR.
- 4TH YR.
- 5TH YR.



E - 2300 E - 2350 E - 2400  
SECTION ALONG - N : 1800

*Kantharaj.K.*  
**KANTHARAJ.K.**  
RQP/GOA/130/2000/A

**ADANI VIZHINJAM PORT PVT. LTD.**  
2nd Floor, Vipanchika Tower, Thycaud,  
Thiruvananthapuram - 695 014, Kerala

**PRODUCTION CROSS SECTION  
BUILDING STONE QUARRY**  
Sited at Re - Block No. 37. Re - Sy. No. 554/1, 554/5, & 554/6  
Nagaroor Village (kadavila), Chirayinkeezh Taluk,  
Thiruvananthapuram Dist, Kerala State.

Updated as on : 01-11-2018      Scale 1 : 1200

EXTENT : 2.4706 Ha

PLATE No. 11

E - 2700

E - 2500

E - 2300

E - 2100

E - 1900

N - 2400

N - 2200

N - 2000

N - 1800

N - 2400

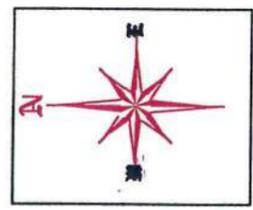
N - 2200

N - 2000

N - 1800

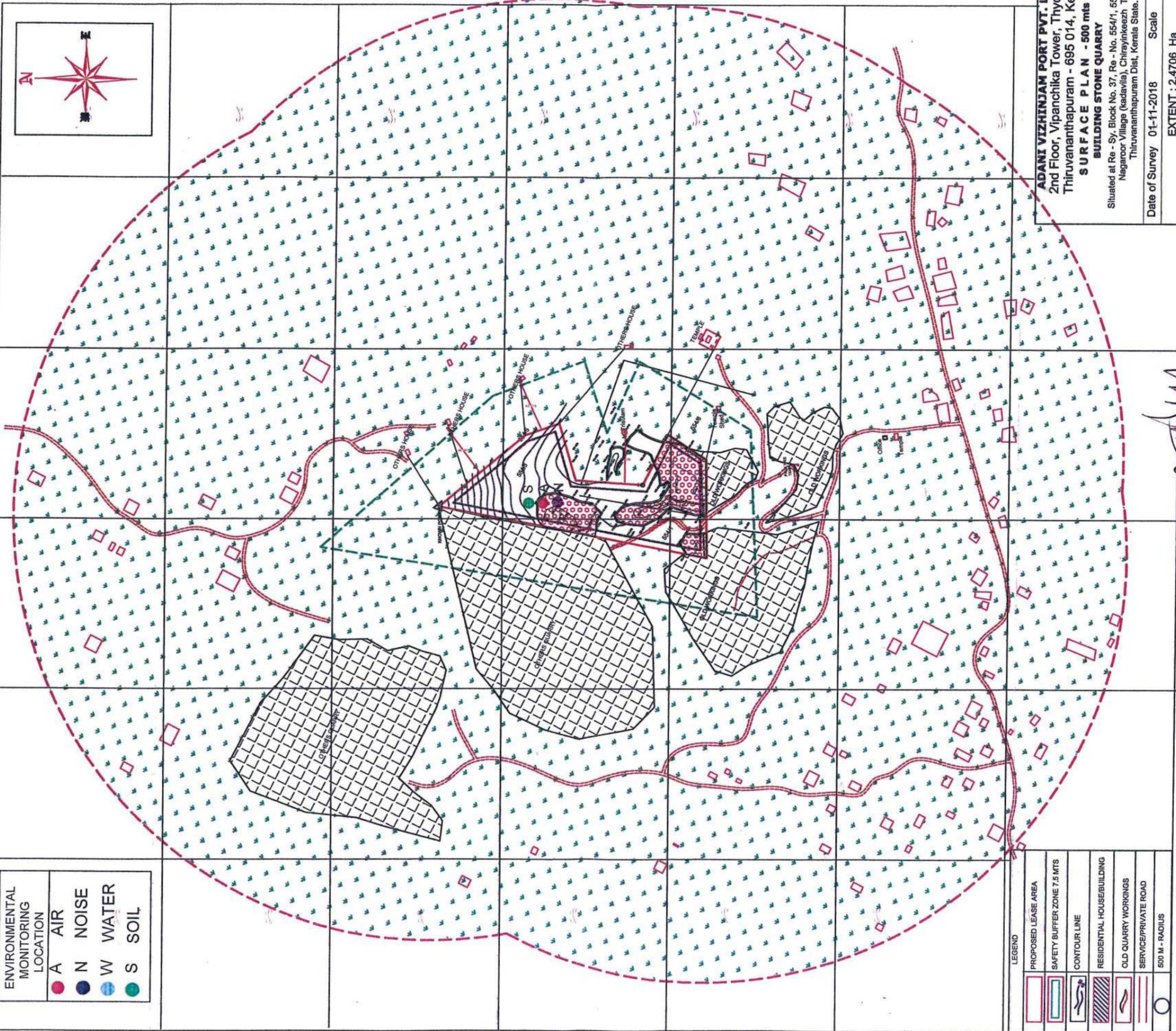
N - 1600

N - 1400



ENVIRONMENTAL MONITORING LOCATION	
A	AIR
N	NOISE
W	WATER
S	SOIL

LEGEND	
	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSEBUILDING
	OLD QUARRY WORKINGS
	SERVICE/PRIVATE ROAD
	500 M - RADIUS



**ADANI VIZHINJAM PORT PVT. LTD.**  
 2nd Floor, Vipanchika Tower, Thycaud,  
 Thiruvananthapuram - 695 014, Kerala  
**SURFACE PLAN - 500 mts**  
**BUILDING STONE QUARRY**  
 Situated at Re - Sy. Block No. 37, Re - No. 554/1, 554/5 & 554/6  
 Nagaroor Village (Kadavilla), Chirayinkeezh Taluk,  
 Thiruvananthapuram Dist, Kerala State.  
 Date of Survey 01-11-2018 Scale 1: 5000  
 EXTENT : 2.4706 Ha

*(Signature)*

E - 2700 E - 2500 E - 2300 E - 2100 E - 1900

**KANTHARAJ.K.**

**RQP/GOA/130/2000/A**

LEGEND	
	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	SERVICE/PRIVATE ROAD
	WORKED OUT AREA / OLD WORKINGS

Others House

62.1718

GPS READING		
BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP1	8°43'51.74"N	76°50'21.24"E
BP2	8°43'50.16"N	76°50'24.90"E
BP3	8°43'49.21"N	76°50'25.94"E
BP4	8°43'47.59"N	76°50'24.33"E
BP5	8°43'45.21"N	76°50'25.43"E
BP6	8°43'45.30"N	76°50'27.59"E
BP7	8°43'43.54"N	76°50'27.45"E
BP8	8°43'41.70"N	76°50'24.14"E

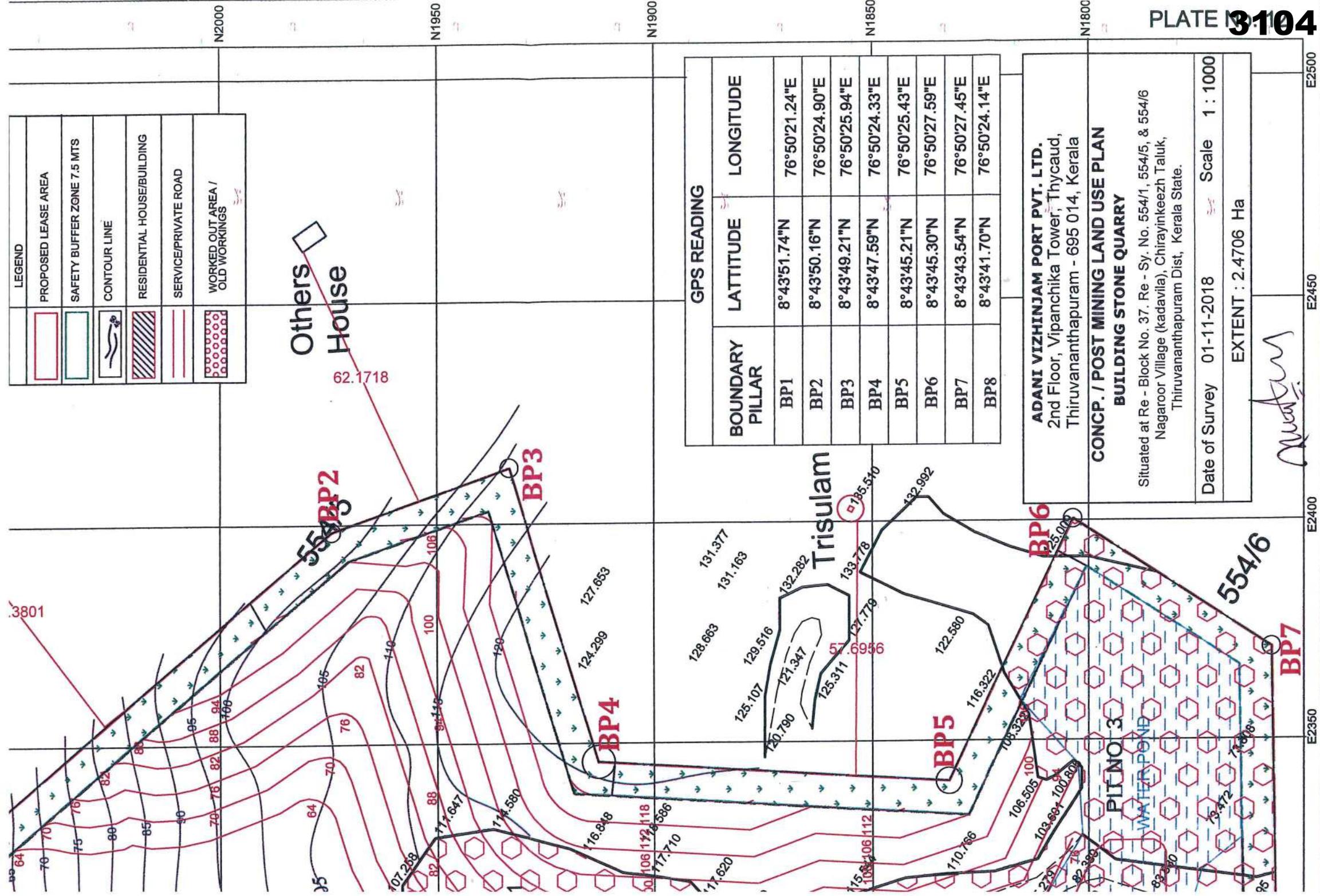
**ADANI VIZHINJAM PORT PVT. LTD.**  
 2nd Floor, Vipanchika Tower, Thycaud,  
 Thiruvananthapuram - 695 014, Kerala

**CONCP. / POST MINING LAND USE PLAN**  
**BUILDING STONE QUARRY**

Situated at Re - Block No. 37. Re - Sy. No. 554/1, 554/5, & 554/6  
 Nagaroor Village (Kadavila), Chirayinkeezh Taluk,  
 Thiruvananthapuram Dist, Kerala State.

