MALABAR CANCER CENTRE

(Post Graduate Institute of Oncology Sciences & Research)
(An autonomous Institution under Government of Kerala)

Thalassery, P.O. Moozhikkara
Kannur-670 103, Kerala, S. India

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No. MCC/286/2022-SUP-EL/ 1200

June 18, 2025

The Director (S)
Ministry of Environment and Forests (MoEF)
Regional Office (Southern Zone)
Kendriya Sadan, 4th Floor, E&F Wing, 17th Main Road
II Block, Koramangala, Bengaluru- 560 034
Email ID: rosz.bng-mef@nic.in
Email ID rosz.bng-mefcc@gov.in

Sir/Madam,

Sub: MCC, Thalassery- Development of Malabar Cancer Center as Postgraduate Institute of Oncology Sciences and Research - **SEIAA- Environmental Clearance for the expansion of Malabar Cancer Centre as Postgraduate Institute of Oncology Science and Research Phase-II, Thalassery, Kannur district. – Submission of 2nd Half Yearly Compliance Report- reg.**

Read: **1) Proposal No. SIA/KL/MIS/208403/2021; File No. 1898/EC4/2021/SEIAA; EC Identification No. EC22B038KL199480; date of issue: 23-07-2022**
2) This office 1st HYCR No: MCC/286/2022-SUP-EL/2256 dated 03-10-2024
3) That Office letter No: 1898/EC4/2021/SEIAA dated 20-11-2024
4) This office revised 1st HYCR No: MCC/286/2022-SUP-EL/705 dated 07-04-2025

With reference to the order cited under reference (1), we are hereby submitting, via **email only**, the 2nd Half-Yearly Compliance Report pertaining to the 2nd Phase of development of the Malabar Cancer Centre project, covering the period from March 2024 to August 2024, for your kind perusal.
Please note that the report has also been published on our official website, as required.

We trust that this submission fulfills the stipulated compliance requirements. Should you need any further information or clarification, please feel free to contact us.
Thank you for your attention.

Yours faithfully,

MALABAR CANCER CENTRE * POST GRADUATE INSTITUTE OF ONCOLOGY SCIENCES & RESEARCH * THALASSERY

DIRECTOR
RAJAGOPALAN.B
DIRECTOR
Malabar Cancer Centre (PGIOSR)
THALASSERY

Enc: 2nd HYCR from March 2024 to August 2024 (103 pages)

Copy Submitted to:

1) Member Secretary , State Environment Impact Assessment Authority (SEIAA), Thampanoor, KSRTC Building 4th Floor, Kerala 695004
   email ID: seacseiaakerala@gmail.com

2) The Chairman , Kerala State Pollution Control Board, Pattom P.O., Thiruvananthapuram- 695 004, Kerala, India, **e mail ID: chn.kspcb@gov.in**

2ND HALF-YEARLY COMPLIANCE REPORT

PERIOD: MARCH 2024 TO AUGUST 2024

FUNDING AGENCY | CLIENT | SPECIAL PURPOSE VEHICLE | CONTRACTOR

TABLE OF CONTENTS

PREFACE

This report aims to provide a detailed overview of our environmental performance, highlighting our compliance with relevant regulations and standards during the period of construction.

The report covers key parameters, including an environmental clearance checklist, required documentation, photographs, and relevant practices. All these elements underscore our unwavering commitment to minimizing the environmental impact of our construction activities.

We are dedicated to adopting the best practices and proactively addressing environmental concerns. By leveraging the insights from this report, we aim to continuously improve our environmental performance and uphold our responsibility to the communities we serve and the planet.

INTRODUCT ION

DEVELOPMENT OF MALABAR CANCER CENTRE 2ND PHASE IN KANNUR DISTRICT

The Development of Malabar Cancer Centre 2nd phase, located in the Thalassery at Kannur District, is a significant healthcare project funded by the Kerala Infrastructure Investment Fund Board (KIIFB). The project is managed by WAPCOS LTD as the Special Purpose Vehicle, and the construction is undertaken by Malani Construction Co.

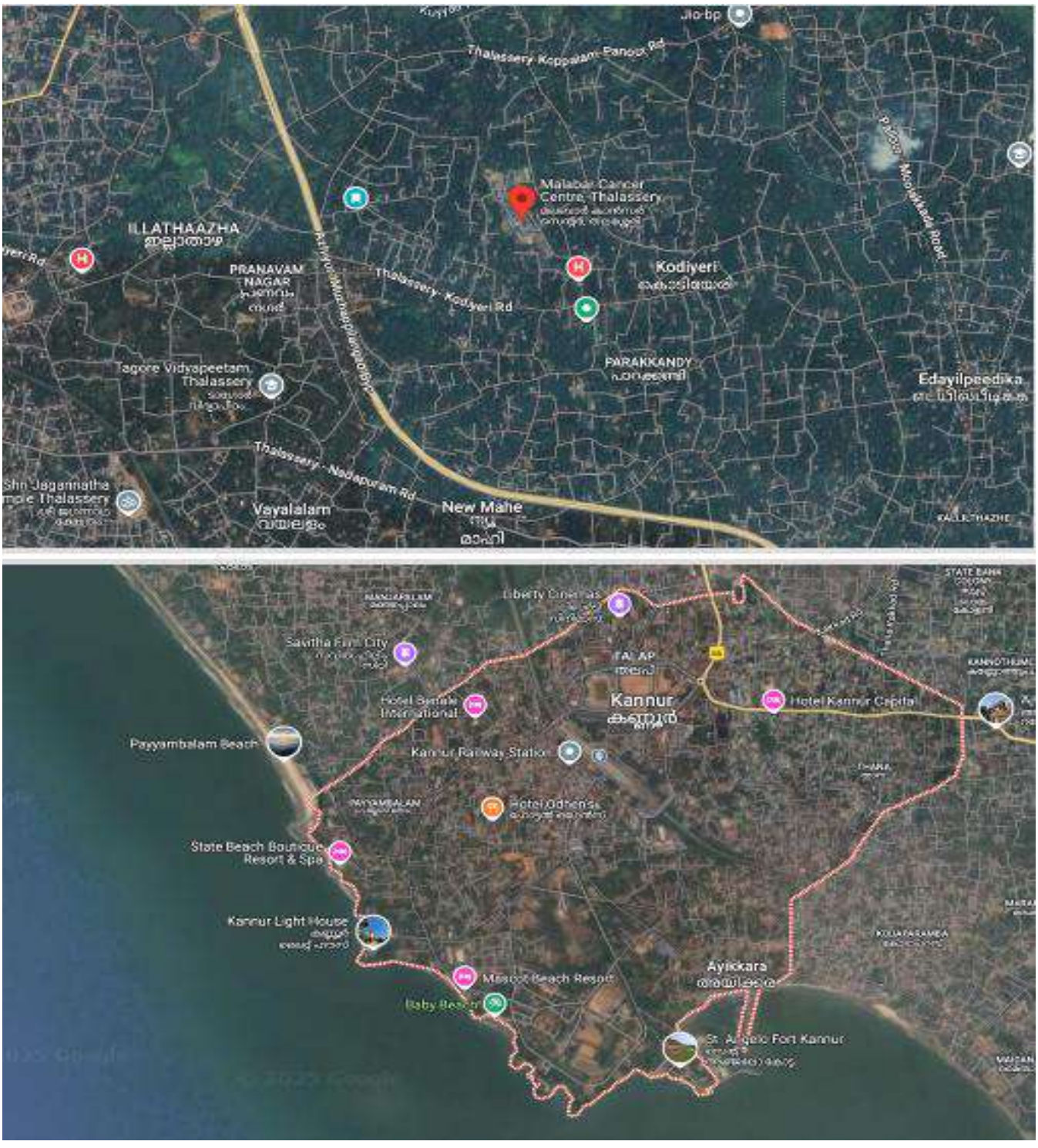
The duration of this project is 36 months. It was handed over on 23.08.2023, with work starting on the same date and an expected completion date of 22.08.2026.

Key facilities include a built-up area of 51,404 SQM and a footprint area of 3,847 SQM. The parking provisions accommodate 588 two-wheelers, 470 cars, and 15 spaces for differently abled individuals. The hospital will have a total of 452 beds.

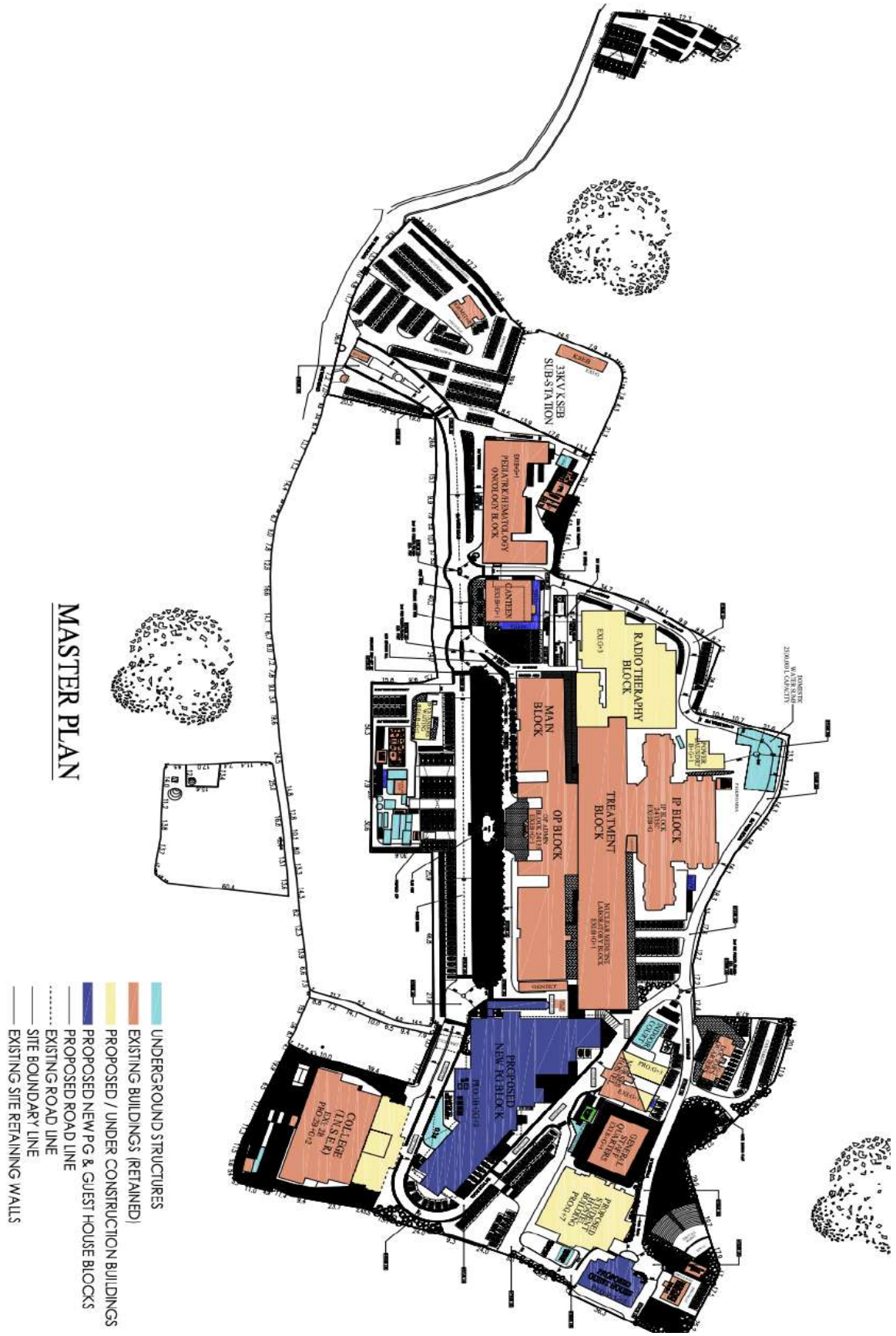
Key infrastructure features include a 1600 KVA transformer, three DG sets of 625/650 KVA, four UPS units of 300 KVA, a chiller system with four units of 400 TR, a firefighting system, and Extra Low Voltage (ELV) systems. Additionally, the project incorporates essential facilities such as a 150 KLD Effluent Treatment Plant, a 200 KLD Sewage Treatment Plant, a 20,000 LPH Water Treatment Plant, a 3000 LPH RO Plant, a Biogas Plant with a capacity of 600 kg per day, and a 100kg/hr incinerator.

LOCATION OF THE PROJECT

Malabar Cancer Centre is at Thalassery, Kannur. Thalassery is a commercial town on Malabar Coast in Kannur district, in the state of Kerala, India, bordered by the districts of Mahe (Pondicherry), Kozhikode, Wayanad and Kodagu (Karnataka)



SITE PLAN


MASTER PLAN
33KV K.SEB SUB-STATION
PEDIATRIC,HEMATOLOGY ONCOLOGY BLOCK
CANTEEN
RADIO THERAPHY BLOCK
MAIN BLOCK
OP BLOCK
TREATMENT BLOCK
IP BLOCK
PROPOSED NEW PG BLOCK
COLLEGE (LNSEM)
UNDERGROUND STRUCTURES
EXISTING BUILDINGS (RETAINED)
PROPOSED / UNDER CONSTRUCTION BUILDINGS
PROPOSED NEW PG & GUEST HOUSE BLOCKS
PROPOSED ROAD LINE
EXISTING ROAD LINE
SITE BOUNDARY LINE
EXISTING SITE RETAINING WALLS

SALIENT FEATURES

1	Title of project	Development Of Malabar Cancer Center Thalassery (2nd Phase), Kannur District
2	Details of project location	- District : District - Taluk : Thalassery - Municipality : Thalassery - Legislative Assembly constituency : Thalassery
3	No of blocks proposed	Proposing one New block with 4 Basemets+Ground+9 Floors
4	No. of storey's of building	4B+G+9
5	Key Aspects of the New Building	- Data centre - CSSD - General Store - Central Store - Pharmacy - Bio Medical Store - Transfusion Medicine - Cellular Therapy - Pre-Operative Ward - Palliative Care Department - Pre-Operative Block - Medical Oncology - Wards - M.I.C.U - Medical H.D.U - Post-Operative Block - I.C.U - H.D.U - Critical Care Department - O.T complex - Anaesthesia Department - Recovery Area - Services - MEP - HVAC - Dormitory - Maintenance - Intensive Chemotheraphy - Hematology Department - Deluxe rooms - BMT Wing - Bio-Chem - Microbiology Depts - Community Oncology Depts - Surgical - Ocular - Nutrition Oncology Depts - Resident Quarters - I.R.B - Oncology Nursing Department - Library Block - Research Labs - Incubation Centre - Deluxe rooms - Dining - Auditorium - Work shop - Administrative Department - Directors Office - HIT - Symposium Halls - Exam Halls

	Floor-wise building features	
	Level	Description
7	Sub Basement Floor	Accounts for 65 car parks and 60 bike parking. Separate entry from the main drive way area.
	Basement -3	Houses 30 cars and can have stack parking for a total of 66 cars. Mortuary with allied areas and drivers/non-technical staffs area. Direct entrance from the main drive way. Visitors entry to the building is also through this level from the main drive way.
	Basement - 2	Houses the general store, discard store, pharmacy, etc along with the CSSD.
	Basement -1	Houses the transfusion medicine/cellular therapy division with easy access from the Ground level. Part of the pre-operative ward is located in the further wing of this floor with separate entry / exit for visitors.
	Ground Floor	Main entry level of this complex which connects with the existing OP/IP Block. Connection to the main lobby is through the ground floor corridor of the existing main block and through the present blood bank area. Houses the Palliative department and also part of the Pre-operative ward. The entry to the Pre-operative ward is independent of the Palliative department.
	First Floor	Houses the Medical Oncology ward along with Medical HDU,MICU.
	Second Floor	Houses the Post-Operative ward, the surgical ICU / HDU ward and Critical care department.
	Third Floor	Contains all the OT, Anaesthesia Department and the recovery beds.
	Fourth Floor	Mainly dedicated to HVAC, Electricals, and Medical Gas services. HIT Lab, dormitory for BMT and OT patients bystanders are also placed in.
	Fifth Floor	Contains Intensive Chemotherapy , Hematology Departments and BMT Wing.
	Sixth Floor	Houses Surgical Oncology, Bio Chemistry, Micro Biology, Community Oncology,Ocular, Nutrition Oncology departments with adequate class rooms, lecture halls and seminar halls
	Seventh Floor	Houses Residents quarters, IRB, Nursing Oncology department and the main library.
	Eighth Floor	Houses the research lab, Incubation centre, Work shop, Main dining hall, Mini Symposium hall and Auditorium
	Ninth Floor	Houses the Admin department, Director’s office, HIT, Deluxe rooms, Media Room,Executive dining, Symposium Hall, Exam hall, Interview area.