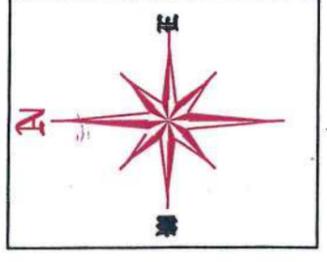
Date of Survey 01-11-2018 Scale 1 : 1000  
 EXTENT : 2.4706 Ha

*Signature*



N2000  
N1950  
N1900  
N1850  
N1800  
E2350  
E2400  
E2450  
E2500

**KANTHARAJ.K.**  
 RQP/GOA/130/2000/A



LEGEND

	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	SERVICE/PRIVATE ROAD
	WORKED OUT AREA / OLD WORKINGS

GPS READING

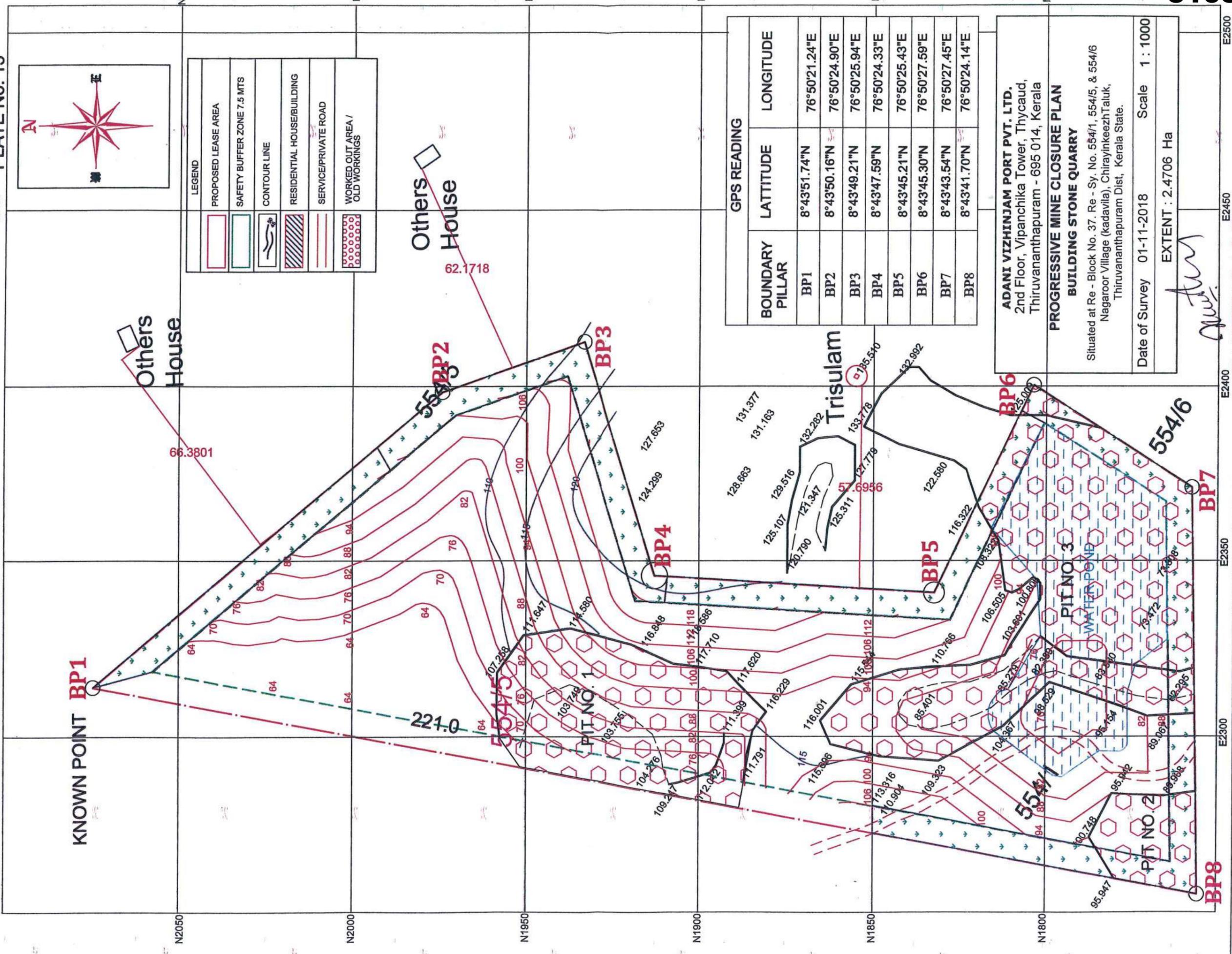
BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP1	8°43'51.74"N	76°50'21.24"E
BP2	8°43'50.16"N	76°50'24.90"E
BP3	8°43'49.21"N	76°50'25.94"E
BP4	8°43'47.59"N	76°50'24.33"E
BP5	8°43'45.21"N	76°50'25.43"E
BP6	8°43'45.30"N	76°50'27.59"E
BP7	8°43'43.54"N	76°50'27.45"E
BP8	8°43'41.70"N	76°50'24.14"E

**ADANI VIZHINJAM PORT PVT. LTD.**  
 2nd Floor, Vipanchika Tower, Thycaud,  
 Thiruvananthapuram - 695 014, Kerala

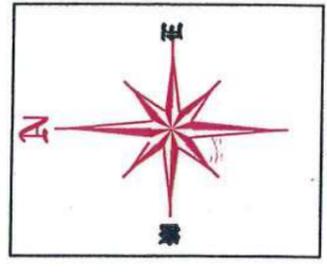
**PROGRESSIVE MINE CLOSURE PLAN**  
**BUILDING STONE QUARRY**

Situated at Re - Block No. 37. Re - Sy. No. 554/1, 554/5, & 554/6  
 Nagaroor Village (kadavila), Chirayinkeezh Taluk,  
 Thiruvananthapuram Dist, Kerala State.

Date of Survey 01-11-2018 Scale 1 : 1000  
 EXTENT : 2.4706 Ha



KANTHARAJ.M  
 RQP/GOA/130/2000...



LEGEND

	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	SERVICE/PRIVATE ROAD
	WORKED OUT AREA / OLD WORKINGS

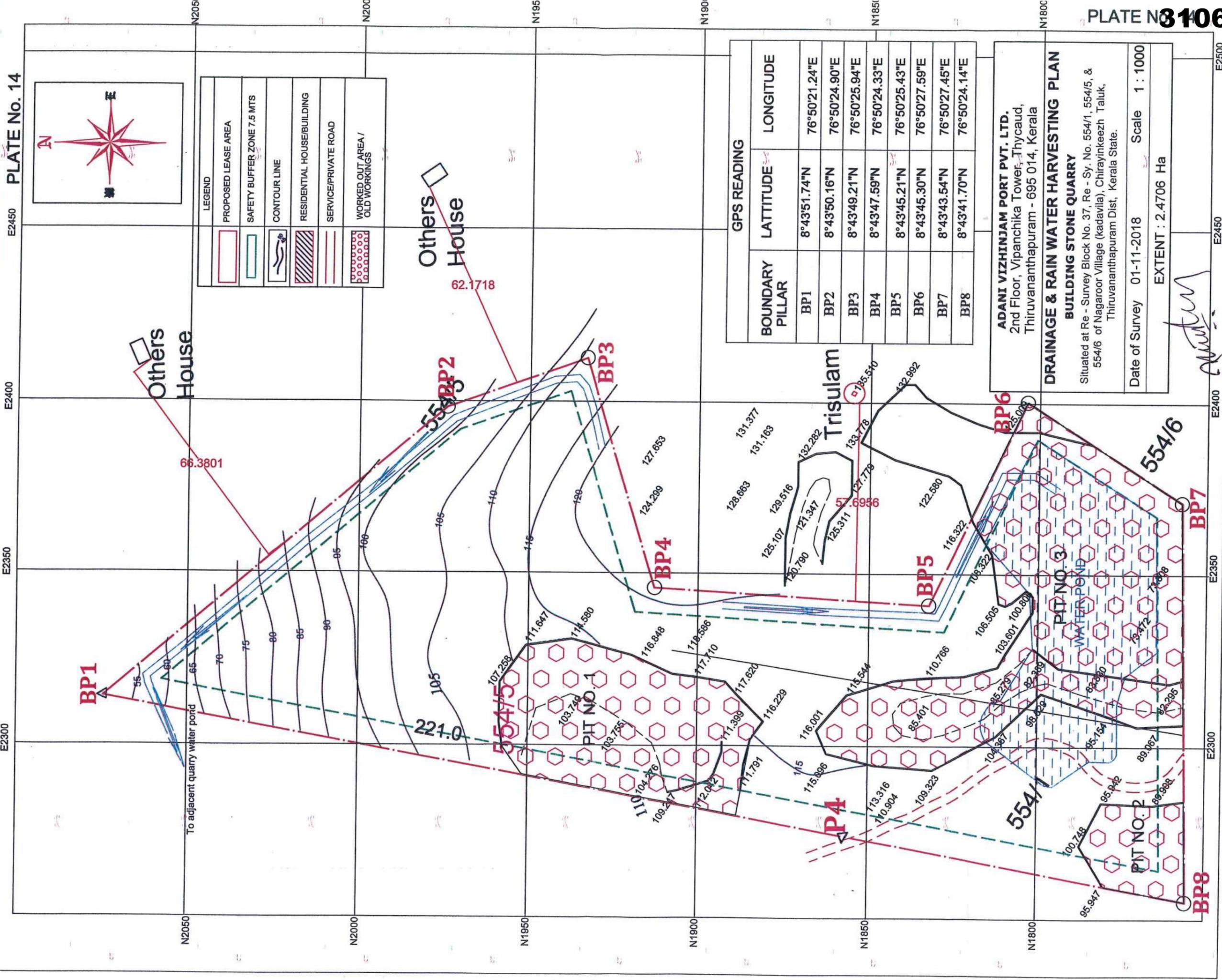
GPS READING

BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP1	8°43'51.74"N	76°50'21.24"E
BP2	8°43'50.16"N	76°50'24.90"E
BP3	8°43'49.21"N	76°50'25.94"E
BP4	8°43'47.59"N	76°50'24.33"E
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BP6	8°43'45.30"N	76°50'27.59"E
BP7	8°43'43.54"N	76°50'27.45"E
BP8	8°43'41.70"N	76°50'24.14"E

**ADANI VIZHINJAM PORT PVT. LTD.**  
 2nd Floor, Vipanchika Tower, Thycaud,  
 Thiruvananthapuram - 695 014, Kerala

**DRAINAGE & RAIN WATER HARVESTING PLAN**  
**BUILDING STONE QUARRY**  
 Situated at Re - Survey Block No. 37, Re - Sy. No. 554/1, 554/5, &  
 554/6 of Nagaroor Village (Kadavilla), Chirayinkeezh Taluk,  
 Thiruvananthapuram Dist, Kerala State.

Date of Survey 01-11-2018 Scale 1 : 1000  
 EXTENT : 2.4706 Ha



E2450 E2400 E2350 E2300 N2050 N2000 N1950 N1900 N1850 N1800

KANTHARAJ.K.  
 RQP/GOA/130/2000/A

**Annexure 2:  
Quarrying Lease Registration  
Agreement – Form H**

2007/2/2023

7723108

ANNEXURE No: 24

22198/23  
03/06/2023

376195/- Three lakhs seventy  
Six thousand one hundred and ninety five only  
KL008175672202324 M.  
09/06/23 DT, Thiruvananthapuram

Lease  
SD 1200/-  
RF 180494/-  
AS 105  
Dop 420  
LVA 210  
Misc 55  
310  
161494

REGISTRY THIRUVANANTHAPURAM  
*[Handwritten signature]*



*Rajesh*



FORM H  
(See Rule 43)  
QUARRYING LEASE

This deed of lease made on this the 31<sup>st</sup> day of May, 2023 between the Governor of Kerala (hereinafter referred to as the "State Government" which expression shall, where the context so admits be deemed to include his successors and assigns) of the one part and M/s.Adani Vizhinjam Port Private Limited, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695 014, Registered Office at: Adani House, Near Mithakhali six Roads, Navrangpura, Ahmedabad, Gujrat State - 380 009) (Represented by its Chief Executive Officer, Shri.Rajesh Kumar Jha) (Aadhaar No.271268167724) (hereinafter called the "lessee/lessees" which expression shall where the context so admits, include his/their heirs, executors, administrators, representatives and permitted assigns) of the other part.

*[Signature]*  
Lessor

*[Signature]*  
Lessee

*[Signature]*

2007/2/2023

7

REGISTERED

Presented at the private residence of the party at SA, Summer Breeze, Kulavambanam Junction, Kowdiar, Village, Thiruvananthapuram, Taluk on 27<sup>th</sup> June 2023 at 5-45 PM with the photographs and Thumb Impressions of the presentant and affixed as per Section 32 A and paid a fee of Rs 161994 through payment by **LATESH KR. JHA.**

*Rafel*

27<sup>th</sup> June 2023 the Principal Sub Registrar Thiruvananthapuram. Bimmonal

Execution admitted at the Residence *Bimmonal*

by M/s Adani Vizhinjam Port Pvt Ltd, 2nd Floor Viperchike, Tower, Thycaud., its chief Executive Officer.

**LATESH KR. JHA**

*Rafel*



**S. S. Chandra Jha.**  
Adani Vizhinjam Port Pvt Ltd, residing at SA, Summer Breeze, Kulavambanam Junction, Kowdiar village

Document No. 2007/2/2023 of Book I  
.....2.....Sheets.....1.....Sheet

*Rafel*

*Bimmonal*

Witnesseth that in consideration of the rents and royalties and lessee's/Lessees' covenants, hereinafter reserved and contained the State Government hereby give on lease to the lessee/lessees the land measuring **2.4706 hectares** described in the schedule hereunder and delineated on the plan hereto annexed and therein coloured red (hereinafter called the "said lands") to hold the same for a period of **05 (five) years** commencing from the ~~31.5.2023~~ and ending on the ~~30.5.2028~~ for the purposes of extracting minor mineral/minerals and subject to the terms and conditions contained in the Kerala Minor Mineral Concession Rules, 2015 (hereinafter referred to as "the Rules") and to the terms and conditions hereinafter appearing

1. The lessee/lessees shall have the right in and upon the said lands to extract Granite Building Stone (herein after called the said mineral/minerals) and to do all acts necessary for the extraction of the said mineral/minerals including the erection on the said lands, buildings and plant required for the purposes and also to take lead and carry away over the said lands and to dispose of the said minerals extracted as aforesaid.
2. The lessee/lessees shall during the subsistence of this lease have the liberty to work the said mineral/minerals and remove the same from the leasehold on permits issued by the State Government/competent authority or any other officer authorized by him in this regard. The permits shall be issued only on the basis of pre-paid royalty at the rates specified in Schedule I to these Rules. The royalty rates shall be subject to revision from time to time as the State Government may order.
3. The lessee/lessees shall pay to the State Government a yearly surface rent equal to the land revenue if any, assessable under the rules for the time being in force, or if the land be the property of Government or in reserve forest then equal to the land revenue plus cess, if any, per hectare of the land the surface whereof shall be occupied or used by the lessee/lessees for any of the purposes of this deed and so in proportion for any area less than one hectare. The said surface rent shall be paid by yearly payments; the first of such payments to be made on or before the last day of the first year of occupation provided always that no such rent shall be paid or demanded in respect of any roads or ways now in existence.
4. The lessee/lessees shall at all times during the currency of this lease keep correct and intelligible books of account showing accurately the quantity of the said minerals extracted and the weight and value of the said mineral sold or exported together with the names of the purchasers or consignees. The lessee shall also maintain a register of employees showing therein separately men, women employed daily and shall at reasonable times allow the competent authority appointed under the rules (hereinafter referred to as "competent authority") or the officer authorized by him to examine the said books of account and the register of employees and to take copies and extracts

  
Lessor

  
Lessee

Total 7 pages 2 sheets

DISTRICT REGISTRAR



Identified by [Signature] at the Residence.

K. JUSHA MATH. [Signature] S/O CH. MATIL, (Head Corporate Affairs) Holari Vizhinjam  
P.O., CRA 97 churovakkal, Enayyambalam. Thiruvananthapuram - 695017

MUNEER. E. T. [Signature] S/O E. T. Mohammed Basha, Assistant Manager, Corporate  
Affairs. Flat NO 70, Horizon Park, Althura Road, Vellayambalam.  
Thiruvananthapuram 695010.

27th June 2023

[Signature]

BINUMON. N  
Sub Registrar

21



I have verified myself as to the execution of the instrument  
by Rajkumar, M.  
Senior Geologist, Dept of Mining and Geology  
of Kerala. The Government  
[Signature]  
27th June 2023

[Signature]

BINUMON. N  
Sub Registrar

V-888  
223-238

Registered as No. 2007 of 2009 of  
Book I of Volume 888 pages 233 to 238  
7 Sheets 2nd Sheet in structure  
2023 Sub-Registrar

Exercising the power  
of District Registrar  
as per Act 30 (C)

[Signature]

BINUMON. N  
Sub Registrar

Rajesh

there from. The lessee/lessees shall submit reports in Forms F and G on the specified dates.

5. All sums found due under or by virtue of this deed from the lessee/lessees may be recovered from him jointly and severally from them and his/their properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue or in any other manner as the State Government may deem fit.
6. The lessee/lessees shall at the lessee's/lessees' own expense erect and at all times maintain and keep in repair boundary marks and pillars along the boundaries of the said lands according to the demarcation shown in the plan here to annexed.
7. The lessee shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 100 meters from any railway line except with the previous written permission of the railway administration concerned and any bridge on National Highway or 50 meters from any reservoir, tanks, canals, rivers, bridges, public roads, other public works, residential buildings, the boundary walls of places of worship, burial grounds or burning ghats or any monument protected by government with the previous permission of the authorities concerned or the Government or competent authority. Provided that the railway administration or the State Government or any other authority in this behalf may in granting such permission impose such other conditions as may be found proper and necessary.
8. The sides of open workings shall be sloped, stepped or secured by the lessee in such a manner as to prevent slope failure, when an open working is worked in steps, steps shall be of sufficient breadth in relation to their height to secure safety. In open workings trees liable to fall and all loose ground and material shall be removed by the lessee sufficiently far from the edge or otherwise made source in order to prevent danger to persons employed in the quarry.
9. If a working place is found to be unsafe all persons shall be withdrawn by the lessee/lessees immediately from the dangerous area and all access to such working place except for the purpose of removing the danger of saving life shall be prevented by securely fencing the full width of all entrances to the place.
10. The lessee/lessees shall at all reasonable times allow any officer authorized by the Central Government or by the State Government in that behalf to inspect the said lands and the buildings and plants erected thereon and the lessee/lessees shall assist such persons in conducting the inspection and afford them all information they may reasonably require, and shall conform to and observe all orders which the Central and State Governments as the result of such inspection or otherwise, may from time to time pass.



Lessor



Lessee

Total 7 Sheets 3

DISTRICT REGISTRAR  
*[Handwritten signature]*

Document No 200.2/2023 of Book 1  
.....2.....Sheets.....3.....Sheet

*[Handwritten signature]*  
S. Registrar



*[Handwritten signature]*

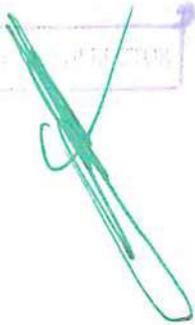
11. The lessee shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.
12. The lessee/lessees shall not assign or underlet the said lands or any part thereof or the rights or privileges, therein hereby granted or any of them without the previous permission in writing of the State Government/competent authority.
13. Where the lease or any right, title or interest therein has been assigned, sublet or transferred as provided in rule 45 read with condition 12, then the person in whose favor such assignment, sublease or transfer has been made shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.
14. The lease may be surrendered by the lessee/lessees at any time after 3 months notice in writing to the State Government/competent authority: Provided the lessee/lessees has/have paid all sums due on account of the lease. Provided further that if the lessee/lessees elects/elect to determine this lease before the expiry of the term of the lease, shall pay in addition to other dues a sum equal to the dead rent payable for the remaining part of the term of the lease deed.
15. If the lessee/lessees shall be desirous of taking a further lease of the said lands for a further term, he/they shall give three months' previous notice in writing of such desire to the State Government/competent authority and if the lessee/lessees has/have duly observed all the conditions of this lease, the State Government/competent authority may agree to renew the lease for such further term and on such terms and conditions as the State Government/competent authority may determine which shall be in accordance with the provisions of these rules.
16. If the lessee/lessees shall at any time during the said term use the said lands or any part thereof in any manner other than as authorized by this lease or fail to carry on quarrying operations as per the approved mining plan without sufficient cause of which the State Government/competent authority shall be the judge or shall commit a breach of any of the conditions of this lease it shall be lawful for the State Government/competent authority to cancel this lease after giving the lessee an opportunity of being heard or the alternative to receive from the lessee/lessees such penalty not exceeding **Rs.5,00,000/- (Rupees five lakh only)** for the breach as the State Government/ competent authority may fix.
17. In cases where the area under quarrying lease is Government land, the lessee shall close the mine within three calendar months after the expiry of the lease or its determination and remove any engine, machinery, buildings, structures and other works and conveniences from the area under the lease. If the lessee does not remove the same within the said period, the same shall become the property of the State government and the State government shall have the right to dispose the same on such terms and conditions as it deems fit.

  
Lessor

  
Lessee

Total 7 4

DISTRICT TRAVANCORE



Document No. 2002/2022 of Book 17  
2 Sheets 4 Sheet

S.A. Registrar 



Rafel

18. This lease subject to all rules and regulations which may from time to time be issued by the State Government regulating the working of the quarries and other matters affecting safety, health and convenience of the lessee's/lessees' employees or of the public, whether under the Indian Mines Act or otherwise.
19. The lessee/lessees shall without delay send to the District Collector and the competent authority or the officer authorized by him in this regard report of any accident causing loss of life or serious bodily injuries or seriously affecting or endangering life or property which may at any time occur at or in the said lands in the course of operations under this lease.
20. The lessee/lessees shall furnish such reports and returns relating to output, labourers employed and other matters as the State Government may prescribe.
21. The lessee/lessees shall make and pay such reasonable compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him/them in exercise of the powers granted by this lease and shall indemnify and shall keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any such damage, injury or disturbance and all costs and expenses in connection therewith.
22. Any condition prescribed in the Kerala Minor Mineral Concession Rules, 2015 but left out in this lease which may be found applicable to the lessee / lessees shall be treated as binding on the lessee/lessees.
23. In this case, the anticipated royalty to be remitted for the mineral extracted per year at the present rate of royalty of **Rs. 48/- per tonne** for the proposed average annual production of **1,56,219 metric ton** is **74,98,512/- (Rupees seventy four lakhs ninety eight thousand five hundred and twelve only)**
24. In this case, the annual surface rent to be remitted at the present rate of **Rs.5 per Are** per year is **Rs.1235/- (Rupees one thousand two hundred and thirty five only)** and the refundable Security Deposit is **Rs.24,706/- (Rupees twenty four thousand seven hundred and six only)**.



Lessor



Lessee

Total ₹ sheets 5

~~Disposal Fee~~

~~(Handwritten signature)~~

Document No. 2007/2023 of Book 1  
2 sheets 5 Sheet

~~(Handwritten signature)~~



Rajesh

**SCHEDULE OF DESCRIPTION OF LAND**

District : Thiruvananthapuram  
 Taluk : Chirayinkeezh  
 Block No. : 37

Village	Survey No.	Lease Area in Hectares
Nagaroor	554/1	1.1375
Nagaroor	554/5	0.6123
Nagaroor	554/6	0.7208
<b>Total area in Hectares</b>		<b>2.4706</b>

Bounded by Survey No:

On the North by : 555/2, 554/1, 554/5  
 On the East by : 554/5, 554/6  
 On the South by : 554/6, 554/1, 555/8  
 On the West by : 555/8, 555/2



In witness whereof the parties hereto have signed on the date and year first above written.

Signed by: *[Signature]* 31/5/23 *Rajkumar M.S., Senior Geologist*

**RAJKUMAR M. S.**  
 M.Sc, M.Phil, M.Tech, PGDM  
 Sr. Geologist  
 Dept. of Mining & Geology  
 Thiruvananthapuram

For and on behalf of the Governor of Kerala,

In the presence of

(1) *[Signature]* 31/5/23 *Unnikrishnan S, Assistant Geologist, District office Thiruvananthapuram*

(2) *[Signature]* 31/5/23 *Ajana Sathyan, Assistant Geologist, District office, Thiruvananthapuram Mining & Geology*

Signed by: *[Signature]* 31/5/2023 **RAJESH KR JHA MD&CEO AVPPL**  
 Address No - 271268167724

For and on behalf of the lessee/lessees In the presence of

(1) *[Signature]* **K. Susma MTR**  
 Achikwad, Chirayinkeezh  
 Pookkuzham  
 Thiruvananthapuram - 695617

*[Signature]*  
 Address No - 8889 53421982

(2) *[Signature]* 31/5/23 **MUNEER E. T.**  
 Sengam, Nagar, Edavappara  
 Muvattupuzha - 673645

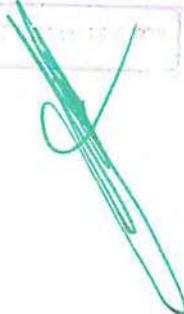
*[Signature]* 31/5/23  
 Address No: 9273 6759 4800

Lessor

*[Signature]*  
 Lessee

Total 7 sheets 6 sheet

DISTRICT REGISTRAR



Document No. 2002/2023 of Box 1  
2 Sheets 6 Sheet

Sd/- Registrar



Rafel

2007/2/2023  
Duplicate 2

3120  
12-3198/23  
03/04/23



കേരളം കേരल KERALA

N 418137



FORM H  
(See Rule 43)

QUARRYING LEASE



This deed of lease made on this the 31<sup>st</sup> day of June 2023 between the Governor of Kerala (hereinafter referred to as the "State Government" which expression shall, where the context so admits be deemed to include his successors and assigns) of the one part and M/s.Adani Vizhinjam Port Private Limited, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695 014, Registered Office at: Adani House, Near Mithakhali six Roads, Navrangpura, Ahmedabad, Gujrat State - 380 009) (Represented by its Chief Executive Officer, Shri.Rajesh Kumar Jha) (Aadhaar No.27I268167724) (hereinafter called the "lessee/lessees" which expression shall where the context so admits, include his/their heirs, executors, administrators, representatives and permitted assigns) of the other part.

*[Signature]*  
Lessor

*[Signature]*  
29-5-23  
Rajesh Kumar Jha MDCCG  
Adani Vizhinjam Port

*[Signature]* Lessee  
17-7 MAY 2023  
ആര. വി. ഗിരിജാ  
സ്വാമി വെണ്ടർ പട്ടം

7  
THIRUVANANTHAPURAM

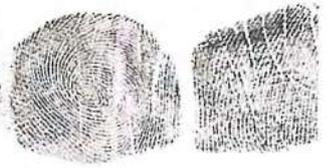
2007/2/2023  
Duplicate 2

Presented at the private residence of the party at SA, Summer Breeze, Kullavankorom, Junction Bandar Village, Thiruvananthapuram Taluk, on 27<sup>th</sup> June 2023 at 5:45 PM with photographs of thumb impressions ~~of~~ of the presentant affixed as per Section 32A, and paid a fee of Rs. 16,494/- through payment by

RAJESH KR. JHA

27<sup>th</sup> June 2023, the principal <sup>Rajesh</sup> Sub Registrar Thiruvananthapuram. Bimrod. n  
Execution admitted at the Residence by   
2) For Adani Vizhinjam Port Pvt Ltd, 2nd Floor, Vipanchiba Tower, The Land, its chief Executive Officer.