ENVIRONMENTAL CLEARANCE CHECKLIST

This checklist outlines the status of recommendations provided by the SEIAA. The status is categorized as completed, in progress, or planned. Relevant evidence is attached to the report, with the corresponding reference page numbers specified in the evidence section. Detailed remarks are included

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
General Conditions						
1	Climate responsive design as per Green Building Guidelines in practice should be adopted.		✓		Page 50,51	Our project complies with GRIHA norms. Currently, we are in the construction phase, and all requirements are being followed on-site.All the measures implemented will be updated in HYCR Photos are attached
2	Vide GO (MS) No. 39/2022/LSGD dated 25.2.2022, the Government of Kerala has introduced Green rating and Green building certification to buildings based on green standards. The guidelines published as part of the GO should be adhered to.		✓			GRIHA norms will be followed. GRIHA Certification for this project will be acquired.
3	Vegetation should be adopted appropriately on the ground as well as over built structures such as roofs, basements, podiums etc.			✓	Page 50	To plant various vegetation on the ground in other areas, such as roofs, basements, and podiums, we are already preserving topsoil. During the finishing stage, we will use this preserved soil for planting. Native plants and trees(Mango, Jackfruit, coconut, cashew nut tree) will be adopted to reduce the water usage. Landscape plans shall indicate plant species, quantity and also area covered by trees and plants.Photos of the preserved soil
4	Green belt development surrounding the campus, avenue tree planting and garden development should commence from the beginning of the construction phase. Only indigenous species should be used for green belt and avenue trees.		✓		Page 50	During the construction phase, indigenous trees, including mango, jackfruit, coconut, and cashew nut trees, will be strategically planted around the site campus.
5	Exposed roof area and covered parking should be covered with material having high solar reflective index.		✓	✓		According to BOQ SL No. 1071, the material will be used for exposed roof areas and covered parking, with the following specifications: applying two coats of High Albedo paint, which must have a minimum Solar Reflective Index (SRI) of 108, solar reflectance, and thermal emittance tested as per ASTM standards, and a VOC content of less than 10 cc/gm.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
GENERAL CONDITIONS						
6	Building design should cater to the differently-abled citizens.			✔	Page 81	Building already designed in consistent with the norms that cater to differently abled citizens. Drawing is attached for reference
7	Provide safe and healthy basic facilities for construction workers as per the Building &Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.		✔		Page 52,53,56, 57,58,60, 61	In accordance with the Building & Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996, we have provided safe and healthy basic facilities at the site. Geotagged photos are attached for reference
8	Appropriate action should be taken to ensure that the excess rainwater runoff reaches the nearest main natural drain of the area unpolluted and if necessary, carrying capacity of the natural drain should be enhanced to contain the peak flow.			✔	Page 83	Well-designed Storm water drainage system has been proposed for the project. Appropriate actions will be taken to ensure the same. Drawing is attached for reference
9	Water efficient plumbing features should be adopted.			✔	Page 80	Plumbing concept as per the WAPCOS DPR is attached for reference

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	General Conditions					
10	Design of the building should be in compliance to Energy Conservation Building Code as applicable			✔	Page 66	GRIHA Certification for this project will be acquired. Additionally ECBC Compliance report is already obtained.
11	Energy conservation measures as proposed in the application should be adopted in total. In addition to the 150 KW Solar system without battery for utility load mounted on terrace, adequate battery linked solar system should also be installed as make up energy supply so as to reduce the fuel-based energy use.Act, 1996.			✔	Page 85	The item is already included in the BoQ. The technical specifications for the solar system are attached to this report
12	The garland canal, silt traps, siltation pond and outflow channel should be desilted periodically to facilitate unhindered overland drainage.		✔		Page 83	Silt trap and siltation pond are available at site location.Drawing is attached for reference
13	The drainage along with silt traps, collection tanks and outflow channel should be desilted periodically and geo-tagged photograph should be incorporated in the Half Yearly Compliance Report.			✔	Page 83	We have integrated it into the building's external work.Drawing is attached for reference

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS					
14	The proponent should submit an affidavit stating that a large water harvesting structure will be developed and managed for meeting the additional water demand as the water supply from KWA is restricted to only three days in a week and the yield of the open well is inadequate to meet the demand.			✔		Large UG sump with a capacity of 1,700,000 liters has been planned for construction within the premises to meet the additional water demand. Affidavit is attached to this report.
15	Adequate built-in composting facility should be set up for the treatment of biodegradable waste as the capacity or the number of BIOBIN proposed is inadequate.			✔		Already considered the item (Bins) in the BoQ. The item will be executed for this project.
16	Adequate and covered storage area should be provided for the storage of non- degradable waste generated for at least 30 days. Additional space should also be provided for the storage of Hazardous Waste and E- waste. The non-degradable solid waste (dry waste) so stored should be handed over to Recyclers/ Local body/ Vendors on a regular basis.			✔		Will properly comply the requirements in future.
17	Rainwater harvesting pond should be linked with the water treatment plant.			✔		We have considered the same in PHE Design.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
GENERAL CONDITIONS						
18	Measures incorporated in the CER should be implemented in total during the first five years and it should be operated and maintained during the subsequent years.		✔		Page 86	MCC has already requested details about CER from the LSGIs, and discussions with KIIFB are ongoing.Letter is attached for reference.
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 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.		✔		Page 86	MCC has already requested details about CER from the LSGIs, and discussions with KIIFB are ongoing.Letter is attached for reference.
20	The violation of EC condition may lead to cancellation of EC and action under The Environment (Protection) Act 1986.		✔			Will adhere to all relevant EC requirements for this project

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
GENERAL CONDITIONS						
21	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project (Circular No.J-11013/41/2006-IA.II(I) of GoI, MoEF dt.22.09.2008).		✔		Page 52,53,58, 79	We have provided safe drinking water at multiple points on site, including the labor camp. We arrange monthly medical health check-ups for the workers. The labor housing is situated within walking distance with adequate lighting and ventilation. Geotagged photos are attached for reference
GREEN CONDITIONS						
22	Adequate rain water harvesting facilities shall be arranged for			✔	Page 83	We have integrated it into our building's architecture.Drawing is attached for reference
23	Technology and capacity of the STP to be indicated with discharge point (if any) of the treated effluent.			✔	Page 87,88	Sewage Treatment Plant (STP) with a capacity of 400 KLD is currently available. 200 KLD STP is being proposed. The technical specifications and drawings for the proposed sewage treatment plant are attached for your reference.
24	Effluent water not conforming to specifications shall not be let out to water bodies.			✔		Effluent water will not be discharged into the water bodies.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
GREEN CONDITIONS						
25	Maximum reuse of grey water for toilet flushing and gardening and construction work shall be ensured.		✔		Page 88	We are Utilizing the Grey water. This shall be ensured
26	Dual plumbing for flushing shall be done.			✔	Page 80	Considered in our PHE design
27	Provisions for disposal of e-wastes, solid wastes, non-biodegradables and separate parking facility for the buildings shall be provided.			✔		It has already been incorporated into the building design.
28	Generation of solar energy to be mandatory for own use and/or to be provided to the grid.			✔	Page 85	Provision is included in the BOQ.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
GREEN CONDITIONS						
29	There shall be no compromise on safety conditions and facilities to be provided by the project proponent, which shall be ensured for occupation, regularisation or consent to operate.	✔			Page 56,57,60,61	We have implemented all necessary measures to ensure everyone's safety on site and will conduct close monitoring to enhance quality.
30	The Clearance will also be subject to full and effective implementation of all the undertakings given in the Application Form, all the environmental impact mitigation and management measures undertaken by the project proponent in the documents submitted to SEIAA, and the mitigation measures and waste management proposal as assured in the Form -1 and Form-1A, Environment Management Plan and Conceptual Plan as submitted. The assurances and clarifications given by the proponent in the application and related documents will be deemed to be part of this Proceedings as conditions as undertaken by the proponent, as if incorporated herein.			✔	Page 70	Will follow
31	Validity of the Environmental Clearance will be for 7 years from the date of issuance of E.C, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of any of the conditions stipulated herein or genuine complaints from residents within the scrutiny area of the project		✔		Page 70	Will follow all the guidelines applicable to this project.
32	Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its agencies and also by the Regional Office of the Ministry of Environment and Forests, Govt. of India, Bangalore. Necessary assistance for entry and inspection by the concerned officials and staff should be provided by the project proponents. Instances of violation if any shall be reported to the District Collector, Kannur to take legal action under the Environment (Protection) Act 1986.			✔		Will ensure the necessary assistance

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
GREEN CONDITIONS						
33	The Half Yearly Compliance Report (HYCRs) with its contents, covering letter, compliance report and environmental monitoring data has to be in PDF format merged into a single document. The email should clearly mention the name of the project, EC Number and date, period of submission should be sent to the Regional Office of MoEF & CC by email only at email ID rosz.bng-mefcc@gov.in . Hardcopy of HYCRs shall not be acceptable.			✔		Will ensure that all instructions are followed when submitting the Half-Yearly Compliance Report.
34	The given address for correspondence with the authorised signatory of the project is Dr.B.Satheesan, Director, M/s Malabar Cancer Centre, Thalassery P.O, Moozhikkara, Kannur-670103.					Will follow
35	The proponent should provide notarized affidavit indicating the number and date of Environmental Clearance proceedings and that all the conditions stipulated in the EC shall be scrupulously followed.					Will provide and ensure that all conditions are being followed
36	The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available on the website of SEIAA www.seiaakerala.in. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.	✔			Page 63,64	Published in two local newspapers that are widely distributed in the region. Photos are included for reference.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
37	The proponent shall send a copy of the clearance letter to the concerned Grama Panchayath/District Panchayath/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.	✔				Environmental Clearance Received,Photo included for reference.
39	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 of size of not less than 40.	✔			Page 65	As instructed, a size board has been placed at the site entrance. Photo is included for reference.
40	Consent to Establish and Consent to Operate from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating activity. All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives. Copies of statutory clearance obtained shall be enclosed along with first half yearly compliance report.	✔			Page 97,98, 99,100,101 ,102,103, 104,105, 106	All statutory clearances and other approvals have already been taken and photos are included for reference.
41	If blasting is involved in the preparation of site, the required clearances from the competent authorities should be obtained.					The site preparation does not involve any blasting.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
42	The stipulations/conditions issued by Statutory Authorities under different Acts 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, Solid Waste Management Rules,2016 Plastic Waste Management and Handling Rules, 2016, Construction and Demolition Waste Management Rules 2016, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.		✔			Will ensure the same.
43	The conditions specified in the EIA notifications 2006 and subsequent amendments, the specific directions given by SEIAA/SEAC should be followed under corporate Environment Responsibility. The activities carried out under CER should be listed with details in Half yearly compliance report along with Status of Implementation and certificates from the beneficiaries and photographs.			✔	Page 86	Will ensure that all conditions are being followed.MCC has already requested details about CER from the LSGIs, and discussions with KIIFB are ongoing.Letter is attached for reference.
44	Safety measures should be implemented as per the Fire and Safety Regulations/SDMA guidelines.	✔			Page 67	The norms are being followed. NOC is attached for reference.
45	The environmental safeguards contained in the EIA Report should be implemented in letter and spirit and status of implementation of each one should be included in the half yearly compliance Report.		✔			Will ensure the same.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
46	Environment Monitoring Committee as agreed under the affidavit filed by the proponent should be formed and made functional. Environmental Monitoring Committee with defined functions and responsibility should foresee post operational environmental problems (Eg. development of slums near the site, increase in traffic congestion, power failure, increase in noise level, natural calamities, and increase in suspended particulate matter etc.) and action taken to solve these immediately with mitigation measures 2006.			✔		Will implement the necessary control measures.
47	Suitable avenue trees should be planted on either side of approach road and internal roads and open parking areas, if any. The proponent should plant trees at least 5 times of the loss of trees that has occurred while clearing the land for the project. The native flowering and fruiting species only shall be used for planting and planning should be done considering the nature of public use.			✔		Will ensure the same.
48	The project shall incorporate devices for solar energy generation and utilization to the maximum possible extent with the possibility of contributing the same to the power grid and consumption in future.		✔		Page 85	Solar system has been included into the building design.
49	The proponent shall submit half yearly compliance reports 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 same on their website and shall update the same periodically. The compliance repot shall be simultaneously sent to the Regional Office of Ministry of Environment, Forests and Climate Change, Govt. of India at Bengaluru and also to SEIAA.			✔		Will follow the instructions while submitting the Half-Yearly Compliance Reports.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
50	The project proponent is responsible for implementing all the provisions of labour laws applicable from time to time. Provision should be made for providing cooking facilities and supply of kerosene or cooking gas to the labourers. 2006.			✔		Will implement all provisions of the labor laws applicable to this project.
51	The proponent shall co-operate with and provide facilities and documents/data to the Agencies including the Officials from the Regional of Ministry of Environment, Forests and Climate Change, Bengaluru during their inspection as part of monitoring the implementation of environmental safeguards.			✔		Will ensure Necessary assistance
52	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.			✔		Will ensure
53	In case of transfer of EC, the matter shall be intimated and approval from the Authority shall be obtained as per the existing norms.			✔		Will ensure the same.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
GENERAL CONDITIONS FOR PROJECTS						
54	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.		✔			Will ensure the same.
55	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.		✔			Will ensure the same.
56	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal 1, if preferred, within a period of 30 days as prescribed under section 11 of the National Green Tribunal Act, 1997.					Will follow.
GENERAL CONDITIONS SPECIFIC TO OPERATION PHASE						
57	All statutory permissions including "Consent for Establishment" to STP/ETP, Solid waste management plant, Power Generator etc shall be obtained from Kerala State Pollution Control Board under Air Act and Water Act and Environment (Protection) Act. A copy shall be submitted to the Ministry/SEIAA before start of any construction work at the site.			✔		Will follow.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
58	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightning etc. Building constructed in the runout area of landslide / rock fall area, shall be provided with suitable structures/ measures to prevent earth materials to hit the structure.			✔		Will ensure the same.
59	All required sanitary and hygienic measures should be in place before starting construction activities which are to be maintained throughout the construction phase.	✔				Yes, Already Implemented.
60	A First Aid Room shall be provided at the project site both during construction and operation phases of the project.	✔			Page 60	Yes, Already Implemented.
61	Adequate drinking water and sanitary facilities should be provided for construction workers at the site, Provision should be made for mobile toilets. Safe disposal of wastewater and solid wastes generated including piling debris during the construction phase should be ensured.	✔		✔	Page 60	Yes, Already Provided.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
62	Unless provided otherwise, all the topsoil excavated during construction phase should be stored and re-used for backfilling/ horticulture/landscaping purposes within the project site.	✔			Page 59	We have already preserved the soil in the site's premise. We intend to utilize this soil for future landscaping purposes. Photos are attached for reference
63	Top soil excavated should not be used for reclaiming wetlands.	✔			Page 59	Top soil excavated shall not be used for reclaiming wetlands. Topsoil will be reserved exclusively for future landscaping.
64	The muck shall be disposed of only at approved sites with the approval of competent authority. The disposal should not create any adverse effect on the neighbouring communities and should be disposed of taking necessary precautions for general safety and health of the public. Proof regarding the same shall be enclosed with the respective six monthly compliance reports.	✔			Page 77	We have taken care of these and took necessary precautions for the disposal of the muck and this will not adversely affect the neighboring communities. Photos are attached for reference
65	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such materials must be secured so that they will not leach into the ground water.					Will ensure the same. Hazardous construction chemical materials will be placed on the raised impervious platform covered from all sides. The spoils will be stored in containers or bags, making sure they do not spill and pollute the groundwater.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
66	Any hazardous waste generated during construction phase, should be disposed off to authorised/approved Waste Collectors as per applicable rules and norms with necessary approval of the Kerala State Pollution Control Board.					Not Applicable in our site.
67	Soil and ground water samples shall be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.		✔		Page 68	Frequent testing of ground water are being followed at site.
68	Storm water control and its re-use measures as per CGWB and BIS standards shall be followed for various applications.			✔		Will follow.
69	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to the applicable air and noise emission standards and should be operated only during non-peak hours. During the transportation of building materials/products, the vehicles shall be covered with suitable materials to prevent dust pollution.		✔		Page 71,74	Will ensure the same. Hazardous construction chemical materials will be placed on the raised impervious platform covered from all sides. The spoils will be stored in containers or bags, making sure they do not spill and pollute the groundwater.
70	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/KSPCB.		✔		Page 69	We have been monitoring this and will be taken care of.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
71	The diesel generator sets used during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards. The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken. DG sets shall be installed and made functional as per guidelines of			✔		Will follow the KSPCB norms.
72	Ready mixed concrete must be used in building construction. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.		✔		Page 72	Will follow.
73	Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.					We are utilizing the existing water source for construction purposes.
74	Separate dual plumbing line should be provided; one line for Toilet Flushing / Gardening / Vehicle wash and another separate line for other domestic uses, for ensuring reuse / recycle of treated waste water to the maximum extent possible.			✔	Page 80	Already Considered in building design.
75	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.			✔	Page 88	Already Considered in the building design.
76	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control			✔	Page 80	Already Considered in the building design.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS FOR PROJECTS					
77	Water efficient plumbing features should be adopted			✔	Page 80	Will properly comply the requirements
78	Use of glass may be reduced by 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating on windows.			✔		Already Considered in the building design.
79	Design of the building should be in compliance to Energy Conservation Building Code as applicable		✔			Already Considered in the building design.
80	Roof should meet perspective requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill the requirement.			✔		Already Considered in the building design.
81	Opaque wall should meet perspective requirement as per energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is optional for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill			✔		Already Considered in the building design.
82	Climate responsive design as per Green Building Guidelines in practice should be adopted		✔			Already Considered in the building design.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
General conditions for projects						
83	Regular supervision of the above and other measures should be in place all throughout the construction phase so as to avoid disturbance to the surroundings.		✓			Will ensure continuous supervision
84	Fly ash should be used as building material in construction as per the provisions of Fly Ash Notification of September, 1999 and Amended as on 27th August 2003. (Applicable to Power Stations).			✓		As per BOQ numbers 1044, 1045, and 1046, fly ash will be used as a building material in construction
85	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining the statutory clearances.		✓			Will ensure
General Conditions specific to operation phase						
86	The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light and ventilation.			✓		Already Considered in the building design.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS SPECIFIC TO OPERATION PHASE					
87	Sewage Treatment Plant (STP) should be installed and made functional as per KSPCB guidelines. On/site Treatment of Sewage and Sullage should be done with scientific method ,ensuring efficiency of treatment, ease in operation , sustainability and it should contain the units of primary, secondary, tertiary and quaternary type of treatment scheme. The installation of the STP should be certified by an independent expert and a report in this regard should be submitted to the Ministry/SEIAA before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled / reused to the maximum extent possible. Treatment of 100% grey water shall be done through a decentralized treatment. Reuse of water shall be practiced for flushing process and garden purposes. Discharge of unused treated effluent shall conform to the norms and standards of the Kerala State Pollution Control Board.			✔	Page 87,88	Will follow the guidelines of the KSPCB.
88	Solid waste management plant shall be installed and made functional as per the guidelines of KSPCB. The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed of to the approved sites for land filling after recovering recyclable material. Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.			✔	Page 87,88	Yes, necessary actions will be taken.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS SPECIFIC TO OPERATION PHASE					
89	Provide adequate Material Collection Facility (MCF) for storage of non-biodegradable waste including plastic waste and E waste, for handing over the same to Recyclers/ Local Body , as stipulated by Kerala State Pollution Control Board.			✔		Yes, Adequate MCF will be provided
90	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets.			✔		Yes, this will be ensured.
91	Low sulphur diesel shall be used as fuel in DG sets.The location of the DG sets may be decided in consultation with Kerala State pollution Control Board. DG sets should not be housed in sub-basement levels.			✔		Yes, this will be ensured.
92	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time, the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations			✔		Yes, these are being monitored at site.

NO	Description	Completed	In progress	Will be done in the future	Evidence	Remarks
	GENERAL CONDITIONS SPECIFIC TO OPERATION PHASE					
93	The green belt of adequate width and density shall be raised preferably with local species along the periphery of the project site so as to provide protection against particulate matter and noise.			✔		Will ensure
94	Weep holes shall be provided in the compound walls to ensure natural drainage of rain water during the monsoon period.		✔		Page 76	Yes, We have provided weep holes in retaining wall as well as in RR masonry.
95	Rain Water Harvesting structures should be installed as per the prevailing provisions of KMBR/KPBR, unless otherwise specified elsewhere. Rain water harvesting measures for roof run-off and surface run-off, as per approved building plan should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 m above the highest ground water table.					Will ensure
96	The ground water level and its quality should be monitored regularly in consultation with State Groundwater Department/Central Ground Water Authority.		✔		Page 68	Yes We are regularly monitoring.

MINUTES OF MEETING

Minutes of 2nd Meeting of the Environmental Monitoring Cell Committee Held on 9th/04/2024 at Malabar Cancer Centre, Thalassery, Kannur
Location: OP Discussion Hall
Time: 3:30 PM

Members Present:

1. Dr.B.Satheesan : Director, Malabar Cancer Centre-PGIOSR
2. Mr. Muralidaran :Chief Project manager(Wapcos). Viraj Sohani :Project manager(Malani construction co)
3. Mr. Ananda Krishna v v :
4. Mr. V. Vasantha :Municipal ward councillor, Thalassery
5. Mr. Ramakumar. :CVCC
6. Mr. Arul :Project manager (HITES)
7. Mr. Sidin D.s :Assistant project engineer (HITES)
8. Mr. Akshay Chandran :Site Engineer
9. Mr.Ramachandran :Project coordinator(Malani construction co)
10. Ms. Reena :Engineer I/C, MCC-PGIOSR
11. Mr.Sujith
12. Mr. Sreenivasan
13. Mr.Chandran : Engineering dept. MCC-PGIOSR
14. Ms. Anitha : Hospital Administrator, MCC-PGIOSR
15. Ms. Shijina : Engineering dept. MCC-PGIOSR

KIIFB Phase II project representative presented the action taken report to the committee.

- Concerns have been raised by the neighbourhood regarding cracks in houses, which were initially attributed to the piling work. The WAPCOS team clarified that the cracks are not due to the piling activities and have addressed these concerns with the residents.
- The hospital administrator has been instructed to organise a Basic Life Support (BLS) training session for construction workers.
- Representatives from Malani Construction committed to improving dust control measures, particularly in residential areas.
- The Director instructed removing the accumulated soil from the old dormitory area.
- Strict guidelines are to be enforced to control labourers' movements during the night.
- To prevent alcohol use among labourers, breathalysers and individual checks will be implemented, as assured by Malani Construction.
- The construction company is required to adhere to speed limits within the MCC campus.
- The director instructed that a meeting with the neighbourhood be held every two months, with the next meeting scheduled for the end of this month.
- A ward member reported soil accumulation in the culvert area and requested its removal. Malani Construction Co. has committed to clearing this soil.
- The ward member also suggested that pre-monsoon cleaning and awareness campaigns for labourers and at the construction site be carried out.
- The municipality has not yet responded regarding the CER project. Members are to take action as instructed by the director.
- The ward member will inform the concerned party about Haritha Karma Sena's irregular collection of undecomposed items.
- MCC instructed Malani Construction Co. to fix the green net around the DG shed area.
- The committee instructed Malani Construction Co. to use tarpaulin or green nets to cover the tipper during soil shifting.
- The committee reported to WAPCOS that the piling work has exceeded its scheduled time, WAPCOS has explained the reasons for this extension.

Sl no	Major concerns	Photos	Remarks
1	Concerns have been raised by the neighbourhood regarding cracks in houses, which were initially attributed to the piling work. The WAPCOS team clarified that the cracks are not due to the piling activities and have addressed these concerns with the residents.	Page 90	We have addressed the issue and rectified the problem
2	The hospital administrator has been instructed to organise a Basic Life Support (BLS) training session for construction workers.		We are waiting for the Basic Life Support (BLS) training session
3	Representatives from Malani Construction committed to improving dust control measures, particularly in residential areas.	Page 91	We are continuously assessing the area, and wherever required, we provide dust control methods.
4	The Director instructed removing the accumulated soil from the old dormitory area.	Page 84	This soil is being utilized for backfilling purposes
5	Strict guidelines are to be enforced to control labourers' movements during the night	Page 92	We have assigned a security guard and additional CCTV cameras for continuous monitoring
6	To prevent alcohol use among labourers, breathalysers and individual checks will be implemented, as assured by Malani Construction.		We have a strict policy regarding drugs, alcohol, and tobacco. All rules and regulations are communicated during the HSE induction on the first day for every member at the site. We also conduct surprise inspections and awareness sessions for everyone

Sl no	Major concerns	Photos	Remarks
7	The construction company is required to adhere to speed limits within the MCC campus.	Page 93	We strictly monitor the speed of our vehicles and have installed a traffic mirror to enhance road safety
8	The director instructed that a meeting with the neighborhood be held every two months, with the next meeting scheduled for the end of this month.		We arrange meetings with the neighborhood
9	A ward member reported soil accumulation in the culvert area and requested its removal. Malani Construction Co. has committed to clearing this soil.	Page 94	We have removed the accumulated soil from the culvert area.
10	The ward member also suggested that pre-monsoon cleaning and awareness campaigns for laboures and at the construction site be carried out.	Page 95	We arrange regular training sessions on-site and conduct pre-monsoon cleaning and awareness campaigns. Additionally, we implement monitoring and prevention methods to control mosquito breeding

Sl no	Major concerns	Photos	Remarks
11	The municipality has not yet responded regarding the CER project. Members are to take action as instructed by the director.		Not applicable
12	The ward member will inform the concerned party about Haritha Karma Sena's irregular collection of undecomposed items.		Not applicable
13	MCC instructed Malani Construction Co. to fix the green net around the DG shed area.	Page 96	We have installed a green net to prevent dust from entering

Sl no	Major concerns	Photos	Remarks
14	The committee instructed Malani Construction Co. to use tarpaulin or green nets to cover the tipper during soil shifting		We strictly monitor vehicles carrying materials that may generate dust and enforce compliance with covering these vehicles
15	The committee reported to WAPCOS that the piling work has exceeded its scheduled time, WAPCOS has explained the reasons for this extension.		We will ensure minimal disturbance to the neighboring areas during the piling work

ENVIRONMENTAL MANAGEMENT PLAN

1. Introduction

Malani Construction Co. is dedicated to sustainable development practices. This EMP outlines the framework for managing the environmental aspects of our projects, adhering to the GRIHA standards, and complying with national regulations.

2. Environmental Policy

Our environmental policy emphasizes commitment to reducing our environmental footprint, ensuring sustainable resource use, and achieving compliance with all relevant legal and regulatory requirements.

3. Purpose

a) The purpose of this Environmental Management Plan (EMP) is to define the environmental requirements and objectives of the Projects as well as the processes and procedures that will govern actions to ensure that these environmental requirements and objectives are satisfied during all Phases of the MCC phase II development Project.

b) The implementation actions defined in the EMP provide the procedures necessary to achieve environmental compliance and ensure protection of the environment and surrounding habitat. In addition, the EMP outlines how objectives will be monitored and enforced. To ensure environmental compliance, all members of the Contractor's and Subcontractor organizations will be cognizant of their responsibilities related to the protection of the environment.

c) This EMP will be revisited and revised where appropriate.

d) Control on all activities from their origin till their final action or elimination, and to regularly review the whole process to minimize the potential cause harm to the environment. To achieve this goal, this management tool applies to any construction or pre- commissioning and commissioning activities of the contractor, including support activities.

4.Regulatory Framework

The Environmental Management Plan (EMP) for Malani Construction Co. is meticulously designed to ensure compliance with a comprehensive set of national and state regulations. This section provides a detailed explanation of the regulatory framework guiding the EMP, focusing on the adherence to laws and standards that govern environmental management practices in construction projects.
In this MCC Phase II project, we adhere to GRIHA norms to ensure the site is planned to minimize environmental impact. This includes measures for soil conservation, rainwater harvesting, and maintaining ecological balance. We implement strategies to reduce energy consumption through efficient building design, use of energy-efficient appliances, and incorporation of renewable energy sources. We consistently utilize water-saving fixtures, recycle wastewater, and harvest rainwater to reduce water consumption. Additionally, we efficiently manage construction waste, promote recycling, and ensure the proper disposal of hazardous materials.

5. Environmental Management Organization

Project Manager

- The Project Manager is responsible for ensuring that all site and construction-related activities of the Contractor and Subcontractors are carried out safely and in full compliance with Malani Construction Co. regulations and the contractual requirements within this EMP.
- The Project Manager supports the HSE In-Charge by ensuring that adequate resources are made available and that measures are immediately implemented to enforce environmental compliance.

Project HSE In charge

- The Project HSE In-Charge reports to the Project Manager and participates in defining the HSE Policy, ensuring its effective implementation. They are responsible for coordinating the HSE management of the entire project, including the establishment, execution, and monitoring of the HSE Plan.
- The Project HSE In-Charge ensures that HSE activities are integrated and coordinated with other project activities.
- Any deviations or requests for modifications will be reported by the Project HSE In-Charge to the Project Manager, or in their absence, to the Assistant Project Manager, who will be responsible for approving these changes to the EMP.
- The Project HSE In-Charge will interface with other departments to receive documentation, ensure its completeness, issue activity reports, and verify the implementation of actions for further analysis.

Project Coordinator

- Coordinate with GRIHA, other agencies, and concerned government departments.
- Coordinate all activities related to the environmental management cell committee.

Deputy Project Manager

- Ensure all activities are aligned with environmental protection norms.
- Ensure the materials used for construction are not harmful to the environment.
- Responsible for ensuring that all technical specifications and documentation produced by the contractor and subcontractors comply with the project's safety and environmental objectives.
- Report to the HSE In charge on all site HSE matters.