RAJESH KR. JHA



Rajesh

Shri Krishna Chandran Jha,  
CEO, Adani Vizhinjam Port Pvt Ltd, ~~residing~~ residing at SA, Summer Breeze, Kullavankorom, Junction Bandar Village

Document No. 2002/23 of Book 1  
2 Sheets 1 Sheet

Rajesh

Witnesseth that in consideration of the rents and royalties and lessee's/Lessee's' covenants, hereinafter reserved and contained the State Government hereby give on lease to the lessee/lessees the land measuring 2.4706 hectares described in the schedule hereunder and delineated on the plan hereto annexed and therein coloured red (hereinafter called the "said lands") to hold the same for a period of 05 (five) years commencing from the 31.5.2022 and ending on the 30.5.2028 for the purposes of extracting minor mineral/minerals and subject to the terms and conditions contained in the Kerala Minor Mineral Concession Rules, 2015 (hereinafter referred to as "the Rules") and to the terms and conditions hereinafter appearing

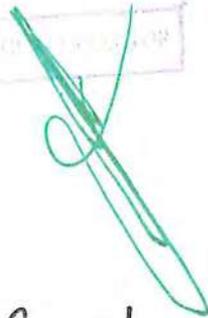
1. The lessee/lessees shall have the right in and upon the said lands to extract Granite Building Stone (herein after called the said mineral/minerals) and to do all acts necessary for the extraction of the said mineral/minerals including the erection on the said lands, buildings and plant required for the purposes and also to take lead and carry away over the said lands and to dispose of the said minerals extracted as aforesaid.
2. The lessee/lessees shall during the subsistence of this lease have the liberty to work the said mineral/minerals and remove the same from the leasehold on permits issued by the State Government/competent authority or any other officer authorized by him in this regard. The permits shall be issued only on the basis of pre-paid royalty at the rates specified in Schedule I to these Rules. The royalty rates shall be subject to revision from time to time as the State Government may order.
3. The lessee/lessees shall pay to the State Government a yearly surface rent equal to the land revenue if any, assessable under the rules for the time being in force, or if the land be the property of Government or in reserve forest then equal to the land revenue plus cess, if any, per hectare of the land the surface whereof shall be occupied or used by the lessee/lessees for any of the purposes of this deed and so in proportion for any area less than one hectare. The said surface rent shall be paid by yearly payments; the first of such payments to be made on or before the last day of the first year of occupation provided always that no such rent shall be paid or demanded in respect of any roads or ways now in existence.
4. The lessee/lessees shall at all times during the currency of this lease keep correct and intelligible books of account showing accurately the quantity of the said minerals extracted and the weight and value of the said mineral sold or exported together with the names of the purchasers or consignees. The lessee shall also maintain a register of employees showing therein separately men, women employed daily and shall at reasonable times allow the competent authority appointed under the rules (hereinafter referred to as "competent authority") or the officer authorized by him to examine the said books of account and the register of employees and to take copies and extracts

  
Lessor

  
Lessee

Total 7 Pages 2

DESCRIPTION OF THE INSTRUMENT



Identified by at the residence

K. SUSHIL MAHAR. Qadim 8/0 C.K. MAHAR, (Hand copyrite of us) Adlaw.  
Vignapuram Patti, CRASS, Chinnambal, Seelampur. Thiruvandipuram - 6257.  
MUNEER-E-T. ~~40~~ 40. E.T. Mohammed Bashir. Assistant Manager,  
Corporate Affairs, Flat No 7D, Horizon Park, Althore Road, Vellayal  
kalam, Tiruvannam. 615010.

27<sup>th</sup> June 2023

*[Signature]*

BINUMON. N  
Sub Registrar

*[Handwritten mark]*

I, Binumon N, Sub Registrar, do hereby certify that I have  
satisfied myself as to the execution of the instrument  
Binumon N, Sub Registrar  
Senior Geologist, Dept of Mining  
For and on behalf of The Governor  
of Kerala  
Who is authorized from personal appearance in this  
Office in the capacity (S/W) of the Registrar for 1988  
27<sup>th</sup> June 2023 Sub Registrar

*[Signature]*

BINUMON. N  
Sub Registrar



V-888  
223-228

Registered as No. 2007 of 2013  
888 pages 228  
Book 1 of Volume 223 to 228  
of 1 Sheets 2nd Sheet 012709 June  
2023 Sub-Registrar

*[Signature]*

BINUMON. N  
Sub Registrar

Exercising the power of  
The District Registrar (Gh)  
as per sec. (30)

*[Handwritten signature]*

there from. The lessee/lessees shall submit reports in Forms F and G on the specified dates.

5. All sums found due under or by virtue of this deed from the lessee/lessees may be recovered from him jointly and severally from them and his/their properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue or in any other manner as the State Government may deem fit.
6. The lessee/lessees shall at the lessee's/lessees' own expense erect and at all times maintain and keep in repair boundary marks and pillars along the boundaries of the said lands according to the demarcation shown in the plan here to annexed.
7. The lessee shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 100 meters from any railway line except with the previous written permission of the railway administration concerned and any bridge on National Highway or 50 meters from any reservoir, tanks, canals, rivers, bridges, public roads, other public works, residential buildings, the boundary walls of places of worship, burial grounds or burning ghats or any monument protected by government with the previous permission of the authorities concerned or the Government or competent authority. Provided that the railway administration or the State Government or any other authority in this behalf may in granting such permission impose such other conditions as may be found proper and necessary.
8. The sides of open workings shall be sloped, stepped or secured by the lessee in such a manner as to prevent slope failure, when an open working is worked in steps, steps shall be of sufficient breadth in relation to their height to secure safety. In open workings trees liable to fall and all loose ground and material shall be removed by the lessee sufficiently far from the edge or otherwise made source in order to prevent danger to persons employed in the quarry.
9. If a working place is found to be unsafe all persons shall be withdrawn by the lessee/lessees immediately from the dangerous area and all access to such working place except for the purpose of removing the danger of saving life shall be prevented by securely fencing the full width of all entrances to the place.
10. The lessee/lessees shall at all reasonable times allow any officer authorized by the Central Government or by the State Government in that behalf to inspect the said lands and the buildings and plants erected thereon and the lessee/lessees shall assist such persons in conducting the inspection and afford them all information they may reasonably require, and shall conform to and observe all orders which the Central and State Governments as the result of such inspection or otherwise, may from time to time pass.



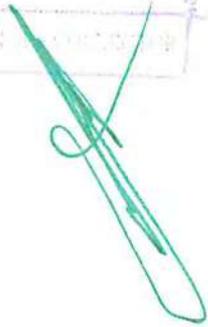
Lessor



Lessee

Dist. 7 ... 3

DISTRICT REGISTRY



Document No. 2002/2001/23 ...  
2 Sheets 3 Sheet

Sub Registrar



Rajesh

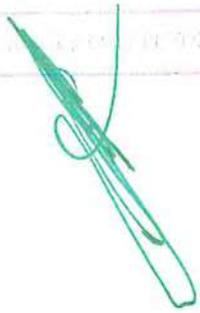
11. The lessee shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.
12. The lessee/lessees shall not assign or underlet the said lands or any part there of or the rights or privileges, therein hereby granted or any of them without the previous permission in writing of the State Government/competent authority.
13. Where the lease or any right, title or interest therein has been assigned, sublet or transferred as provided in rule 45 read with condition 12, then the person in whose favor such assignment, sublease or transfer has been made shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.
14. The lease may be surrendered by the lessee/lessees at any time after 3 months notice in writing to the State Government/competent authority: Provided the lessee/lessees has/have paid all sums due on account of the lease. Provided further that if the lessee/lessees elects/elect to determine this lease before the expiry of the term of the lease, shall pay in addition to other dues a sum equal to the dead rent payable for the remaining part of the term of the lease deed.
15. If the lessee/lessees shall be desirous of taking a further lease of the said lands for a further term, he/they shall give three months' previous notice in writing of such desire to the State Government/competent authority and if the lessee/lessees has/have duly observed all the conditions of this lease, the State Government/competent authority may agree to renew the lease for such further term and on such terms and conditions as the State Government/competent authority may determine which shall be in accordance with the provisions of these rules.
16. If the lessee/lessees shall at any time during the said term use the said lands or any part thereof in any manner other than as authorized by this lease or fail to carry on quarrying operations as per the approved mining plan without sufficient cause of which the State Government/competent authority shall be the judge or shall commit a breach of any of the conditions of this lease it shall be lawful for the State Government/competent authority to cancel this lease after giving the lessee an opportunity of being heard or the alternative to receive from the lessee/lessees such penalty not exceeding **Rs.5,00,000/- (Rupees five lakh only)** for the breach as the State Government/ competent authority may fix.
17. In cases where the area under quarrying lease is Government land, the lessee shall close the mine within three calendar months after the expiry of the lease or its determination and remove any engine, machinery, buildings, structures and other works and conveniences from the area under the lease. If the lessee does not remove the same within the said period, the same shall become the property of the State government and the State government shall have the right to dispose the same on such terms and conditions as it deems fit.

  
Lessor

  
Lessee

Total 7 sheets 4 sheet

DISTRICT REGISTRY



Document No 2002/2023 of Book 2  
2 Sheets 4 Sheet

Sub Registrar



Rafel

18. This lease subject to all rules and regulations which may from time to time be issued by the State Government regulating the working of the quarries and other matters affecting safety, health and convenience of the lessee's/lessees' employees or of the public, whether under the Indian Mines Act or otherwise.
19. The lessee/lessees shall without delay send to the District Collector and the competent authority or the officer authorized by him in this regard report of any accident causing loss of life or serious bodily injuries or seriously affecting or endangering life or property which may at any time occur at or in the said lands in the course of operations under this lease.
20. The lessee/lessees shall furnish such reports and returns relating to output, labourers employed and other matters as the State Government may prescribe.
21. The lessee/lessees shall make and pay such reasonable compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him/them in exercise of the powers granted by this lease and shall indemnify and shall keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any such damage, injury or disturbance and all costs and expenses in connection therewith.
22. Any condition prescribed in the Kerala Minor Mineral Concession Rules, 2015 but left out in this lease which may be found applicable to the lessee / lessees shall be treated as binding on the lessee/lessees.
23. In this case, the anticipated royalty to be remitted for the mineral extracted per year at the present rate of royalty of Rs. 48/- per tonne for the proposed average annual production of 1,56,219 metric ton is 74,98,512/- (Rupees seventy four lakhs ninety eight thousand five hundred and twelve only)
24. In this case, the annual surface rent to be remitted at the present rate of Rs.5 per Are per year is Rs.1235/- (Rupees one thousand two hundred and thirty five only) and the refundable Security Deposit is Rs.24,706/- (Rupees twenty four thousand seven hundred and six only).



Lessor



Lessee

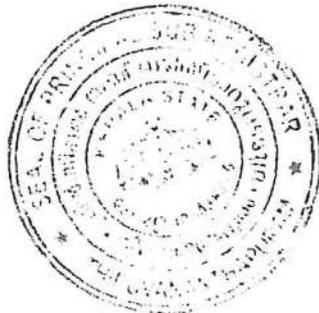
Total \$ 5

DISTRICT REGISTRAR, ...

*[Handwritten signature in green ink]*

Document No. 2002/20 of Book 2  
2 Sheets 5 Sheet

Sub Registrar *[Handwritten signature]*



*Rajesh*

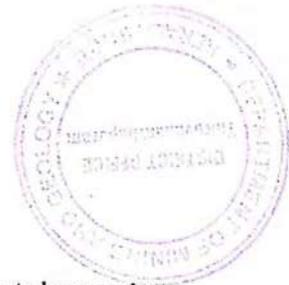
**SCHEDULE OF DESCRIPTION OF LAND**

District : Thiruvananthapuram  
 Taluk : Chirayinkeezh  
 Block No. : 37

Village	Survey No.	Lease Area in Hectares
Nagaroor	554/1	1.1375
Nagaroor	554/5	0.6123
Nagaroor	554/6	0.7208
<b>Total area in Hectares</b>		<b>2.4706</b>

Bounded by Survey No:

On the North by : 555/2, 554/1, 554/5  
 On the East by : 554/5, 554/6  
 On the South by : 554/6, 554/1, 555/8  
 On the West by : 555/8, 555/2



In witness whereof the parties hereto have signed on the date and year first above written.