Admin Manager

- Ensure all vehicles entering the site have the required documents, especially the vehicle pollution certificate.
- Oversee waste management systems for the entire site and labour camp.
- Ensure adequate resources are available for implementing the environmental management plan.
- Coordinate the procurement and distribution of materials needed for environmental protection measures.
- Assist in developing and maintaining emergency response plans for environmental incidents.
- Ensure all staff are trained and aware of emergency procedures.
- Oversee the management of facilities to ensure they comply with environmental standards.
- Implement measures to reduce the environmental impact of administrative operations.

Engineers and Supervisor

- Report to the Deputy Project Manager
- Responsible for the day-to-day management of all environmental activities.
- Responsible for implementing the EMP plan for all subcontractors.
- Interface with other members of the contractor's team concerning environmental topics, issues, and challenges.
- Ensure that all contractor and subcontractor personnel are properly trained in environmental compliance.
- Ensure that the EMP is correctly implemented.
- Coordinate environmental monitoring activities.
- Coordinate and oversee the execution of emergency response activities.

6.Environmetal mitigation strategies

The environmental mitigation strategies to be employed before and during construction and start-up activities are crucial for minimizing environmental impacts. Since effective mitigation relies on thorough planning prior to construction, this section begins with a discussion on the primary tool for mitigating environmental impacts during the planning process. Each specific type of construction activity is addressed individually, with subsections outlining the general goals, principles for mitigation, and procedures for implementation related to each activity.

7. Environmental Enhancement Measures (EEM)

In addition to the Environmental Management Plan for addressing environmental issues, we are committed to exploring opportunities for environmental enhancement. The Environmental Enhancement Measures (EEM) plan will be incorporated into the project.

1.	Waste Management System	The proposal incorporates a comprehensive waste management system for both the construction and operational phases. This system is detailed in the Annexure. The waste management system addresses the following types of waste during both phases: **Construction Phase:** Construction waste, sewage, garbage, and electronic waste (E-waste). **Operational Phase:** Solid waste, hospital waste, including cytotoxic and radioactive waste, and sewage.
2.	Green area development and landscaping	The plan for developing landscaped areas includes using native plants. Additionally, the requirement for tree cutting is minimal and will prioritize transplanting trees whenever possible.
3.	Emergency Management Plan	Detailed emergency evacuation plan for the constrain phase is attached in Annexure
4.	Traffic management plan	During construction, flagmen will be assigned to ensure smooth traffic flow within the internal roads. Vehicles are only permitted to park within the designated areas.
5.	Environmental Monitoring Plan	Comprehensive Environmental Monitoring Plan is recommended for the project to assess the quality of the environmental attributes. This plan will facilitate the implementation of appropriate measures to ensure that the quality limits of these attributes are maintained at optimal levels.

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
EMP for Construction Phase						
1	Setting up and operation of labour Camp	Soil	Soil contamination could be resulted in due to improper dumping of solid waste generated from labour camp.	A demarcated composting area and sufficient number of toilets attached with septic tank will be provided in the labour camp under contractor's scope.	Malani construction co	Wapcos
		Air	Air emission will be resulted if domestic waste is burned especially, plastic, rags etc	- Domestic waste should not be permitted to burn. - Waste bins should be provided for waste collection and safe disposal.	Malani construction co	Wapcos
		Socio-economic	Social security issues are of special concern where large number of construction workers resides.	The labourers shall be properly registered with the police, CCTV will be installed for monitoring, and a full security staff will be provided.	Malani construction co	Wapcos
		Air	Air pollution due to dust /airborne litter which will disturb neighbourhood	Camp will be enclosed with fencing	Malani construction co	Wapcos
2	Site preparation	Biological	Displacement of the existing flora and fauna at the site	The development of a green belt with trees will be included in the project. For every tree that is cut, 10 trees will be planted.	Malani construction co	Wapcos
		Scio Economic	Existing activity of the hospital will be disturbed	Site will be enclosed with fencing or green net.	Malani construction co	Wapcos
3	Excavation works	Soil	Loss of topsoil can be expected.	Topsoil shall be preserved for future landscaping purposes.	Malani construction co	Wapcos

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
		Air	Excavation work especially along the loose soil areas releases large amount of dust.	- Water should be sprinkle periodically to suppress the dust generation. - The construction area should be temporarily fenced to avoid dispersion of dust from the same area.	Malani construction co	Wapcos
			Operation of fossil fuelled vehicles and machineries will lead to emissions due to fossil fuel burning	- Pollution- under –check (PUC) should be made mandatory for all vehicles used for construction activities - Stack height of Generator and emission level of vehicles and machineries should meet the relevant guidelines.	Malani construction co	Wapcos

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
			Levelling of site, loading and unloading of excavated earth releases significant amount of dust	- Water should be sprinkled periodically to suppress the dust generation. - Site will be enclosed with fencing or green net. - Tarpaulin covering sheets will be used for trucks carrying excavated and construction material to prevent air borne dust	Malani construction co	Wapcos

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
		Noise	Operation of heavy duty machineries such as excavators, loaders and frequent uses of transit vehicles such as lorry, tractor etc. leads to increased ambient noise level in project area.	- Workers shall not be exposed to sounds of more than 85 – 90 DB for more than eight hours a day and shall be provided with ear plugs. - Noise quality monitoring shall be conducted as per Environmental Monitoring Plan to detect noise pollution. - Construction contract shall clearly specify the use of equipment emitting noise of not greater than 90 dB (A) for the eight hour operation shift. - Schedule noisy activities during daytime hours to minimise disturbance to nearby residents. - Provision of barricades of adequate height along the periphery of the site	Malani construction co	Wapcos

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
		Socioeconomic	Occupational health and safety impacts for workers	- Provisions to ensure worker's safety shall be followed as per the rule in force. - Competent health and safety engineer shall be hired for monitoring.	Malani construction co	Wapcos
4		Soil	Soil pollution can occur due to spillage of fuel/lubricants used in construction machineries.	- Machinery and equipments are maintained and refilled in such a way that fuel spillage does not contaminate the soil. - Soil quality monitoring shall be conducted as per Environmental Monitoring Plan to ascertain level of contamination. Necessary management plan will be developed as and when required. - Maintenance should be carried out on impervious platforms with spill collection provisions and oil traps.	Malani construction co	Wapcos

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
	Super structure construction activities		Soil pollution can occur along raw material storage area, concrete mixing area and along the transit points and construction sites due to spillage.	- The materials would be stored by properly covered	Malani construction co	Wapcos
		Water	Contaminated runoff can be expected from the construction site	- Temporary pits will be created at lower elevation point for collecting the mudflow from the construction site	Malani construction co	Wapcos
		Air	Use of DG set in the construction site can lead to air pollutants emission	- The DG should be operated on standby mode. - The stack height of the DG set has to be adequate. - Stack height and emission level of hot mix plant and diesel generator should meet the relevant SPCB	Malani construction co	Wapcos
			Dust emission will be resulted due to transit of construction vehicles and concrete mixer.	- Water should be sprayed at regular intervals. - Tires of the vehicles should be washed before leaving construction site. - The materials being transported should be adequately covered. - Pollution- under –check (PUC) should be conducted for vehicles in every three months.	Malani construction co	Wapcos

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
		Noise	Operation of transport vehicles and construction machineries especially Concrete transfer pump, Jack hammer, vibrator etc. Leads to increased ambient noise level.	- Noise quality monitoring shall be conducted as per Environmental Monitoring Plan to detect noise pollution. - Construction contract shall clearly specify the use of equipment emitting noise of not greater than 90 dB (A) for the eight hour operation shift. - The vibrators would be mounted on vibration damping mountings recommended for machines.	Malani construction co	Wapcos
			Noise pollution arise from the construction vehicles and machineries.	- The work has to be done within the noise barrier zone	Malani construction co	Wapcos

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
			Construction activities will disturb the exiting surrounding activities especially the normal working of existing hospital.	- Prior information to the existing inhabitants regarding the construction works will be provided especially contractor will inform the surrounding community in prior to operations that bear the risk of nuisance and accidents. - The site should be isolated by installing tall fabric fences - Adequate signs, hoarding boards will be implemented for reducing accidents of bypasses - Noisy construction shall be stopped between 11:00 pm and 4:00 am.	Malani construction co	Wapcos
			Safety issues to workers	- Competent health and safety engineer shall be hired for monitoring. - Workers shall not be exposed to sound of more than 85 – 90 dB for more than eight hours a day and shall be provided with ear plugs. - Necessary planning and safety approach will be made for rescue during emergency - The use of safety gears (helmets, safety belts, masks, gloves and boot) by workers depending on nature of work will be made mandatory - Workers will be provided with first aid and health facilities at the site. - Emergency mock drills shall be conducted every six months.	Malani construction co	Wapcos

Sl. No	Activity	Environmental Attribute	Environmental Issues/Impacts	Mitigation measures	Implementing Agency	Monitoring Agency
		Socio-economic	Traffic and pedestrian road congestion	- The transportation vehicles will be parked within the premises of construction site - Sufficient hoarding board to inform the pedestrian and adjacent buildings about the activities will be established - The transportation will be scheduled such as not to coincide during peak traffic hours, - Safety measures to be considered while transporting the materials - Covering of the trucks with plastic sheets to prevent dust pollution and other hazards	Malani construction co	Wapcos
			Improper disposal of the construction waste will lead to the risk and nuisance to the inhabitants of hospital	An effective construction waste management plan will be implemented.	Malani construction co	Wapcos
			Labor involved in the site clearance is exposed to dust and increased ambient noise level.	- Water should be sprinkled periodically to suppress the dust generation. - Personal protective equipments such as ear plugs, helmets, goggles, gloves, boots etc. should be made mandatory for the construction workers. - Other provisions to ensure worker's safety shall be followed as per rules in force.	Malani construction co	Wapcos

Annexure

S. No	Photos
1	 **Environmental protection initiatives**

S. No	Photos
2	

Preservation of existing trees during excavation

S. No	Photos
3	 **Sufficient toilet facilities for the site**

S. No	Photos
4	 **Drinking water for the site**

S. No	Photos
5	 **Shelter for laborers to rest at site**

S. No	Photos
6	 **Dust control at site**

S. No	Photos
7	

Using appropriate methods to prevent dust during soil shifting

S. No	Photos
8	 **Frequent training sessions at the site to raise awareness among the workers.**

S. No	Photos
9	 **Labour hutment with proper lighting and ventilation**

S. No	Photos
10	 **Topsoil is preserved for future landscaping in accordance with GRIHA norms.**

S. No	Photos
11	  **On-site first aid setup at site in accordance with BOCW Act 1996 and GRIHA norms**

S. No	Photos
12	   **Mock drill**

S. No	Photos
13	 **We provide suitable PPE for everyone**

S. No	Photos
14	  **Newspaper cutout**

ഈ അധ്യയനവർഷം എംപ്ലോ ഗവ. ഐ.ടി.ഐ.യിൽ ഇൻഡ
ഗസ്റ്റ് ഇൻസ്ട്രക്ടറെ നിയമിക്കു ഫോൺ: 0495 2461898.

മലബാർ കാൻസർ സെന്റർ (പോസ്റ്റ് ഗ്രാജുവേറ്റ് ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് ഒങ്കോളജി സയൻസസ് & റിസർച്)
(കേരളാ സർക്കാരിനു കീഴിലുള്ള ഒരു സ്വയം ഭരണ സ്ഥാപനം)
മുഴിക്കര പി.ഒ. തലശ്ശേരി. കണ്ണൂർ - 670 103 ഫോൺ: 0490 2355880
ഫാക്സ്: 0490 2355881, Email: mcctly@gmail.com, Web: www.mcc.kerala.gov.in

മലബാർ കാൻസർ സെന്ററിന് പാരിസ്ഥിതിക അനുമതി ലഭിച്ചു

തലശ്ശേരി മലബാർ കാൻസർ സെന്റർ (പോസ്റ്റ് ഗ്രാജുവേറ്റ് ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് ഒങ്കോളജി സയൻസസ്സ് ആൻഡ് റിസർച്) വികസനത്തിനായി കിഫ്ബി നടപ്പാക്കാനുദ്ദേശിക്കുന്ന രണ്ടാംഘട്ട നിർമ്മാണ പ്രവർത്തനങ്ങൾ ആരംഭിക്കുന്നതിനു മുന്നാടിയായി ലഭിക്കേണ്ടുന്ന പാരിസ്ഥിതിക അനുമതി സെൻറിനു ലഭിച്ചു. ഉത്തരവിന്റെ പകർപ്പും മറ്റു വിവരങ്ങളും ഡയറക്ടറേറ്റ് ഓഫ് എൻവിയോണ്മെന്റ് ആൻഡ് ക്ലൈമറ്റ് ചേഞ്ച് ഓഫ് കേരളയുടെ ഓഫീസിലും www.seiaakerala.in, www.mcc.kerala.gov.in എന്നീ വെബ് സൈറ്റ് വിലാസത്തിലും ലഭ്യമാണ്.
ഒപ്പ് /- ഡയറക്ടർ

ഭാരത സർക്കാർ
ആറ്റോമിക് എനർജി റെഗുലേറ്ററി ബോർഡ്

മലബാർ ക്യാൻസർ സെന്റർ

രണ്ടാംഘട്ട വികസനത്തിന് പാരിസ്ഥിതികാനുമതി

സ്വന്തം ലേഖകൻ

തലശ്ശേരി

മലബാർ ക്യാൻസർ സെന്റർ (പോസ്റ്റ് ഗ്രാജുവേറ്റ് ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് ഓങ്കോളജി സയൻസസ് ആൻഡ് റിസർച്ച്) രണ്ടാംഘട്ട വികസനത്തിന് പാരിസ്ഥിതികാനുമതിയായി. സംസ്ഥാന പാരിസ്ഥിതിക ആഘാത നിർണയ അതോറിറ്റിയാണ് അനുമതി നൽകിയത്. ഉത്തരവിന്റെ പകർപ്പും മറ്റുവിവരങ്ങളും ഡയറക്ടറേറ്റ് ഓഫ് എൻവിയോൺമെന്റ് ആൻഡ് ക്ലൈമറ്റ് ചേഞ്ച് ഓഫ് കേരള ഓഫീസിലും www.seiaakerala.org, www.mcc.kerala.gov.in എന്നീ വെബ്സൈറ്റിലും അറിയാം.

പാരിസ്ഥിതിക അനുമതി ലഭിച്ചതോടെ എംസിസി വികസനം വേഗത്തിലാവും. രണ്ടാംഘട്ട വികസനത്തിന് 562.4 കോടി രൂപയുടെ പ്രവൃത്തിക്കാണ് ഭരണാനുമതി ലഭിച്ചത്. ഇതിൽ 398.31 കോടി രൂപയുടെ നിർമാണ പ്രവൃത്തിയുടെ ടെൻഡർ നടപടി തുടങ്ങി. കിഫ്ബി ഫണ്ട് ഉപയോഗിച്ചാണ് വികസനം.

S. No	Photos

മലബാർ കാൻസർ സെന്റർ (പോസ്റ്റ് ഗ്രാജുവേറ്റ് ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് ഒങ്കോളജി സയൻസസ് & റിസർച്ച്)
(കേരളാ സർക്കാരിനു കീഴിലുള്ള ഒരു സ്വയം ഭരണ സ്ഥാപനം)
മുഴിക്കര പി.ഓ. തലശ്ശേരി, കണ്ണൂർ - 670 103 ഫോൺ: 0490 2355080
ഫാക്സ്: 0490 2355081, Email: mcctly@gmail.com, Web: www.mcc.kerala.gov.in

മലബാർ കാൻസർ സെന്ററിന് പാരിസ്ഥിതിക അനുമതി ലഭിച്ചു

തലശ്ശേരി മലബാർ കാൻസർ സെന്റർ (പോസ്റ്റ് ഗ്രാജുവേറ്റ് ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് ഒങ്കോളജി സയൻസസ് ആൻഡ് റിസർച്ച്) വികസനത്തിനായി കിഫ്ബി നടപ്പാക്കാനുദ്ദേശിക്കുന്ന രണ്ടാംഘട്ട നിർമ്മാണ പ്രവർത്തനങ്ങൾ ആരംഭിക്കുന്നതിനു മുന്നാടിയായി ലഭിക്കേണ്ടുന്ന പാരിസ്ഥിതിക അനുമതി സെന്ററിനു ലഭിച്ചു. ഉത്തരവിന്റെ പകർപ്പും മറ്റു വിവരങ്ങളും ഡയറക്ടറേറ്റ് ഓഫ് എൻവിയോണ്മെന്റ് ആൻഡ് ക്ലൈമറ്റ് ചേഞ്ച് ഓഫ് കേരളയുടെ ഓഫീസിലും www.seiaakerala.in, www.mcc.kerala.gov.in എന്നീ വെബ് സൈറ്റ് വിലാസത്തിലും ലഭ്യമാണ്.

ഒപ്പ്/ ഡയറക്ടർ

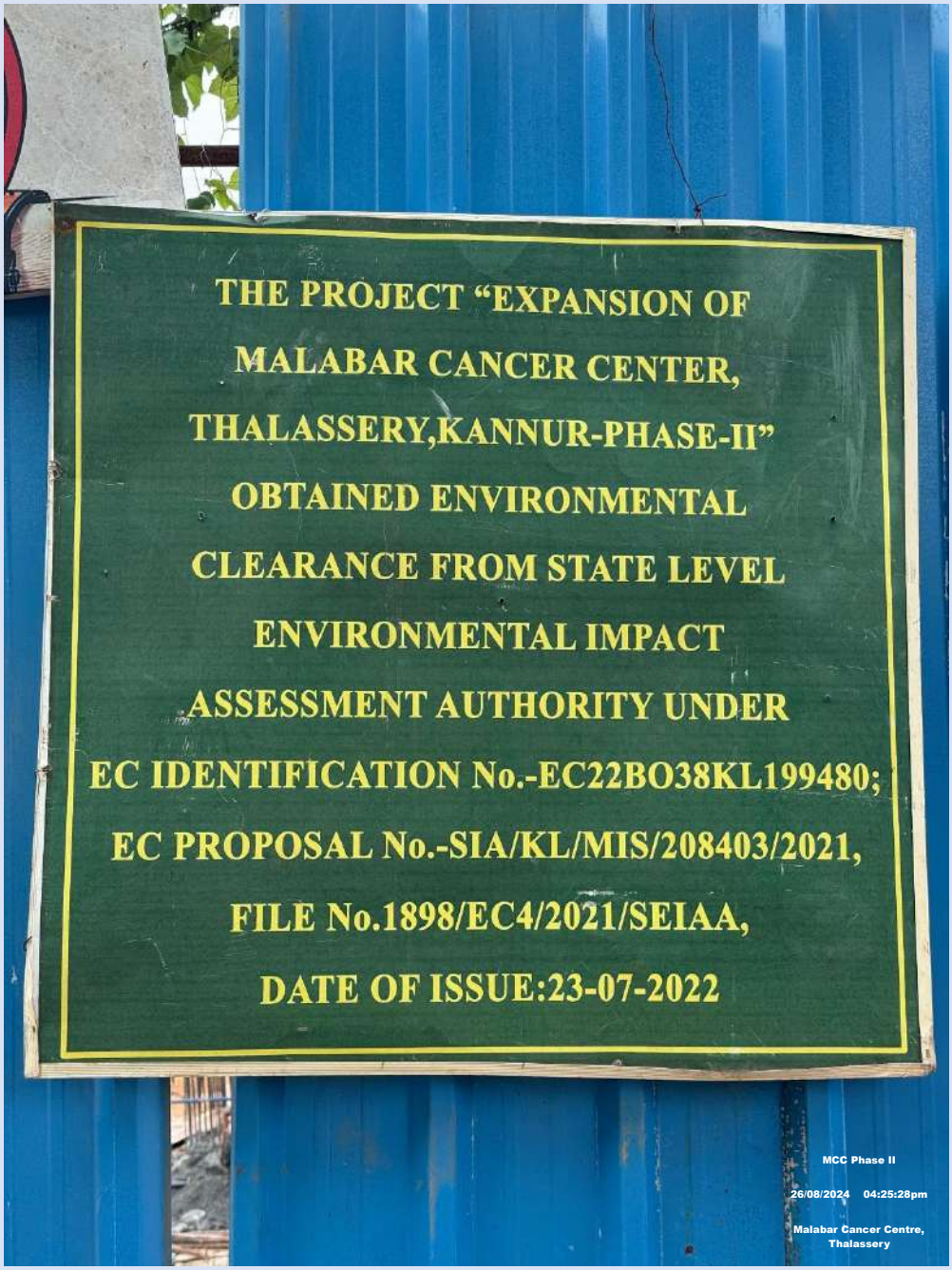
കേരള സ്റ്റേറ്റ് അതോറിറ്റി - ഇലക്ട്രോണിക് ദൃശ്യം നോട്ടീസ്

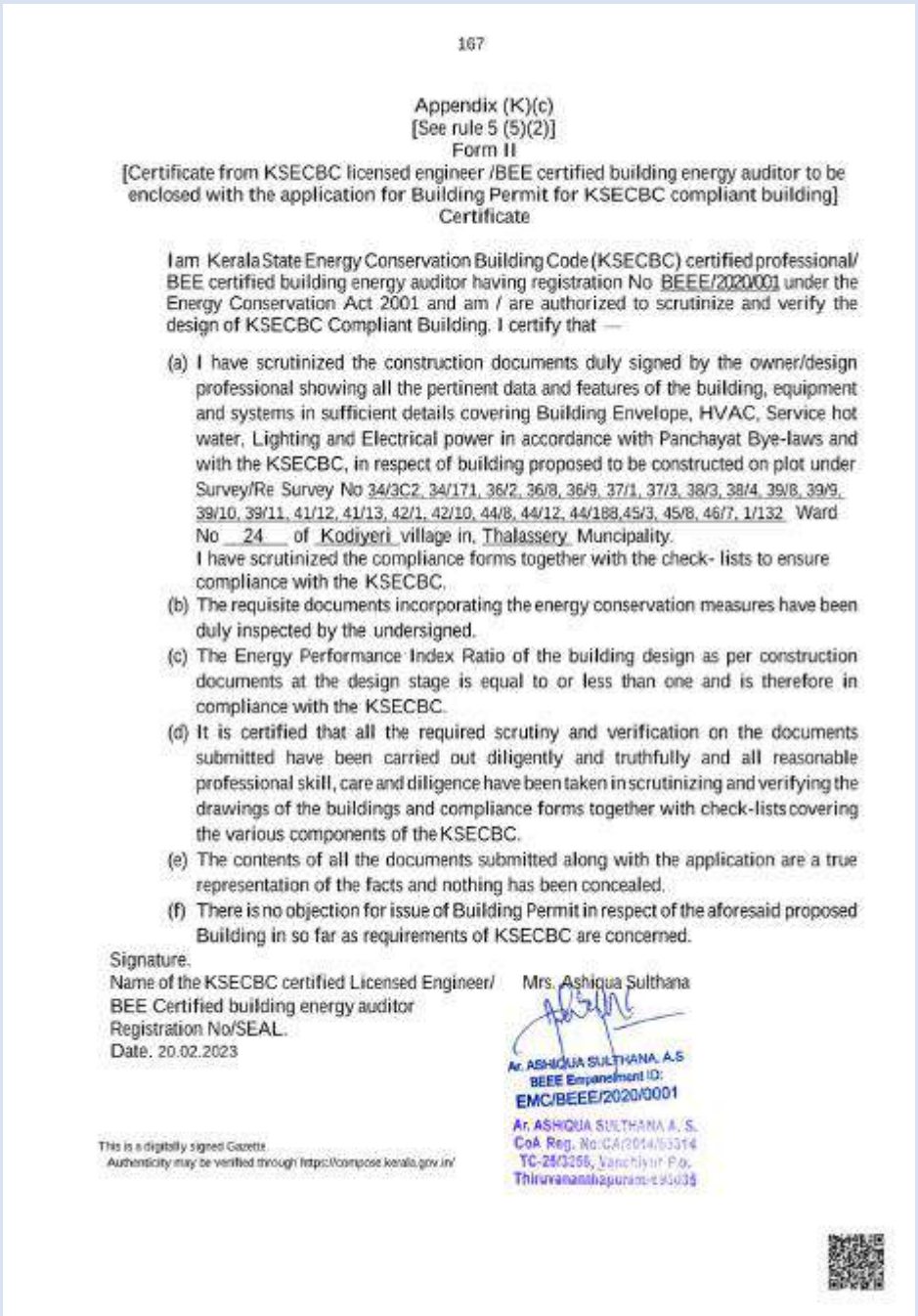
എം.സി.സി.: രണ്ടാംഘട്ട നിർമാണത്തിന് പാരിസ്ഥിതിക അനുമതി

കണ്ണൂർ ▸ മലബാർ കാൻസർ സെന്റർ വികസനത്തിനായി കിഫ്ബി നടപ്പാക്കുന്ന രണ്ടാംഘട്ട നിർമാണങ്ങൾക്ക് പാരിസ്ഥിതിക അനുമതി ലഭിച്ചു. സംസ്ഥാന പാരിസ്ഥിതിക ആഘാത നിർണയ അതോറിറ്റിയുടെ യോഗത്തിലാണ് തീരുമാനം.

പോസ്റ്റ് ഗ്രാജുവേറ്റ് ഇൻസ്റ്റിറ്റ്യൂട്ട് ഓഫ് ഓങ്കോളജി സയൻസസ് ആൻഡ് റിസർച്ച് ആയി ഉയർന്ന സ്ഥാപനത്തിന്റെ വികസനം വേഗത്തിലാക്കാൻ ഇതുപകരിക്കും. രണ്ടാംഘട്ട വികസനത്തിനായി 562.4 കോടിയുടെ ഭരണാനുമതി ലഭിച്ചിരുന്നു. ഇതിൽ 398.31 കോടിയുടെ പ്രവർത്തനങ്ങൾക്ക് ടെൻഡർ നടപടികൾ ആരംഭിച്ചിട്ടുണ്ട്.

Newspaper cutout

S. No	Photos
15	 **Environmental Clearance metallic board**

S. No	Photos
16	

167

Appendix (K)(c)
[See rule 5 (5)(2)]
Form II
[Certificate from KSECBC licensed engineer /BEE certified building energy auditor to be enclosed with the application for Building Permit for KSECBC compliant building]
Certificate

I am Kerala State Energy Conservation Building Code (KSECBC) certified professional/ BEE certified building energy auditor having registration No BEEE/2020001 under the Energy Conservation Act 2001 and am / are authorized to scrutinize and verify the design of KSECBC Compliant Building. I certify that —

(a) I have scrutinized the construction documents duly signed by the owner/design professional showing all the pertinent data and features of the building, equipment and systems in sufficient details covering Building Envelope, HVAC, Service hot water, Lighting and Electrical power in accordance with Panchayat Bye-laws and with the KSECBC, in respect of building proposed to be constructed on plot under Survey/Re Survey No 34/3C2, 34/171, 36/2, 36/8, 36/9, 37/1, 37/3, 38/3, 38/4, 39/8, 39/9, 39/10, 39/11, 41/12, 41/13, 42/1, 42/10, 44/8, 44/12, 44/188,45/3, 45/8, 46/7, 1/132 Ward No 24 of Kodiyeri village in, Thalassery Muncipality.
I have scrutinized the compliance forms together with the check- lists to ensure compliance with the KSECBC.

(b) The requisite documents incorporating the energy conservation measures have been duly inspected by the undersigned.

(c) The Energy Performance Index Ratio of the building design as per construction documents at the design stage is equal to or less than one and is therefore in compliance with the KSECBC.

(d) It is certified that all the required scrutiny and verification on the documents submitted have been carried out diligently and truthfully and all reasonable professional skill, care and diligence have been taken in scrutinizing and verifying the drawings of the buildings and compliance forms together with check-lists covering the various components of the KSECBC.

(e) The contents of all the documents submitted along with the application are a true representation of the facts and nothing has been concealed.

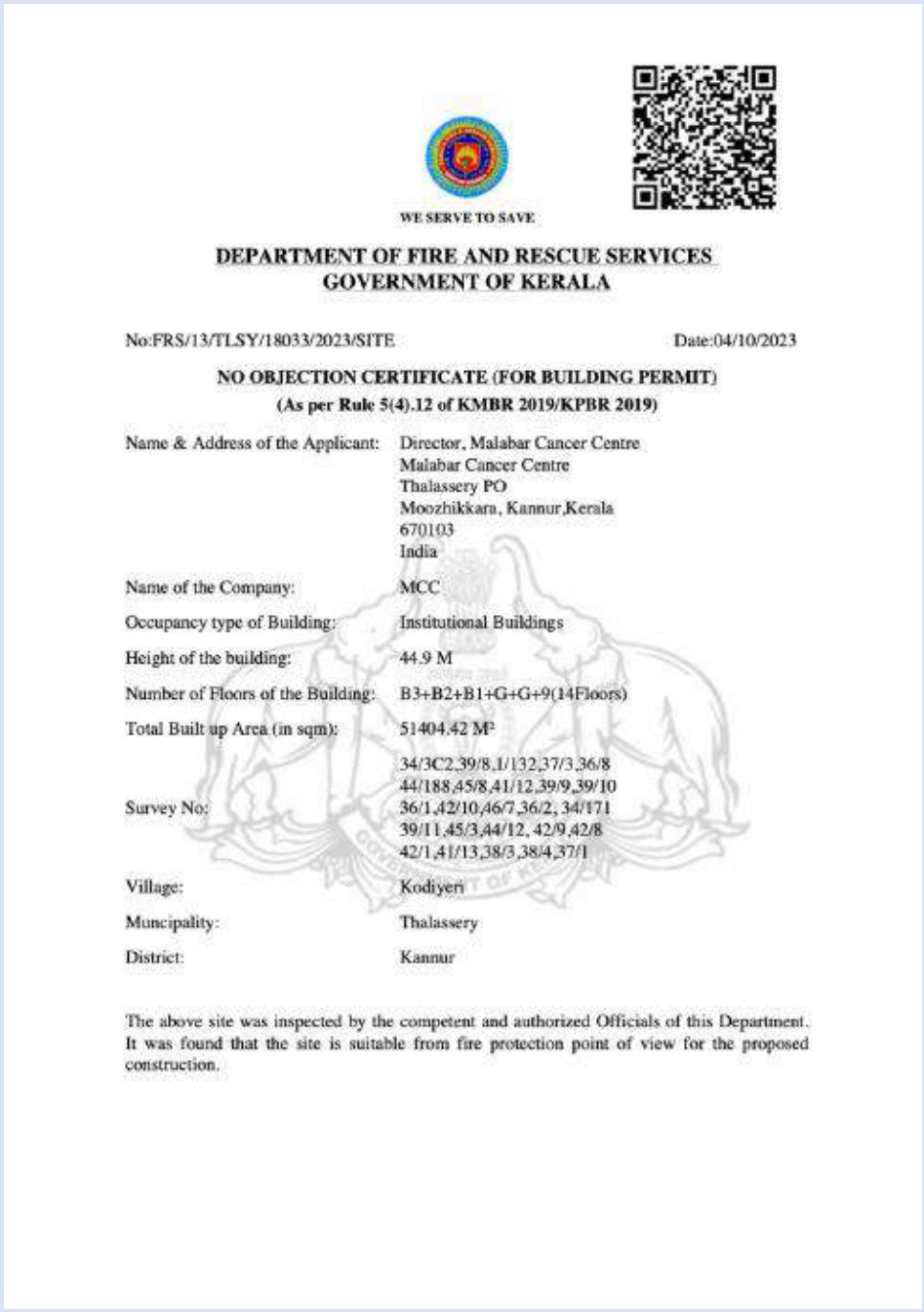
(f) There is no objection for issue of Building Permit in respect of the aforesaid proposed Building in so far as requirements of KSECBC are concerned.