Signed by: *31/5/23* Rajkumar M.S., Senior Geologist.

**RAJKUMAR M. S.**  
 M.Sc, M.Phil, M.Tech, PGDM  
 Sr. Geologist  
 Dept. of Mining & Geology  
 Thiruvananthapuram

For and on behalf of the Governor of Kerala,

In the presence of

(1) *31/5/23* Chinnikavishnan.S Assistant Geologist District Office Thiruvananthapuram

*31/5/23*

(2) *31/5/23* Ajana Sathyan, Assistant Geologist, Mining & Geology (Dist. office), Thiruvananthapuram

*31/5/23*

Signed by *Rajesh* RAJESH KR JHA MD & CEO AV PPL  
*31/5/23* Aadhar NO. 271268167724

For and on behalf of the lessee/lessees In the presence of

(1) *31/5/23* K. Jushia MHA  
 Bachikondal, Chennakkal.  
 Poo Kongu.  
 Thiruvananthapuram - 610012 Aadhar NO - 8889 5342 1902

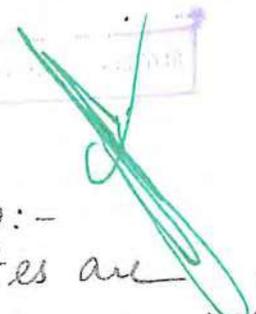
(2) *31/5/23* MUNEEB E-T.  
 Sanganam, Maroori, Eduvemappada.  
 Madappara 673645. Aadhar NO: 9273 6759 4800.

Lessor

Lessee

Total ..... 6 .....

DISTRICT REGISTRAR .....



Duplicate Two:-

Two duplicates are registered along with the original. There is no difference between the original and the duplicate. There is no correction and interlineation.

Compared by Reader Nithin AJ, clerk Shobna  
by Examiner Shabna S, clerk Shobna  
on 27th June 2023 Sub Registrar  
Binumon N

Document No. 2002/2023 of Book 2  
..... 2 ..... Sheets ..... 6 ..... Sheet

Sub Registrar



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**Annexure 3:**  
**AVPPL Letter – Submission of  
Quarrying Lease Agreement to SEIAA**

**adani**Ports and  
Logistics

Ref: AVPPL/SEIAA/2023-24/2501

Date: 14<sup>th</sup> July 2023

To,  
The Member Secretary,  
State Environment Impact Assessment Authority (SEIAA), Kerala  
K.S.R.T.C Bus Terminal Complex, 4th Floor,  
Thampanoor, Thiruvananthapuram - 695 001

**Subject:** Environment Clearance (EC) with respect to our proposed Building Stone quarry situated at Re-Sy. Block No. 37, Re-Sy. No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavilla), Chirayinkeezh Taluk, Thiruvananthapuram District of Kerala State - Submission of Executed Lease Order - Reg.

**Reference:** EC No. 92/Q/2022 dated 16.08.2022

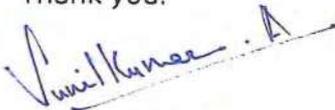
Dear Sir/Madam,

As per the EC obtained from State Environment Assessment Authority (SEIAA), Kerala vide reference above, specific condition S. No. 2 states: *The EC shall be valid from the date of execution of permit/lease from the Department of Mining and Geology. The copy of the lease order should be provided to the SEIAA before commencing the mining activity.*

Therefore, in compliance with the same we are herewith submitting the Executed Lease Order from Department of Mining & Geology dated 31.05.2023.

You are requested to kindly acknowledge receipt of the same.

Thank you.



Yours Sincerely  
Sunil Kumar Ayyappan  
AGM-Projects  
Encl: As Stated Above



Received  
15/7/23

Adani Vizhinjam Port Pvt Ltd  
3<sup>rd</sup> Floor, Aspinwall House,  
Kuravankonam,  
Thiruvananthapuram,  
Kerala-695003

Registered Office:

Adani Corporate House, Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad-382421

Tel +91 471 2772 100  
Fax +91 471 2325 600  
[project.vizhinjam@adani.com](mailto:project.vizhinjam@adani.com)  
[www.adani.com](http://www.adani.com)  
CIN: U61200GJ2015PTC083954

**Annexure 4:**  
**Nagaroor Panchayath Meeting**  
**Minutes Regarding the Road**  
**Improvement**

നഗരൂർ ഗ്രാമപഞ്ചായത്ത് കമ്മിറ്റിയുടെ  
11/04/2023 തീയതി നടന്ന സാധാരണ/അടിയന്തിര മീറ്റിംഗിലെ  
5(1)-ാം നമ്പർ തീരുമാനം

നഗരൂർ ഗ്രാമപഞ്ചായത്തിലെ കടവിള ജംഗ്ഷൻ - തണ്ണികോണം (സെക്കന്റ് എക്സിറ്റ് ഗേറ്റ്) വരെയുള്ള റോഡ് അറ്റകുറ്റപ്പണി നടത്തുന്നതിനുള്ള അനുമതി ആവശ്യപ്പെട്ട് കടവിള സ്റ്റോൺ ക്വാറി അദാനി വിഴിഞ്ഞം പോർട്ടിന് വേണ്ടി സമർപ്പിച്ച കത്ത് യോഗം വിശദമായി ചർച്ച ചെയ്തു. ടി റോഡ് വിഴിഞ്ഞം പോർട്ട് നിർമ്മാണാവശ്യത്തിനായി നിരന്തരമായി ഉപയോഗിച്ച് വരികയാണെന്നും ആയത് കൊണ്ട് തന്നെ അടിയന്തിരമായി അറ്റകുറ്റപ്പണി നടത്തേണ്ടുന്ന സാഹചര്യമാണുള്ളത് എന്ന് യോഗം വിലയിരുത്തി. മേൽ സാഹചര്യത്തിൽ സ്വന്തം ചെലവിൽ റോഡ് അറ്റകുറ്റപ്പണികൾ നടത്തുന്നതിന് വിഴിഞ്ഞം ഇന്റർനാഷണൽ പോർട്ട് (പ്രൈ.ലി.) സന്നദ്ധത അറിയിച്ച സാഹചര്യത്തിൽ, നഗരൂർ ഗ്രാമപഞ്ചായത്ത് എൽ.എസ്.ജി.ഡി അസി.എഞ്ചിനീയറുടെ മേൽനോട്ടത്തിൽ റോഡ് മെയിന്റനൻസ് പ്രവൃത്തി ഏറ്റെടുത്ത് നടപ്പിലാക്കുന്നതിന് അനുമതി നൽകിയും, ടി മരാമത്ത് പ്രവൃത്തിയുടെ മേൽനോട്ട ചുമതല വഹിക്കുന്നതിന് അസി.എഞ്ചിനീയറെ ചുമതലപ്പെടുത്തിയും തീരുമാനിച്ചു.

ഒപ്പ്  
പ്രസിഡന്റ്



//ശരിപകർപ്പ്//

SECRETARY  
Nagaroor Grama Panchayat

**Annexure 5:**  
**AVPPL Letter – Submission of EMP to**  
**Nagaroor Panchayath**


  
**adani**

Ports and  
Logistics

Ref: AVPPL/NGP/2022-23/2452

Date: 01<sup>st</sup> June 2023

To,  
The Panchayat Secretary,  
Office of the Nagaroor Grama Panchayat,  
Chemmarathamukku, Nagaroor,  
Thiruvananthapuram,  
Kerala - 695601

**Subject:** Environment Clearance (EC) for Granite Building Stone Quarry situated at Re-Sy. Block No. 37, Re-Sy. No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavilla-283), Chirayinkeezh Taluk, Thiruvananthapuram District of Kerala State - Reg.

**Reference:** EC No. 92/Q/2022 dated 16.08.2022

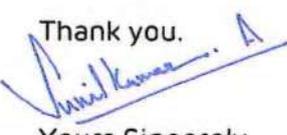
Dear Sir/Madam,

As per the EC obtained from State Environment Assessment Authority (SEIAA), Kerala vide reference above, specific condition point no. 19 states that: *As per OM no F.No.22-65/2017-IA.III dated 30th September 2020, under Corporate Environmental Responsibility (CER) the project Proponent shall prepare an Environment Management Plan (EMP) as directed by SEAC during appraisal, covering the issues to address the environmental problems in the project region, indicating both physical and financial targets year wise. The EMP shall be implemented in consultation with local self Govt. Institutions. The indicated cost for CER shall be 2% of the project cost depending upon the nature of activities proposed. The follow-up action on implementation of CER shall be included in the Half Yearly Compliance Report which will be subjected to field inspection at regular EC Identification intervals. A copy of the approved EMP shall be made available to the concerned Panchayat for information and implementation support.*

The EMP was prepared during the Environmental Impact Assessment (EIA) stage which was appraised by SEAC and approved. In compliance with the above-mentioned condition, we are herewith enclosing a copy of the approved EMP for information and implementation support.

You are requested to kindly acknowledge receipt of the same.

Thank you.

  
Yours Sincerely  
Sunil Kumar Ayyappan  
AGM-Projects

Encl: As Stated Above



Received by  
Suseela U 

Adani Vizhinjam Port Pvt Ltd  
3<sup>rd</sup> Floor, Aspinwall House,  
Kuravankonam,  
Thiruvananthapuram,  
Kerala-695003  
Registered Office:

Tel +91 471 2772 100  
Fax +91 471 2325 600  
[project.vizhinjam@adani.com](mailto:project.vizhinjam@adani.com)  
[www.adani.com](http://www.adani.com)  
CIN: U61200GJ2015PTC083954

Adani Corporate House, Shantigram, Near Vaishya Devi Circle, S. C. Highway, Khodiyar, Ahmedabad 382421

**Annexure 6:  
Letter and Copy of Notarized Affidavit  
sent to SEIAA by AVPPL**

Ref: AVPPL/SEIAA/2022-23/2090

Date: 31<sup>st</sup> August 2022

To,  
The Member Secretary,  
State Environment Impact Assessment Authority (SEIAA), Kerala  
K.S.R.T.C Bus Terminal Complex, 4th Floor,  
Thampanoor, Thiruvananthapuram - 695 001

**Subject:** Environment Clearance (EC) with respect to our proposed Building Stone quarry situated at Re-Sy. Block No. 37, Re-Sy. No. 554/1, 554/5 & 554/6 of Nagaroor village (Kadavilla), Chirayinkeezh Taluk, Thiruvananthapuram District of Kerala State – Submission of Signed EC, Newspaper Advertisements and Notarized Affidavit - Reg.

**Reference:** EC No. 92/Q/2022 dated 16.08.2022

Dear Sir/Madam,

As per the EC obtained from State Environment Assessment Authority (SEIAA), Kerala vide reference above, we are hereby complying with and submitting necessary documents with respect to certain General Conditions as detailed in the table below:

S. No.	Condition	Compliance Status
<b>General Conditions</b>		
1	The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.	<b>Complied</b> Affidavit for the same is enclosed as <b>Annexure 1</b> .
3	The project proponent should advertise in newspapers that the project has been accorded Environmental Clearance and copies of clearance letters are available in the Office of State Environment Impact Assessment Authority (SEIAA) and on the website of the Authority at <a href="http://www.seiaakerala.in">www.seiaakerala.in</a> . The advertisement should be in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language. The advertisement should be made within 10 days from the date of receipt of the Environmental Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.	<b>Complied</b> EC for the project was issued on 16.08.2022. Details of the EC were advertised in two local newspapers (The Hindu – English and Mathrubhumi – Malayalam) published on 18.08.2022. Copies of the Newspapers in Enclosed as <b>Annexure 2</b> .  The signed EC is enclosed in <b>Annexure 3</b> .  The copy of EC is also uploaded to the company website: <a href="https://www.adaniports.com/Downloads">https://www.adaniports.com/Downloads</a>

Adani Vizhinjam Port Pvt Ltd  
3<sup>rd</sup> Floor, Aspinwall House,  
Kuravankonam,  
Thiruvananthapuram,  
Kerala-695003

Registered Office:

Adani Corporate House, Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad-382421

Tel +91 79 2656 5555  
Fax +91 79 2555 5500  
[info@adani.com](mailto:info@adani.com)  
[www.adani.com](http://www.adani.com)  
CIN: U61200GJ2015PTC083954



S. No.	Condition	Compliance Status
4.	The proponent shall send a copy of the EC to concerned Grama Panchayat/ District Panchayat/Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The Environmental Clearance shall also be uploaded on the website of the company.	
42	The proponent has to provide insurance protection to the workers in the case of existing mining or provide the affidavit in case of fresh lease before execution of mining lease.	<b>Complied</b> The contractors involved in mining at the quarry will be completely responsible for insurance of their workers and the same will be explicitly mentioned the Service Order issued to them. Affidavit for the same is enclosed as <b>Annexure 1</b> .

You are requested to kindly acknowledge the receipt of the same.

Thanking you.

Yours Sincerely  
Rajesh Jha  
Chief Executive Officer

Encl: As Stated Above

**Annexure 7:  
NOC from District Collector**

**തിരുവനന്തപുരം ജില്ലാ കളക്ടറുടെ നടപടിക്രമം**

(ഹാജർ: ഡോ.നവജോത് ബോസ, ഐ.എ.എസ്)

ബി7-17779/2018

തീയതി: 24/02/2022

വിഷയം : വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണം - സർക്കാർ പാറ ഖനനം ചെയ്യുന്നതിനായി അനുവദിച്ച നിരാക്ഷേപ സാക്ഷ്യപത്രം - കാലാവധി ദീർഘിപ്പിച്ചും സ്റ്റോപ്പ് മെമ്മോ പിൻവലിച്ചും ഉത്തരവാകുന്നു.

- പരാമർശം: 1. ഈ കാര്യലയത്തിൽ നിന്നും 20/07/2018 ന് അനുവദിച്ച ബി7-17779/18 നമ്പർ നിരാക്ഷേപ സാക്ഷ്യപത്രം.
- 2. ഈ കാര്യലയത്തിലെ 24/04/2020 തീയതിയിലെ മേൽ നമ്പർ കത്ത്.
- 3. ബഹു. കേരള ഹൈക്കോടതിയുടെ 07/02/2022 ലെ WP(C)2294/2022 നമ്പർ ഉത്തരവ്.
- 4. 28/12/2021 തീയതിയിലെ REV-P2/284/2021-REV നമ്പർ സർക്കാർ കത്ത്.
- 5. അദാനി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ് കമ്പനി സി.ഇ.ഒ. 09/02/2022 ന് സമർപ്പിച്ച AVPPL/GoK/2021-22/1858 നം. അപേക്ഷ.

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വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിനു വേണ്ടി ചിറയിൻകീഴ് താലൂക്കിൽ നഗരൂർ വില്ലേജിൽ ബ്ലോക്ക് നമ്പർ 37 ൽ റീസർവ്വെ നമ്പർ 554/1, 554/5, 554/6 എന്നിവയിൽ ഉൾപ്പെട്ട സർക്കാർ ഭൂമിയിൽ നിന്നും പാറ പാട്ടത്തിനെടുത്ത് ഖനനം ചെയ്യുന്നതിനു വേണ്ടി അദാനി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ് കമ്പനിയ്ക്ക് പരാമർശം (1) പ്രകാരം ഈ കാര്യലയത്തിൽ നിന്നും നിരാക്ഷേപ സാക്ഷ്യപത്രം അനുവദിച്ചിട്ടുള്ളതാണ്. നിരാക്ഷേപ സാക്ഷ്യപത്രം ലഭിച്ച് 6 മാസത്തിനുള്ളിൽ പാരിസ്ഥിതിക അനുമതി നേടിയിരിക്കണമെന്നും 2 വർഷത്തിനുള്ളിൽ ഖനനം ആരംഭിച്ചിട്ടില്ലെങ്കിൽ ടി നിരാക്ഷേപ സാക്ഷ്യപത്രം അസാധുവാകുന്ന താണെന്നുമുള്ള നിബന്ധനകൾ പ്രസ്തുത നിരാക്ഷേപ സാക്ഷ്യപത്രത്തിൽ ഉൾപ്പെടുത്തിയിരുന്നു എന്നാൽ ചിറയിൻകീഴ് താലൂക്കിൽ നഗരൂർ വില്ലേജിൽ ബ്ലോക്ക് നമ്പർ 37 ൽ റീസർവ്വെ 554/6 ൽ ഉൾപ്പെട്ട 5.12.35 ഹെക്ടർ ഭൂമിയുടെ ഉടമസ്ഥാവകാശം സംബന്ധിച്ച് ശ്രീ രഞ്ജിത് മുതൽപേർ ബഹുമാനപ്പെട്ട കേരള ഹൈക്കോടതിയിൽ കേസ് ഫയൽ ചെയ്തിട്ടുള്ളതായും ടി കേസിൽ ബഹുമാനപ്പെട്ട ഹൈക്കോടതിയുടെ 01/10/2010 തീയതിയിലെ WP(C)30260/2010 (F)നമ്പർ സ്റ്റേ ഓർഡർ നിലവിലുള്ളതായും ശ്രദ്ധയിൽപ്പെട്ടതിനെ തുടർന്ന് ടി നിരാക്ഷേപ സാക്ഷ്യപത്രത്തിന്റെ അടിസ്ഥാനത്തിൽ ലീസ് അനുവദിക്കുന്നതിനുള്ള നടപടികൾ താല്പാലികമായി നിർത്തി വയ്ക്കുന്നതിന് തിരുവനന്തപുരം ജില്ലാ ജിയോളജിസ്റ്റിന് പരാമർശം (2) പ്രകാരം ഈ കാര്യലയത്തിൽ നിന്നും നിർദ്ദേശം നൽകിയിട്ടുള്ളതാണ്. ആയതിനെതിരെ അദാനി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ് കമ്പനി ബഹുമാനപ്പെട്ട കേരള ഹൈക്കോടതിയിൽ സമർപ്പിച്ച WP(C)2294/2022(J) നമ്പർ ഹർജിയിൽ പരാമർശം 3 പ്രകാരം 07/02/2022 ന് കോടതി പുറപ്പെടുവിച്ചിട്ടുള്ള ഉത്തരവിൽ അദാനി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ് കമ്പനി 29/12/2021 ന് സമർപ്പിച്ച അപേക്ഷ പുന:പരിശോധിച്ച് നിയമാനുസൃതമായി ഉത്തരവ് പുറപ്പെടുവിക്കുവാൻ ജില്ലാ കളക്ടർക്ക് നിർദ്ദേശം നൽകിയിട്ടുള്ളതും ഇപ്രകാരം ജില്ലാ കളക്ടർ നൽകുന്ന ഉത്തരവ് ബഹുമാനപ്പെട്ട കേരള ഹൈക്കോടതിയിൽ നിലവിലുള്ള WP(C)No.25830/2010, WP(C)No.30260/2010 എന്നീ

കേസുകളിൽ ബഹുമാനപ്പെട്ട ഹൈക്കോടതി പുറപ്പെടുവിക്കുന്ന ഉത്തരവുകൾക്ക് വിധേയമായിരിക്കുമെന്നും ഉത്തരവായിട്ടുള്ളതാണ്. കൂടാതെ വിഴിഞ്ഞം പദ്ധതിയുടെ പ്രാധാന്യം കണക്കിലെടുത്ത്, ഉത്തരവ് നൽകുന്ന തീയതി മുതൽ ഒരു വർഷത്തേക്ക് കൂടി അനുവാദം ലഭിക്കുന്നതെന്ന് രീതിയിൽ, നിരാക്ഷേപ സാക്ഷ്യപത്രം ദീർഘിപ്പിച്ച് നൽകാൻ പരാമർശം (4) പ്രകാരം സർക്കാർ നിർദ്ദേശിച്ചിട്ടുള്ളതുമാണ്. ഈ സാഹചര്യത്തിൽ ബഹുമാനപ്പെട്ട ഹൈക്കോടതിയുടെ ഉത്തരവിന്റേയും സർക്കാർ നിർദ്ദേശത്തിന്റേയും അടിസ്ഥാനത്തിൽ ചുവടെ ചേർക്കും പ്രകാരം ഉത്തരവാകുന്നു.

**ഉത്തരവ്**

സർക്കാർ പാറ പാട്ടത്തിനെടുത്ത് ഖനനം ചെയ്ത് വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിന് ഉപയോഗിക്കുന്നതിനായി അദാനി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ് കമ്പനി ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർക്ക് 20/07/2018-ാം തീയതി ഈ കാര്യാലയത്തിൽ നിന്നും അനുവദിച്ച ബി7-17779/18 നമ്പർ നിരാക്ഷേപ സാക്ഷ്യപത്രത്തിലെ 2, 4 നമ്പർ നിബന്ധനകളിൽ ഇളവ് വരുത്തി പ്രസ്തുത നിരാക്ഷേപ സാക്ഷ്യപത്രത്തിന്റെ കാലാവധി ഈ ഉത്തരവ് പുറപ്പെടുവിക്കുന്ന തീയതി മുതൽ ഒരു വർഷത്തേക്ക് കൂടി ദീർഘിപ്പിച്ചുകൊണ്ട് ഇതിനാൽ ഉത്തരവാകുന്നു ജില്ലാ ജിയോളജിസ്റ്റ് ടി നിരാക്ഷേപ സാക്ഷ്യപത്രത്തിന്റെ അടിസ്ഥാനത്തിൽ പാറ ഖനനത്തിനുള്ള ലീസ് അനുവദിക്കുന്നതിന് നിയമാനുസൃതമായ തുടർ നടപടികൾ സ്വീകരിക്കേണ്ടതാണ്. ബഹുമാനപ്പെട്ട ഹൈക്കോടതിയുടെ 07.02.22-ലെ WP(C)2294/2022(J) നമ്പർ ഉത്തരവനുസരിച്ച് ഈ നടപടിക്രമപ്രകാരം അനുവദിക്കുന്ന നിരാക്ഷേപസാക്ഷ്യപത്രത്തിന്റെ സാധുത ബഹുമാനപ്പെട്ട ഹൈക്കോടതിയിൽ നിലവിലുള്ള WP(C)No.25830/2010, WP(C)No.30260/2010 എന്നീ കേസുകളിൽ ബഹുമാനപ്പെട്ട ഹൈക്കോടതി പുറപ്പെടുവിക്കുന്ന ഉത്തരവുകൾക്ക് വിധേയമായിരിക്കുന്നതാണ്.

(ഒപ്പ്)  
ജില്ലാ കളക്ടർ

✓ ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ  
അദാനി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ്

പകർപ്പ്

1. ഡയറക്ടർ, മൈനിംഗ് & ജിയോളജി, തിരുവനന്തപുരം
2. ജില്ലാ ജിയോളജിസ്റ്റ്, തിരുവനന്തപുരം
3. തഹസീൽദാർ, ചിറയിൻകീഴ്
4. വില്ലേജ് ഓഫീസർ, നഗരൂർ
5. കരുതൽ ഫയൽ

ഉത്തരവിൻപ്രകാരം

ഡെപ്യൂട്ടി കളക്ടർ (എൽ.ആർ)

**Annexure 8:  
Lol From DMG**

I/281728/2022

No. DMG/2879/2022-M3

Directorate of Mining & Geology  
Kesavadasapuram, Pattom Palace P.O.  
Thiruvananthapuram-695 004  
email : director@dmg.kerala.gov.in  
Web: www.dmg.kerala.gov.in  
Tel/Fax: 0471-2447429  
25-10-2022

From  
**Director of Mining and Geology**

To  
**M/s. Adani Vizhinjam Port Private Limited**  
2nd floor, Vipanchika Tower, Thycaud,  
Thiruvananthapuram District – 695 014  
(Registered Office at: Adani House, Near Mithakhali six Roads,  
Navrangpura, Ahmedabad, Gujrat State-380 009)  
(Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Sir,

**Sub:-** Mines & Minerals - Minor Minerals-Granite Building Stone - Quarrying  
Lease application submitted by **M/s. Adani Vizhinjam Port Private  
Limited**, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram  
District – 695 014 (Registered Office at: Adani House, Near Mithakhali  
six Roads, Navrangpura, Ahmedabad, Gujrat State-380 009) (Represented  
by its Chief Executive Officer, Shri. Rajesh Kumar Jha) - Request of  
extension of Letter of Intent - Order issued – reg.

**Ref.:-**

1. Kerala Minor Mineral Concession Rules, 2015.
2. Application Dated 07.08.2018 submitted by M/s. Adani Vizhinjam  
Port Private Limited, 2nd floor, Vipanchika Tower, Thycaud,  
Thiruvananthapuram District-695014,
3. Letter of Intent No.12118/M3/2018 Dated 23.11.2018
4. Application submitted by the applicant Dated 15.09.2022
5. O. A. No. 304/2019 pending before the Honourable National Green  
Tribunal.

Please refer to the above references. As per reference 2<sup>nd</sup> cited, an application  
has been filed before this office in respect of **M/s. Adani Vizhinjam Port Private  
Limited**, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695  
014 (Registered Office at: Adani House, Near Mithakhali six Roads, Navrangpura,  
Ahmedabad, Gujrat State-380 009) (Represented by its Chief Executive Officer, Shri.  
Rajesh Kumar Jha) for granting Quarrying lease for an area of 2.4706 Hectares of  
land in Block No.37, Re-Survey Nos.554/1, 554/5, 554/6 of Nagaroor Village of



I/281728/2022

Chirayinkeezhu Taluk in Thiruvananthapuram District. On verification of the application it is found genuine in all respects and hence the Letter of Intent vide ref (3) was issued in accordance with the Rules cited (1) above. Thereafter vide reference (4) cited the applicant had submitted that they could not obtain the valid clearances from the authorities during the stipulated time and have requested to extend the validity of the Letter of Intent already issued. On scrutiny of the application it is found genuine and hence the following orders issued.