Signature.
Name of the KSECBC certified Licensed Engineer/ BEE Certified building energy auditor — Mrs. Ashiqua Sulthana
Registration No/SEAL.
Date. 20.02.2023

Ar. ASHIQUA SULTHANA. A.S
BEEE Empanelment ID:
EMC/BEEE/2020/0001
Ar. ASHIQUA SULTHANA. A. S.
CoA Reg. No:CA/2014/83314
TC-28/3256, Vanchiyur P.o.
Thiruvananthapuram-695035

This is a digitally signed Gazette.
Authenticity may be verified through https://compose.kerala.gov.in/

Certificate from KSECBC

S. No	Photos
17	

WE SERVE TO SAVE

DEPARTMENT OF FIRE AND RESCUE SERVICES
GOVERNMENT OF KERALA

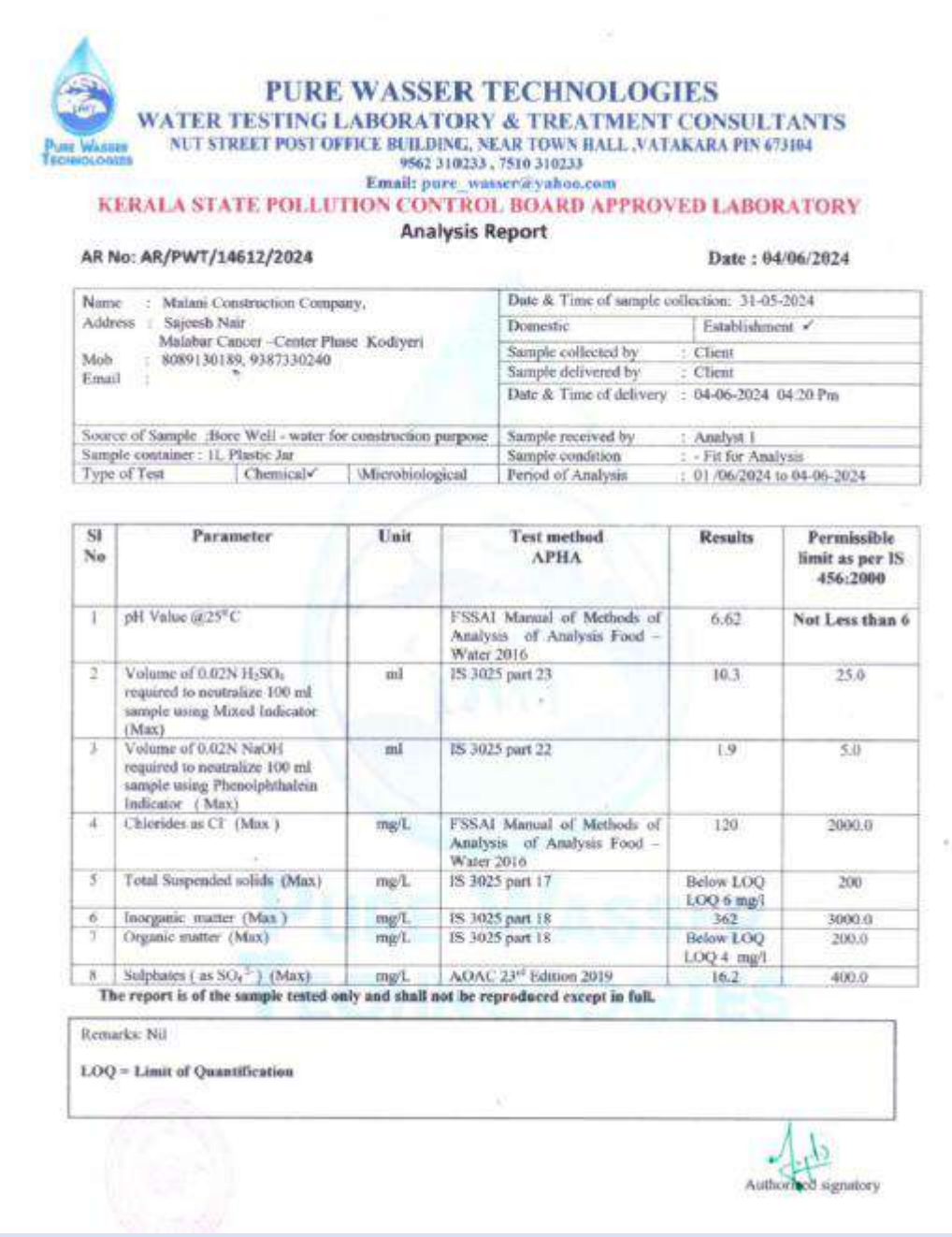
No:FRS/13/TLSY/18033/2023/SITE Date:04/10/2023

NO OBJECTION CERTIFICATE (FOR BUILDING PERMIT)
(As per Rule 5(4).12 of KMBR 2019/KPBR 2019)

Name & Address of the Applicant:	Director, Malabar Cancer Centre Malabar Cancer Centre Thalassery PO Moozhikkara, Kannur,Kerala 670103 India
Name of the Company:	MCC
Occupancy type of Building:	Institutional Buildings
Height of the building:	44.9 M
Number of Floors of the Building:	B3+B2+B1+G+G+9(14Floors)
Total Built up Area (in sqm):	51404.42 M²
Survey No:	34/3C2,39/8,1/132,37/3,36/8 44/188,45/8,41/12,39/9,39/10 36/1,42/10,46/7,36/2, 34/171 39/11,45/3,44/12, 42/9,42/8 42/1,41/13,38/3,38/4,37/1
Village:	Kodiyeri
Muncipality:	Thalassery
District:	Kannur

The above site was inspected by the competent and authorized Officials of this Department. It was found that the site is suitable from fire protection point of view for the proposed construction.

No Objection Certificate (for Building Permit)

S. No	Photos
18	

PURE WASSER TECHNOLOGIES
WATER TESTING LABORATORY & TREATMENT CONSULTANTS
NUT STREET POST OFFICE BUILDING, NEAR TOWN HALL ,VATAKARA PIN 673104
9562 310233 , 7510 310233
Email: pure_wasser@yahoo.com
KERALA STATE POLLUTION CONTROL BOARD APPROVED LABORATORY

Analysis Report

AR No: AR/PWT/14612/2024 **Date : 04/06/2024**

Name : Malani Construction Company,	Date & Time of sample collection: 31-05-2024
Address : Sajeesh Nair, Malabar Cancer –Center Phase Kodiyeri	Domestic / Establishment ✓
Mob : 8089130189, 9387330240	Sample collected by : Client
Email :	Sample delivered by : Client
	Date & Time of delivery : 04-06-2024 04:20 Pm
Source of Sample :Bore Well - water for construction purpose	Sample received by : Analyst 1
Sample container : 1L Plastic Jar	Sample condition : - Fit for Analysis
Type of Test: Chemical✓ / Microbiological	Period of Analysis : 01/06/2024 to 04-06-2024

Sl No	Parameter	Unit	Test method APHA	Results	Permissible limit as per IS 456:2000
1	pH Value @25°C		FSSAI Manual of Methods of Analysis of Analysis Food – Water 2016	6.62	Not Less than 6
2	Volume of 0.02N H_2SO_4 required to neutralize 100 ml sample using Mixed Indicator (Max)	ml	IS 3025 part 23	10.3	25.0
3	Volume of 0.02N NaOH required to neutralize 100 ml sample using Phenolphthalein Indicator (Max)	ml	IS 3025 part 22	1.9	5.0
4	Chlorides as Cl (Max)	mg/L	FSSAI Manual of Methods of Analysis of Analysis Food – Water 2016	120	2000.0
5	Total Suspended solids (Max)	mg/L	IS 3025 part 17	Below LOQ LOQ 6 mg/l	200
6	Inorganic matter (Max)	mg/L	IS 3025 part 18	362	3000.0
7	Organic matter (Max)	mg/L	IS 3025 part 18	Below LOQ LOQ 4 mg/l	200.0
8	Sulphates (as SO_4^{--}) (Max)	mg/L	AOAC 23rd Edition 2019	16.2	400.0

The report is of the sample tested only and shall not be reproduced except in full.

Remarks: Nil

LOQ = Limit of Quantification

Authorised signatory

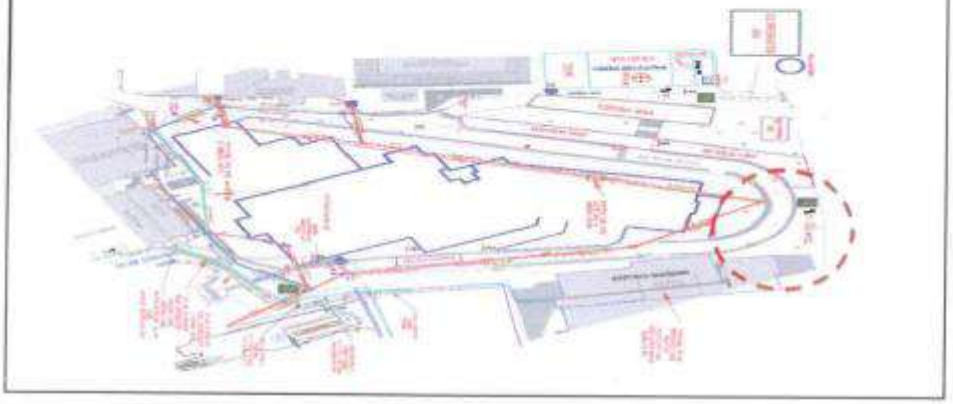
Water test report

S. No	Photos
19	

NOISE MONITORING RECORD

Site : Mcc_Phase II	Date:18.06.2024

Sketch of Area and Location of Sources of Noise:



NOISE LEVEL READING

Sl	Location	Noise Level (dB)	Distance from the Sources of Noise	Time	Activity at the time of Measurement	Type and Number of Equipment
1	Zone II part II	59.9dB	85M	12:51Pm	Pile boring work	SR155C10 Rotary Drilling Rig & No 1
3	Zone II part II	69.3dB	40M	01:05pm	Pile boring work	SR155C10 Rotary Drilling Rig & No 1
5	Zone II part II	73.3dB	10M	01:15pm	Pile boring work	SR155C10 Rotary Drilling Rig & No 1

Noise monitoring report

S. No	Photos
20	

ENVIRONMENTAL CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environmental Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), Kerala)

To,

The DIRECTOR
MALABAR CANCER CENTER
Malabar Cancer Centre, Moozhikara PO -670103

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/KL/MIS/208403/2021 dated 07 Jun 2021. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22B038KL199480**
2.	**File No.**	1898/EC4/2021/SEIAA
3.	**Project Type**	New
4.	**Category**	B2
5.	**Project/Activity including Schedule No.**	8(a) Building and Construction projects
6.	**Name of Project**	Development of Malabar Cancer Center as Postgraduate Institute of Oncology Sciences and Research
7.	**Name of Company/Organization**	MALABAR CANCER CENTER
8.	**Location of Project**	Kerala
9.	**TOR Date**	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 23/07/2022

(e-signed)
Dr. Venu V IAS
Member Secretary
SEIAA - (Kerala)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

This is a computer generated cover page.

Environmental clearance

S. No	Photos
21	

Pollution Under Control Certificate

Date : 26/09/2023
Time : 13:30:56 PM
Validity upto : 25/09/2024

Vehicle Photo with Registration plate
80 mm x 30 mm

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon (THC/HC)	ppm		
High Idling emissions	CO	percentage (%)		
	RPM	RPM	2500 + 200	
	Lambda	-	1 + 0.03	
Smoke Density	Light absorption coefficient	1/metre	1.62	0.04

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

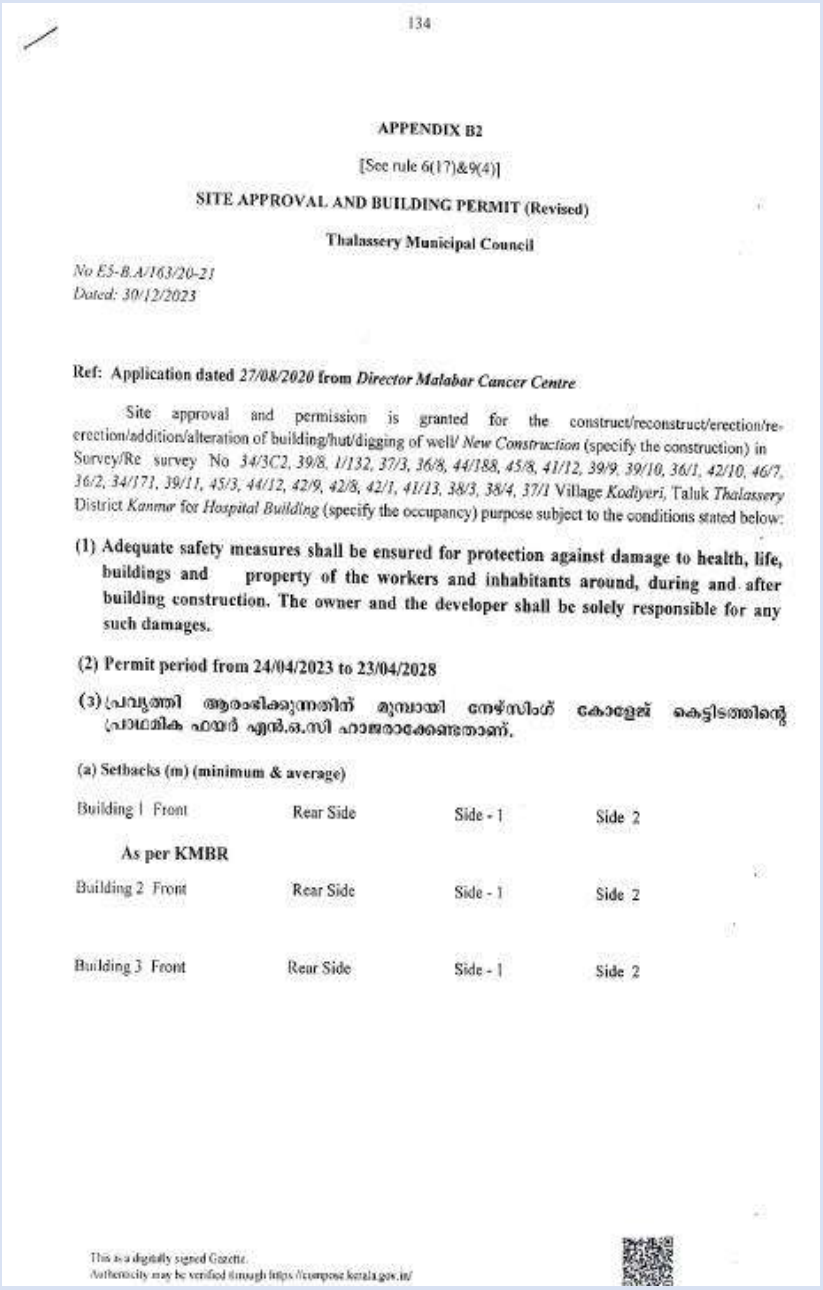
Note : 1. Vehicle owners to link their mobile numbers to registered vehicle by logging on to https://vahan.parivahan.gov.in

Authorised Signature with stamp of PUC operator

POLLUTION TESTING CENTRE
Koppalam, P.O. Moothakunnam

Pollution under control certificate

S. No	Photos
22	 **RMC plant**

S. No	Photos
23	

134

APPENDIX B2

[See rule 6(17)&9(4)]

SITE APPROVAL AND BUILDING PERMIT (Revised)

Thalassery Municipal Council

No ES-B.A/163/20-21
Dated: 30/12/2023

Ref: Application dated *27/08/2020* from *Director Malabar Cancer Centre*

Site approval and permission is granted for the construct/reconstruct/erection/re-erection/addition/alteration of building/hut/digging of well/ *New Construction* (specify the construction) in Survey/Re survey No *34/3C2, 39/8, 1/132, 37/3, 36/8, 44/188, 45/8, 41/12, 39/9, 39/10, 36/1, 42/10, 46/7, 36/2, 34/171, 39/11, 45/3, 44/12, 42/9, 42/8, 42/1, 41/13, 38/3, 38/4, 37/1* Village *Kodiyeri*, Taluk *Thalassery* District *Kannur* for *Hospital Building* (specify the occupancy) purpose subject to the conditions stated below:

(1) Adequate safety measures shall be ensured for protection against damage to health, life, buildings and property of the workers and inhabitants around, during and after building construction. The owner and the developer shall be solely responsible for any such damages.