The Letter of Intent issued as per reference 3rd cited is extended until further orders subject to the same conditions specified therein and also subject to the decision on 200m distance criteria from the Hon'ble National Green Tribunal in OA 304/2019.



Yours faithfully

Signed by Devidas N. IAS  
Date: 25-10-2022 11:23:34

Devidas N. IAS  
DIRECTOR

Copy to

1. The Member Secretary, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.
2. The Chairman, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.
3. The Deputy Chief Controller of Explosives, CSEZ, CGO Complex, Kakkanad, Ernakulam.
4. Kerala State Pollution Control Board, District Office, Thiruvananthapuram
5. The Secretary, Nagaroor Grama Panchayath, Thiruvananthapuram District.
6. The Tahsildar, Chirayinkeezhu Taluk Office, Thiruvananthapuram District.

**For kind attention of statutory authorities.**

[The statutory authorities while issuing licence/consents/NOCs based on this letter of intent may refer this letter of intent in the respective licence/consent/clearance /NOC while issuing the same. The statutory authorities may refer the survey map and consider the extent of applied area, quantity of mineral proposed to be extracted and the period of lease applied for while issuing such documents. The authorities may note that the operation as per their licence shall start only after execution and registration of Quarrying Lease granted by this office. All the survey Nos./Re Survey numbers with Block No. included in the survey map submitted in this connection shall be included in all the aforesaid File No. DMG/2879/2022-M3 documents.]

7. The Senior Geologist, District Office, Thiruvananthapuram (The Senior Geologist shall forward all the above said documents to this office for grant of quarrying lease with recommendations)

*Rafel*

**Annexure 9:  
CTO from KSPCB**

FILE NO : KSPCB/TV/ICO/10005087/2022

Date of issue : 27-08-2022



**KERALA STATE POLLUTION CONTROL BOARD**

**CONSENT TO**

**OPERATE/AUTHORISATION/REGISTRATION**

**ISSUED UNDER**

The Water (Prevention & Control of Pollution) Act, 1974

The Air (Prevention & Control of Pollution) Act, 1981

and

The Environment (Protection) Act, 1986

As per Application No. : 10005087

Dated : 15-06-2022

To

**Adani Vizhinjam Port Pvt Ltd**

**Kadavila 2 & 3 Stone Quarry, Nagaroor Village, Chirayinkeezhu, Thiruvananthapuram**

Consent No. : KSPCB/TV/ICO/10005087/2022

Valid Upto : 31-05-2025

*Rajesh*

**1. GENERAL**

1.1. This integrated consent is granted subject to the power of the Board to withdraw consent, review and make variation in or revoke all or any of the conditions as the Board deems fit

1	<b>VALIDITY</b>	31-05-2025
2	Name and Address of the establishment	Adani Vizhinjam Port Pvt Ltd Kadavila 2 & 3 Stone Quarry, Nagaroor Village, Chirayinkeezhu, Thiruvananthapuram
3	Occupier Details	CEO AVPPL Adani Vizhinjam Port Pvt LTD Mulloor Post, Vizhinjam, Thiruvananthapuram, kerala - 695521
4	Local Body	Nagaroor Panchayat
5	Survey Number	554/1, 554/5, 554/6
6	Village	Nagaroor
7	Taluk	Chirayinkeezhu
8	District	THIRUVANANTHAPURAM
9	Capital Investment(Rs in Lakhs)	301.5
10	Scale	Small
11	Category	RED
12	Annual fee(Rs)	35000.0
	Total Fee remitted(Rs)	175250.0
13	Activity	GRANITE BUILDING STONE QUARRY-2,30,000 TPA (as per EC No. 92/Q/2022)
14	Machinery details	



## GENERAL CONDITIONS

- 2.1 Quarrying is restricted to the land bearing Survey nos. 554/1, 554/5, 554/6.
- 2.2 This consent is granted subject to the power of the Board to review and make variations in all or any of the conditions as per section 21 of the Air (Prevention and Control of Pollution) Act 1981 and section 25 of the Water (Prevention and Control of pollution) Act 1974.
- 2.3 Any change in the particulars furnished in the references and/or in the identity of the occupier / authorized agent shall be intimated to the Board within a week.
- 2.4 It is the responsibility of occupier to ensure that quarrying activities are restricted to only area shown in the attached drawing and at a distance more than 200 m from the nearby residential buildings, places of worship, public buildings, public road having vehicular traffic, river or lake, railway line and bridges.
- 2.5 After excavation at the site is completed, the land may be reclaimed or used for rain water harvesting with protective barriers/any other suitable purpose like aquaculture approved by the authority.
- 2.6 All the necessary control measures provided should be maintained properly to ensure that the system is adequate to control the air and water pollution caused by the functioning of the unit within the limit.
- 2.7 Regular wetting of the roads in the premises of the quarry and approach roads near the quarry shall be done for avoiding excessive dust emission within and outside the boundary of the unit.
- 2.8 Boundary of quarrying area shall be fenced and demarcated.
- 2.9 Fugitive emission from the quarry premises and road leading to quarry shall be suppressed using water sprinkling.
- 2.10 The suspended particulate matter (SPM) at boundary of the premises of the quarry shall not exceed the following limit applicable to that area as per the National Ambient Air Quality Standards. a) The PM 10 in ambient air at the boundary shall not exceed 100 microg/m<sup>3</sup> b) The PM 2.5 in ambient air at 1m outside the boundary shall not exceed 60 microg/m<sup>3</sup>.
- 2.11 The sound level measured at 1.0 m outside the boundary shall not exceed the limit as per the Ambient Air Quality Standards in respect of Noise.
- 2.12 The operation of the unit shall be commenced/done only after obtaining clearances from all concerned authorities.
- 2.13 The quarry shall be operated only from 6am to 6pm.
- 2.14 For renewal of the consent in case of continuance of operation of the industry, application in the prescribed form shall be submitted through the web portal of the Board keralapcbonline.com for renewing the Consent on or before two month in advance to expiry date. Late application will be accepted with 10% (for application before expiry date) & 50% of yearly fee as late fee for application after due date.
- 2.15 This Consent is granted on the basis of ENVIRONMENTAL CLEARANCE DATED: 16/08/2022 and other documents furnished by the applicant. If any document is found false, the consent issued will be cancelled/ revoked.
- 2.16 This consent is granted subject to the Environmental Clearance No:92/Q/2022 DATED: 16/08/2022 issued by State Environmental Impact Assessment Authority(SEIAA), Thiruvananthapuram.

Validity unknown

Digitally signed by Bincy B S  
Date: 2022.08.27 12:54:33 IST

SIGNATURE OF ISSUING AUTHORITY

ENVIRONMENTAL ENGINEER



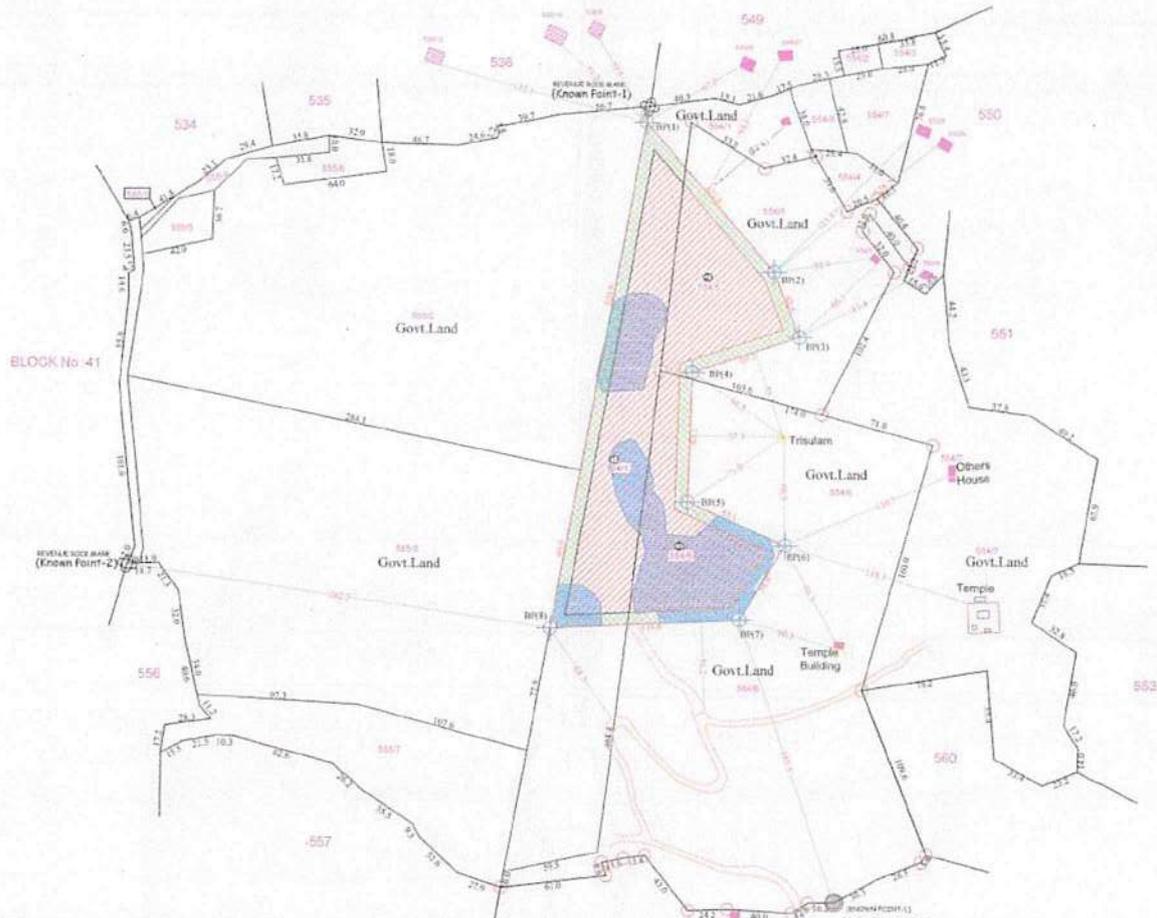
**SURVEY MAP-NAGAROOR VILLAGE ( PROPOSED QUARRY OF M/s C . E . O ADANI VIZHINIAM PORT Pvt. Ltd**

DISTRICT : THIRUVANANTHAPURAM  
 TALUK : CHIRAYINKEEZH  
 VILLAGE : NAGAROOR  
 BLOCK No : 37

FILE NO :  
 Bq/2671/18



Re Sy No. : 554/1,5,6



- റീസർവെ 554/1,5,6 ൽ ഖനനാനുമതിക്കായി ആവശ്യപ്പെടുന്ന സ്ഥലം 1,8440 Ha
- റീസർവെ 554/1,5,6 ൽ ഖനനാനുമതിക്കായി ആവശ്യപ്പെടുന്ന സ്ഥലത്തിന്റെ ചുറ്റുമുള്ള ബഫർ എരിയ് 0.6266 Ha
- റീ സർവെ 554/1,5,6 ൽ ഖനനാനുമതിക്കായി ആവശ്യപ്പെടുന്ന Lease Area -2,4706 Ha
- റീസർവെ 539/6 ഉൾപ്പെടുവരുന്ന പഞ്ചായത്ത് റോഡ്
- N.O.C ലഭിച്ച സ്ഥലത്ത് നിലവിലുള്ള റോഡ്
- ഖനനസ്ഥലത്തിലേക്കുള്ള വഴി
- പരിസര പ്രദേശത്തുള്ള വീട്
- പാറ മാർക്ക് കാണുന്ന സ്റ്റേഷനുകൾ
- റീസർവെ 554/1,5,6 ൽ ഖനനാനുമതിക്കായി ആവശ്യപ്പെടുന്ന സ്ഥലത്ത് സ്ഥാപിച്ചിട്ടുള്ള സ്റ്റേഷനുകൾ
- N.O.C ലഭിച്ച റീസർവെ 554/1,5,6 എന്നിവയിൽ പുനസ്താപിച്ച കല്ലുകൾ
- ഖനനാനുമതിക്കായി ആവശ്യപ്പെടുന്ന സ്ഥലത്ത് മുമ്പ് പാറ ഖനനം ചെയ്ത സ്ഥലം 0,8000 Ha

Submit before The Mining and Geology Department

BOUNDARY PEAR	LATITUDE	LONGITUDE
SP1	8°42'51.747N	76°50'23.245E
SP2	8°42'53.167N	76°50'23.807E
SP3	8°42'54.217N	76°50'23.849E
SP4	8°42'54.387N	76°50'23.537E
SP5	8°42'54.274N	76°50'23.457E
SP6	8°42'54.307N	76°50'23.527E
SP7	8°42'54.167N	76°50'23.457E
SP8	8°42'54.107N	76°50'23.147E

PROPERTY DETAILS					
Re Sy NO:	N O C AREA	UN USSED AREA	BUFFER AREA	MINING AREA	LEASE AREA
554/1	2.7604 Hectare	1.6229 Hectare	0.2883 Hectare	0.8492 Hectare	1.1375 Hectare
554/5	1.7037 Hectare	1.0914 Hectare	0.1455 Hectare	0.4668 Hectare	0.6123 Hectare
554/6	5.1154 Hectare	4.3946 Hectare	0.1928 Hectare	0.5280 Hectare	0.7208 Hectare
<b>TOTAL =</b>	<b>9.5795 Hectare</b>	<b>7.1089 Hectare</b>	<b>0.6266 Hectare</b>	<b>1.8440 Hectare</b>	<b>2.4706 Hectare</b>

Applicant Designation & Address:  
 M/s C.E.O ADANI VIZHINIAM PORT Pvt. Ltd.  
 2nd Floor, Vipanchula Tower,  
 Thycaad, Thiruvananthapuram.