(2) Permit period from 24/04/2023 to 23/04/2028

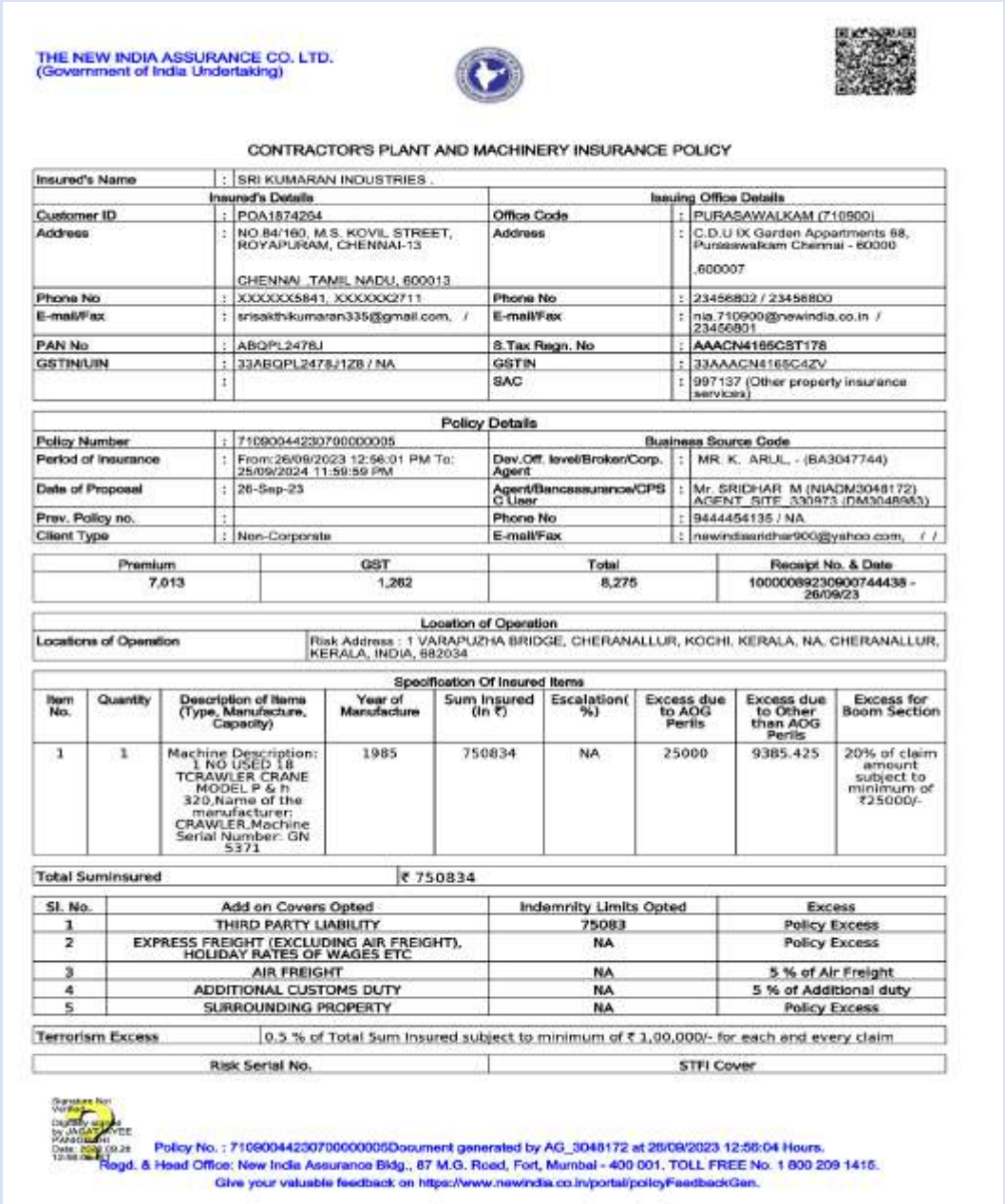
(3) പ്രവൃത്തി ആരംഭിക്കുന്നതിന് മുമ്പായി നേഴ്സിംഗ് കോളേജ് കെട്ടിടത്തിന്റെ പ്രാഥമിക ഫയർ എൻ.ഒ.സി ഹാജരാക്കേണ്ടതാണ്.

(a) Setbacks (m) (minimum & average)

Building 1	Front	Rear Side	Side - 1	Side 2
	As per KMBR			
Building 2	Front	Rear Side	Side - 1	Side 2
Building 3	Front	Rear Side	Side - 1	Side 2

This is a digitally signed Gazette.
Authenticity may be verified through https://egazette.kerala.gov.in/

Approval of Building Permit Thalassery

S. No	Photos
24	

THE NEW INDIA ASSURANCE CO. LTD.
(Government of India Undertaking)

CONTRACTOR'S PLANT AND MACHINERY INSURANCE POLICY

Insured's Name	:	SRI KUMARAN INDUSTRIES .			
Insured's Details			Issuing Office Details		
Customer ID	:	POA1874264	Office Code	:	PURASAWALKAM (710900)
Address	:	NO.84/160, M.S. KOVIL STREET, ROYAPURAM, CHENNAI-13 CHENNAI, TAMIL NADU, 600013	Address	:	C.D.U IX Garden Appartments 68, Purasaiwalkam Chennai - 60000 ,600007
Phone No	:	XXXXXX5841, XXXXXX2711	Phone No	:	23456802 / 23456800
E-mail/Fax	:	srisakthikumaran335@gmail.com, /	E-mail/Fax	:	nia.710900@newindia.co.in / 23456801
PAN No	:	ABQPL2478J	S.Tax Regn. No	:	AAACN4165CST178
GSTIN/UIN	:	33ABQPL2478J1ZB / NA	GSTIN	:	33AAACN4165C4ZV
	:		SAC	:	997137 (Other property insurance services)

Policy Details					
Policy Number	:	710900442307000000005	Business Source Code		
Period of Insurance	:	From:26/09/2023 12:56:01 PM To: 25/09/2024 11:59:59 PM	Dev.Off. level/Broker/Corp. Agent	:	MR. K. ARUL, - (BA3047744)
Date of Proposal	:	26-Sep-23	Agent/Bancassurance/CPS C User	:	Mr. SRIDHAR M (NIADM3048172) AGENT_SITE_330973 (DM3048983)
Prev. Policy no.	:		Phone No	:	9444454135 / NA
Client Type	:	Non-Corporate	E-mail/Fax	:	newindiasridhar900@yahoo.com, / /

Premium	GST	Total	Receipt No. & Date
7,013	1,262	8,275	10000089230900744438 - 26/09/23

Location of Operation	
Locations of Operation	Risk Address : 1 VARAPUZHA BRIDGE, CHERANALLUR, KOCHI, KERALA, NA, CHERANALLUR, KERALA, INDIA, 682034

Specification Of Insured Items

Item No.	Quantity	Description of Items (Type, Manufacture, Capacity)	Year of Manufacture	Sum Insured (In ₹)	Escalation(%)	Excess due to AOG Perils	Excess due to Other than AOG Perils	Excess for Boom Section
1	1	Machine Description: 1 NO USED 1.8 TCRAWLER CRANE MODEL P & h 320,Name of the manufacturer: CRAWLER,Machine Serial Number: GN 5371	1985	750834	NA	25000	9385.425	20% of claim amount subject to minimum of ₹25000/-

Total Suminsured	₹ 750834

Sl. No.	Add on Covers Opted	Indemnity Limits Opted	Excess
1	THIRD PARTY LIABILITY	75083	Policy Excess
2	EXPRESS FREIGHT (EXCLUDING AIR FREIGHT), HOLIDAY RATES OF WAGES ETC	NA	Policy Excess
3	AIR FREIGHT	NA	5 % of Air Freight
4	ADDITIONAL CUSTOMS DUTY	NA	5 % of Additional duty
5	SURROUNDING PROPERTY	NA	Policy Excess

Terrorism Excess	0.5 % of Total Sum Insured subject to minimum of ₹ 1,00,000/- for each and every claim

Risk Serial No.	STFI Cover

Policy No. : 710900442307000000005Document generated by AG_3048172 at 26/09/2023 12:56:04 Hours.
Regd. & Head Office: New India Assurance Bldg., 87 M.G. Road, Fort, Mumbai - 400 001. TOLL FREE No. 1 800 209 1415.
Give your valuable feedback on https://www.newindia.co.in/portal/policyFeedbackGen.

We ensure all vehicles are insured and have a pollution control certificate

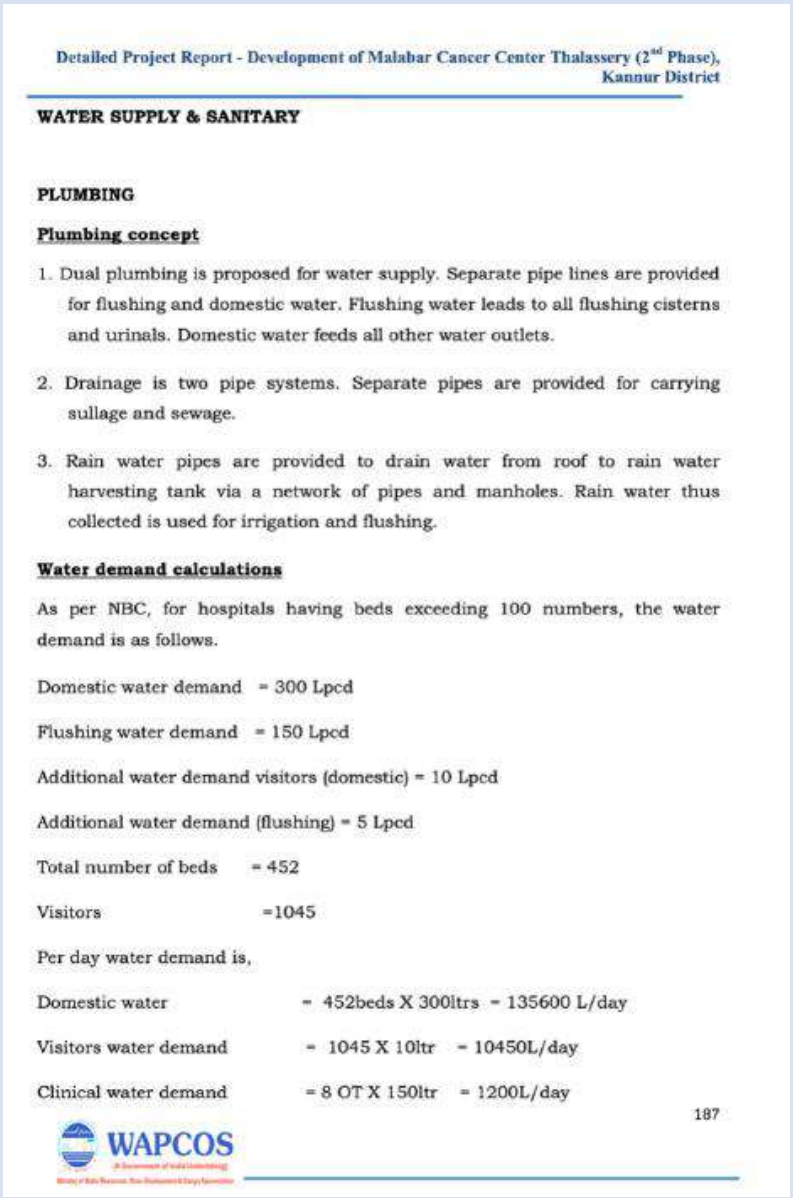
S. No	Photos
25	 **Waste management system and Biogas plant**

S. No	Photos
26	 **Weep holes in retaining wall**

S. No	Photos
27	 **Waste We prioritize the well-being of neighboring communities by implementing all necessary measures to ensure public safety and health.**

S. No	Photos
28	 **Toolbox talk**

S. No	Photos
29	 **Routine health checkup at site.**

S. No	Photos
30	

WATER SUPPLY & SANITARY

PLUMBING

Plumbing concept

1. Dual plumbing is proposed for water supply. Separate pipe lines are provided for flushing and domestic water. Flushing water leads to all flushing cisterns and urinals. Domestic water feeds all other water outlets.
2. Drainage is two pipe systems. Separate pipes are provided for carrying sullage and sewage.
3. Rain water pipes are provided to drain water from roof to rain water harvesting tank via a network of pipes and manholes. Rain water thus collected is used for irrigation and flushing.

Water demand calculations

As per NBC, for hospitals having beds exceeding 100 numbers, the water demand is as follows.