Office Use:  
 Adani m3 00112  
 2nd floor  
 vipanchula tower  
 thycaad

Scale 1cm = 20 m

APPROVED SITE /OUTLET LOCATION DRAWING

**Bincy B S**  
 Digitally signed by Bincy B S  
 Date: 2022.08.27 12:45:55 +0530  
 ENVIRONMENTAL ENGINEER

*Rajesh*

Side plan verified  
*[Signature]*  
 (AEI)



*[Signature]*  
 TAHSILDAR  
 CHIRAYINKEEZH  
**NIRMAL KUMAR. G**  
 TAHSILDAR  
 CHIRAYINKEEZHU

**Annexure 10:**  
**Proceedings of Execution of Quarrying**  
**Lease Deed and Lease Order**  
**Sanctioned from DMG**

No.DMG/2879/2022-M3

**Directorate of Mining and Geology,**  
**Kesavadasapuram, Pattom Palace P. O.,**  
**Thiruvananthapuram – 695004**  
Tel./Fax. 04712447429  
e-mail: director.dir.dmg@kerala.gov.in  
www.dmg.kerala.gov.in  
Dated:25-04-2023

From  
**The Director of Mining and Geology**

To  
**M/s.Adani Vizhinjam Port Private Limited,**  
2nd Floor, Vipanchika Tower, Thycaud,  
Thiruvananthapuram District - 695 014.  
Registered Office at: Adani House, Near Mithakhali Six Roads,  
Navrangpura, Ahmedabad, Gujrat State - 380 009)  
(Represented by its Chief Executive Officer, **Shri.Rajesh Kumar Jha**)

Sir,

*Sub:* Mining & Geology - Mines and Minerals - Minor Mineral -  
Granite Building Stone - Preparation and execution of quarrying  
lease deed – reg.

*Ref:* 1) Proceedings Order No. 30/2023-24/2879/M3/2022/DMG  
Thiruvananthapuram, Dtd: 25-04-2023  
2) Kerala Minor Mineral Concession Rules, 2015 & Kerala  
Minor Mineral Concession (Amendment) Rules, 2023  
3) Kerala Minerals (Prevention of Illegal Mining, Storage  
&Transportation) Rules 2015 & Kerala Minerals (Prevention  
of Illegal Mining, Storage &Transportation) Amendment  
Rules, 2023  
4) Mines &Minerals (Development &Regulation) Act 1957

Please refer to the order cited above wherein a quarrying lease for Granite  
(Building Stone) is granted to **M/s. Adani Vizhinjam Port Private Limited**, 2<sup>nd</sup>  
Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695 014,  
Registered Office at: Adani House, Near Mithakhali Six Roads, Navrangpura,  
Ahmedabad, Gujrat State - 380 009) (Represented by its Chief Executive Officer,



**Shri.Rajesh Kumar Jha**), over an area of 2.4706 Hectares of Government land in Block No.37, Re-Survey Nos. 554/1, 554/5, 554/6 of of Nagaroor Village of Chirayinkeezhu Taluk, Thiruvananthapuram District for a period of 5 (Five) years.

A draft copy of quarrying lease deed in Form H is enclosed. I request you to prepare three copies of the quarrying lease deed, original on plain paper and two copies of the same in stamped paper worth Rs.500/- and produce the same before the Senior Geologist, District Office, Thiruvananthapuram for scrutiny and execution. The date of execution will be filled by the Senior Geologist at the time of execution or you fill in the date after getting confirmation from the District Geologist. After scrutiny of the quarrying lease deed, the Senior Geologist will inform you the date of execution convenient to him. You have to be present in person at the District Office on such date with two witnesses for execution of deed. It may be noted that the survey map based on which leases granted to you forms a part of the deed and same has to be included in the lease deed. The signature of the lessee and lessor has to be affixed in the survey map also. After execution of deed, as per the request of the District Geologist, stamp duty shall be fixed by District Registrar. On remittance of stamp duty, a certificate of remittance of stamp duty will be entered in the lease deed by the Registrar. The lease deed has to be registered by the office of the Registration Department concerned after registration, the documents have to be produced before the District Geologist.

You are directed to remit Rs.24,706/- (Rupees twenty four thousand seven hundred and six only) being the security deposit via online in the web site <https://etreasury.kerala.gov.in> against the head of account 8443-00-103-00-00-00-N-V-Security Deposit. The treasury receipt chalan may also be produced along with the typed copies of the lease deed before the Senior Geologist, District



Office, Thiruvananthapuram at the time of execution. Please note that the quarrying lease deed has to be executed within a period of six months from the date on which quarrying lease has been granted and got registered in accordance with the Registration Act,1908 vide Rule 44 of the Kerala Minor Mineral Concession Rules, 2015.

Before starting quarrying operations you have to send 2 copies of notice in attached Form-D to the Director (Mining), Directorate General of Mines Safety, No.5, 14th Main(100ft) Road, 4thBlock, Koramangla, Bengaluru – 560 034 and one copy to District Magistrate concerned.

Yours faithfully

Signed by  
Devidas N. Ias  
Date: 25-04-2023 10:30:26

Devidas N. IAS  
DIRECTOR

Encl.: (To the applicant )

1. Proceedings order
2. Draft Form-H
3. Form-D



Copy to:

The Senior Geologist, District Office, Thiruvananthapuram for further necessary action. (Ref. your letter No.2304/DOT/ML/2018 dated 12.11.2018)

You are instructed to execute the lease deed as and when it is received. The Proceedings Order cited as reference 1, original survey map and draft Form-H are enclosed herewith. The survey map forms a part of lease deed and the signatures of both lessor and lessee has to be affixed in the Sy. map also. A copy of the lease deed may be forwarded to this office soon after registration. Please ensure that

*Rafel*

the area under this grant is demarcated and boundary stones maintained properly before execution of the lease deed.

You may ensure remittance of security deposit, surface rent etc. for the amount specified in the lease order. You may also obtain financial guarantee from the lessee for the amount specified in the lease order.

You are also instructed to obtain and forward the Form-D to this office. Since Form- D is a statutory document, no movement permits shall be issued to lessee if lessee fails to prove that he had sent notice in Form-D to the Director (Mining), Directorate General of Mine Safety, No. 5, 100ft Road, 17th Main, Koramangala 4th Block Bengaluru, Karnataka -560034 and District Magistrate.

You are further instructed to forward photocopies of the registered lease deed to the Director of Mines Safety, Bengaluru & District Collector. Please ensure that the lessee is observing the requirements as per mining plan, lease grant order, form-H and KMMC Rules, 2015.

Encl: (To the District Geologist)

1. Original Survey Map
2. Draft Form-H
3. Proceedings order



**PROCEEDINGS OF THE DIRECTOR OF MINING & GEOLOGY,  
THIRUVANANTHAPURAM, KERALA  
(Present: Devidas N., IAS)**

*Sub:* Department of Mining and Geology - Mines & Minerals - Minor Mineral - Granite (Building Stone) - Quarrying Lease to M/s. Adani Vizhinjam Port Private Limited, 2<sup>nd</sup> floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District- 695 014, Registered Office at: Adani House, Near Mithakhali six Roads, Navrangpura, Ahmedabad, Gujrat State - 380 009) (Represented by its Chief Executive Officer, Shri.Rajesh Kumar Jha) - sanctioned - orders - issued - reg.

*Read:*

1. Application dated 07.08.2018 from M/s.Adani Vizhinjam Port Private Limited, 2<sup>nd</sup> floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695014 (Represented by its Chief Executive Officer, Shri.Rajesh Kumar Jha)
2. Letter No.2304/DOT/ML/2018 dt 12.11.2018 & 12.04.2023 from the Geologist, District Office, Thiruvananthapuram
3. Letter of Intent No.12118/M3/2018 dated 23.11.2018 issued by Director of Mining and Geology
4. Environmental Clearance No.92/Q/2022 Dated 16.8.2022 vide proposal No.SIA/KL/MIN/58473/2019 by the State Environment Impact Assessment Authority, Kerala
5. Integrated consent to operate No.KSPCB/TV/ICO/10005087/2022 dated 27.08.2022 issued by Kerala State Pollution Control Board, Thiruvananthapuram (Valid up to 31.05.2025)
6. Explosive License No.E/SE/KL/22/331(E121778) dated 13.09.2022 issued by Petroleum and Explosives Safety Organization (PESO), Ernakulam (valid till 31.3.2026)
7. Dangerous and Offensive Trade License No.232/2022-2023/ A-2/RPTI.19/2139 dated 25.2.2023 issued by the Secretary Nagaroor Grama Panchayath (valid till 31.03.2025)
8. Mines and Minerals (Development & Regulation) Act, 1957
9. Kerala Minor Mineral Concession Rules, 2015 & Kerala Minor Mineral Concession (Amendment) Rules, 2023
- 10 Kerala Minerals (Prevention of Illegal Mining, Storage & Transportation) Rules 2015 & Kerala Minerals (Prevention of Illegal Mining, Storage & Transportation) Amendment Rules, 2023

No.30/2023-24/2879/M3/2022/DMG

Thiruvananthapuram 25-04-2023

**ORDER**

M/s.Adani Vizhinjam Port Private Limited, 2<sup>nd</sup> floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District-695014, Registered Office at: Adani House, Near Mithakhali six Roads, Navrangpura, Ahmedabad, Gujrat State - 380 009) (Represented by its Chief Executive Officer, Shri.Rajesh Kumar Jha) submitted an application vide reference first



cited to obtain quarrying lease to quarry Granite (Building Stone) over an area of 2.4706 Hectares of land (as per the survey map issued by Tahsildar, Chirayinkeezh) comprised in Block No.37, Re-Survey Nos. 554/1, 554/5, 554/6 of Nagaroor Village, Chirayinkeezh Taluk, Thiruvananthapuram District. Vide letters referred 2<sup>nd</sup> above the District Geologist, Thiruvananthapuram has intimated that no dues by way of royalty to be collected from the applicant.

Based on the merit of the application and the enclosed mandatory documents including survey map, possession certificates, demarcation certificate and land assignment certificate issued by Revenue Authorities and based on the recommendation of the District Geologist, a letter of intent was issued to the applicant vide reference cited (3) intimating the intention of the Department to grant quarrying lease subject to production of approved mining plan and other statutory licenses. The District Geologist forwarded the mining plan (prepared by Shri.V.K.Roy, Recognized Qualified Person-Reg.No.DMG/KERALA/RQP/4/2016) approved by him and other statutory licenses submitted by the applicant to this office. In the approved mining plan it is mentioned that during the life of the mine (05 years), mineable mineral reserve of 781094 MT can be mined and it is proposed to mine the maximum quantity of 229906 MT of granite (building stone) per year. Since the applicant has produced all statutory documents as per the Letter of Intent, it is decided to grant a quarrying lease in the said land and hence the following orders are issued.

A quarrying lease is here by granted to **M/s. Adani Vizhinjam Port Private Limited**, 2<sup>nd</sup> floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695 014 (Represented by its Chief Executive Officer, **Shri. Rajesh Kumar Jha**) to quarry Granite (Building Stone) over an area of 2.4706 Hectares of land (as per the survey map issued by Tahsildar, Chirayinkeezh) comprised in Block No.37, Re-survey Nos. 554/1, 554/5, 554/6 of Nagaroor Village, Chirayinkeezh Taluk, Thiruvananthapuram District for 05 (five) years as per the Kerala Minor Mineral Concession Rules, 2015, subject to the conditions mentioned below.

1. The lessee shall execute a quarrying lease deed within a period of six months from the date of this order in form 'H' as per Rule 43 of the Kerala Minor Mineral Concession Rules, 2015 and the quarrying lease deed shall be registered in accordance with the provisions of the Indian Registration Act, 1908.
2. The lessee shall commence quarrying operation only after the deed is executed and registered.
3. The lessee shall not assign, sublet or transfer his lease or any right or interest therein to any person without previous written permission of the Director of Mining and Geology.