Domestic water demand = 300 Lpcd

Flushing water demand = 150 Lpcd

Additional water demand visitors (domestic) = 10 Lpcd

Additional water demand (flushing) = 5 Lpcd

Total number of beds = 452

Visitors =1045

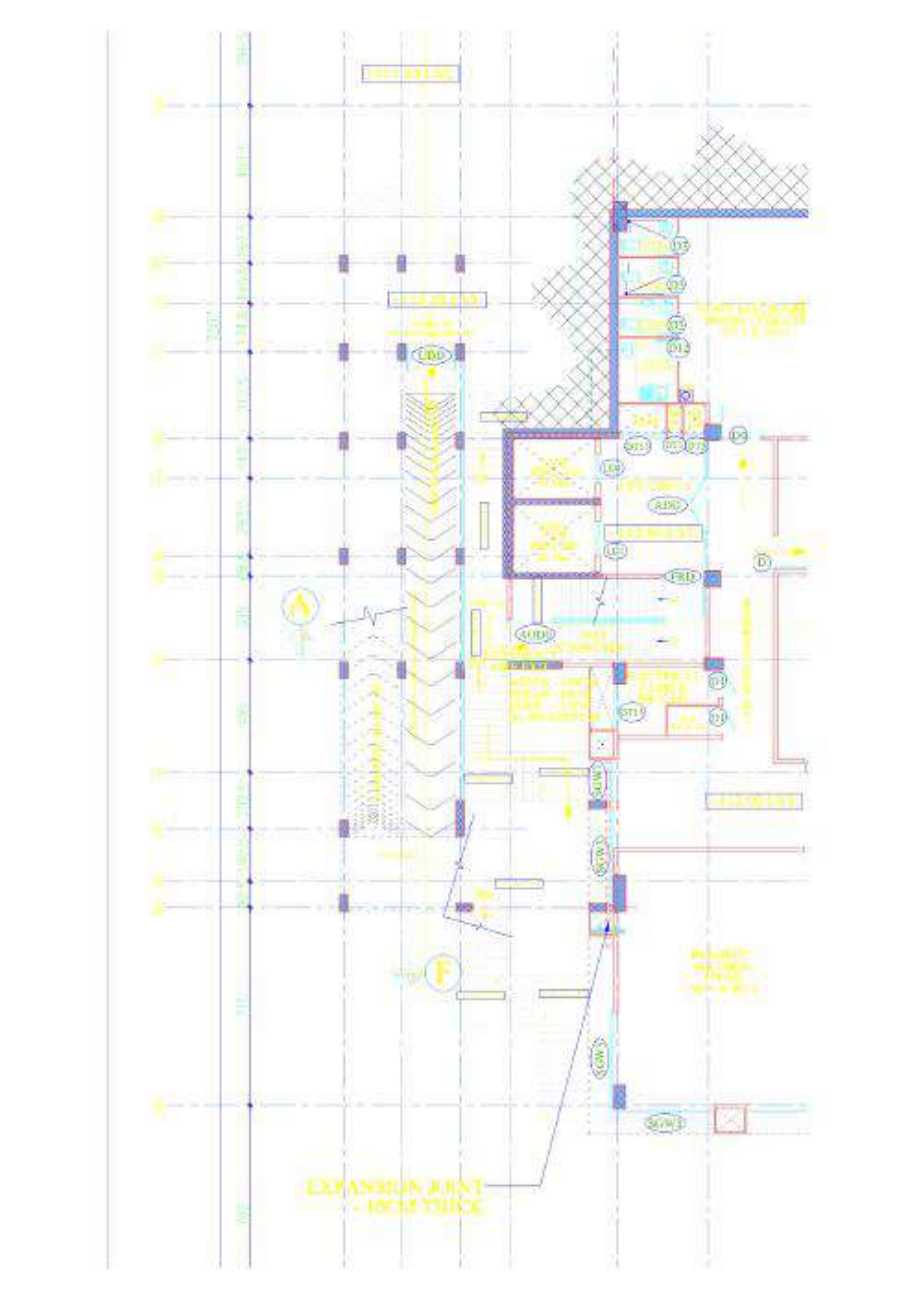
Per day water demand is,

Domestic water = 452beds X 300ltrs = 135600 L/day

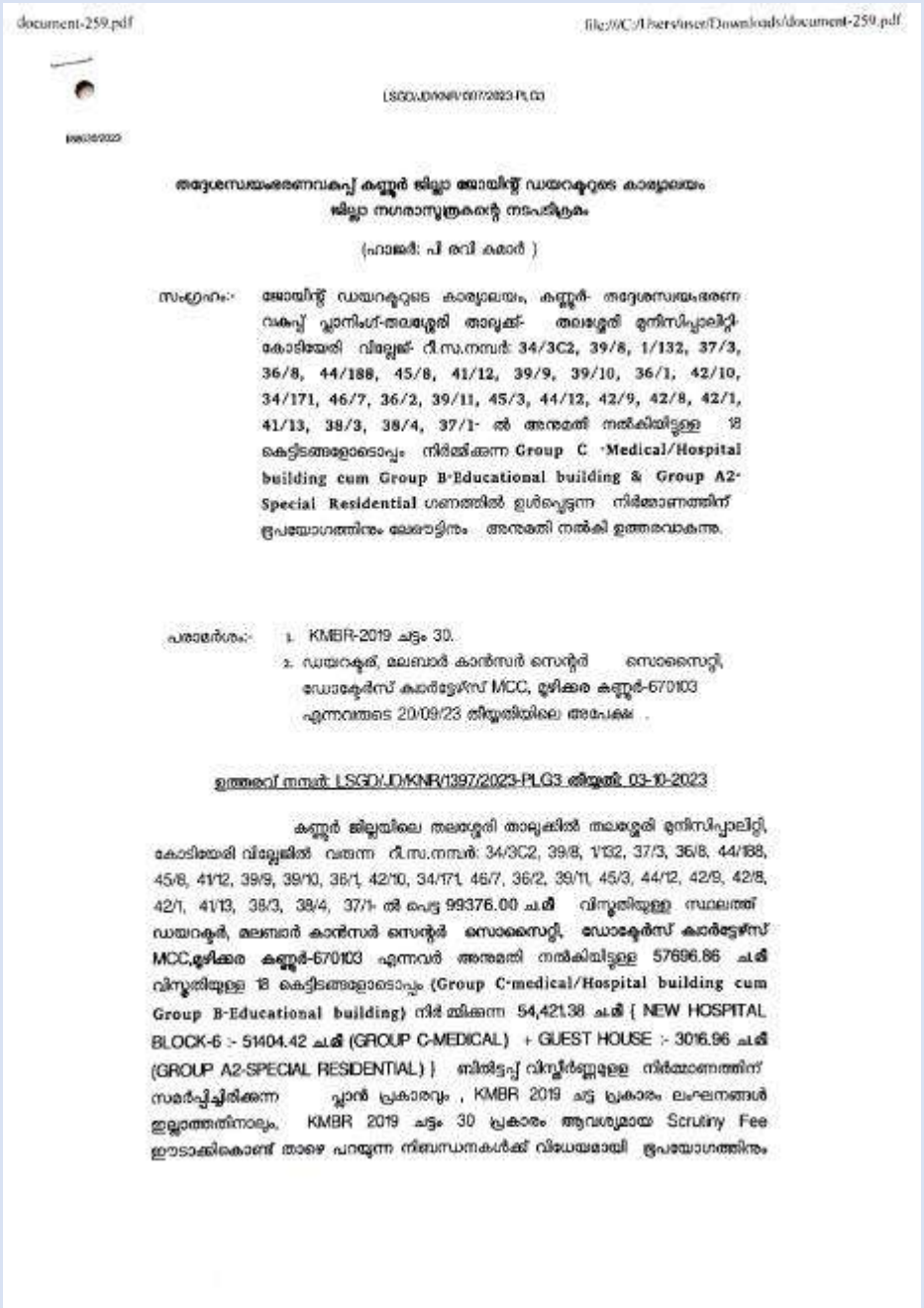
Visitors water demand = 1045 X 10ltr = 10450L/day

Clinical water demand = 8 OT X 150ltr = 1200L/day

Proposed Water-efficient plumbing features

S. No	Photos
31	

Ramp access for differently abled citizens

S. No	Photos
32	

document-259.pdf file:///C:/Users/user/Downloads/document-259.pdf

LSGD/JD/KNR/1397/2023-PLG3

തദ്ദേശസ്വയംഭരണവകുപ്പ് കണ്ണൂർ ജില്ലാ ജോയിന്റ് ഡയറക്ടറുടെ കാര്യാലയം
ജില്ലാ നഗരാസൂത്രകന്റെ നടപടിക്രമം

(ഹാജർ: പി രവി കുമാർ)

സംഗ്രഹം:- ജോയിന്റ് ഡയറക്ടറുടെ കാര്യാലയം, കണ്ണൂർ- തദ്ദേശസ്വയംഭരണ വകുപ്പ് പ്ലാനിംഗ്-തലശ്ശേരി താലൂക്ക്- തലശ്ശേരി മുനിസിപ്പാലിറ്റി-കോടിയേരി വില്ലേജ്- റീ.സ.നമ്പർ: 34/3C2, 39/8, 1/132, 37/3, 36/8, 44/188, 45/8, 41/12, 39/9, 39/10, 36/1, 42/10, 34/171, 46/7, 36/2, 39/11, 45/3, 44/12, 42/9, 42/8, 42/1, 41/13, 38/3, 38/4, 37/1- ൽ അനുമതി നൽകിയിട്ടുള്ള 18 കെട്ടിടങ്ങളോടൊപ്പം നിർമിക്കുന്ന Group C -Medical/Hospital building cum Group B-Educational building & Group A2-Special Residential ഗണത്തിൽ ഉൾപ്പെടുന്ന നിർമാണത്തിന് ഉപയോഗത്തിനും മേൽനോട്ടിനും അനുമതി നൽകി ഉത്തരവാകുന്നു.

പരാമർശം:- 1. KMBR-2019 ചട്ടം 30.
2. ഡയറക്ടർ, മലബാർ കാൻസർ സെന്റർ സൊസൈറ്റി, ഡോക്ടേർസ് കമ്മ്യൂണിറ്റീസ് MCC, മുഴിക്കര കണ്ണൂർ-670103 എന്നവരുടെ 20/09/23 തീയ്യതിയിലെ അപേക്ഷ .

ഉത്തരവ് നമ്പർ: LSGD/JD/KNR/1397/2023-PLG3 തീയ്യതി: 03-10-2023

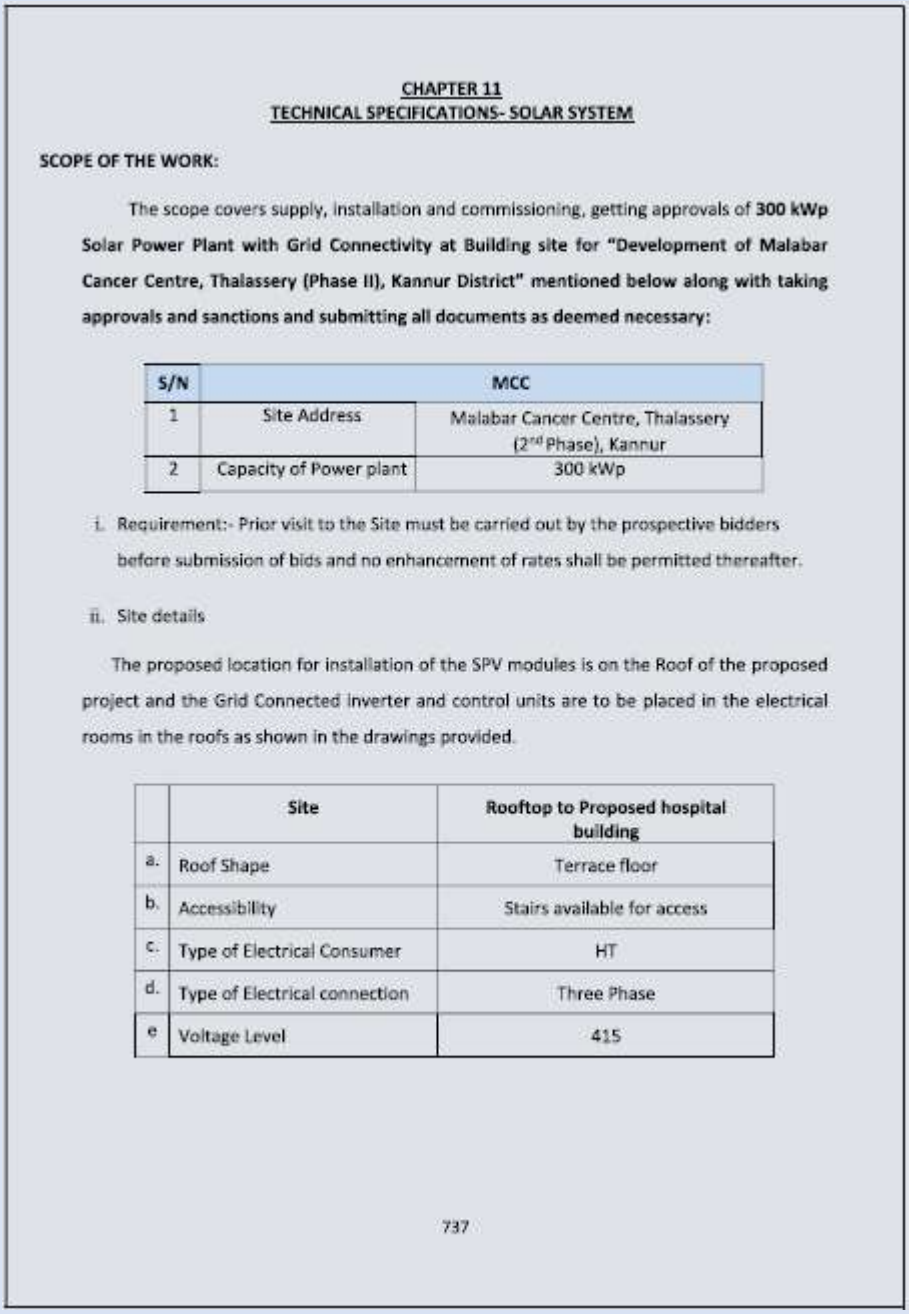
കണ്ണൂർ ജില്ലയിലെ തലശ്ശേരി താലൂക്കിൽ തലശ്ശേരി മുനിസിപ്പാലിറ്റി, കോടിയേരി വില്ലേജിൽ വരുന്ന റീ.സ.നമ്പർ: 34/3C2, 39/8, 1/132, 37/3, 36/8, 44/188, 45/8, 41/12, 39/9, 39/10, 36/1, 42/10, 34/171, 46/7, 36/2, 39/11, 45/3, 44/12, 42/9, 42/8, 42/1, 41/13, 38/3, 38/4, 37/1- ൽ പെട്ട 99376.00 ചതു വിസ്തൃതിയുള്ള സ്ഥലത്ത് ഡയറക്ടർ, മലബാർ കാൻസർ സെന്റർ സൊസൈറ്റി, ഡോക്ടേർസ് കമ്മ്യൂണിറ്റീസ് MCC,മുഴിക്കര കണ്ണൂർ-670103 എന്നവർ അനുമതി നൽകിയിട്ടുള്ള 57696.86 ചതു വിസ്തൃതിയുള്ള 18 കെട്ടിടങ്ങളോടൊപ്പം (Group C-medical/Hospital building cum Group B-Educational building) നിർ ർമിക്കുന്ന 54,421.38 ചതു [NEW HOSPITAL BLOCK-6 :- 51404.42 ചതു (GROUP C-MEDICAL) + GUEST HOUSE :- 3016.96 ചതു (GROUP A2-SPECIAL RESIDENTIAL)] ബിൽട്ടപ്പ് വിസ്തീർണ്ണമുള്ള നിർമ്മാണത്തിന് സമർപ്പിച്ചിരിക്കുന്ന പ്ലാൻ പ്രകാരവും , KMBR 2019 ചട്ട പ്രകാരം ലംഘനങ്ങൾ ഇല്ലാത്തതിനാലും, KMBR 2019 ചട്ടം 30 പ്രകാരം ആവശ്യമായ Scrutiny Fee ഈടാക്കികൊണ്ട് താഴെ പറയുന്ന നിബന്ധനകൾക്ക് വിധേയമായി ഉപയോഗത്തിനും

Town Planning Layout Approval

S. No	Photos
33	

Water drainage system

S. No	Photos
34	 **This soil is being utilized for backfilling purposes**

S. No	Photos
35	

CHAPTER 11
TECHNICAL SPECIFICATIONS- SOLAR SYSTEM

SCOPE OF THE WORK:

The scope covers supply, installation and commissioning, getting approvals of **300 kWp Solar Power Plant with Grid Connectivity at Building site for "Development of Malabar Cancer Centre, Thalassery (Phase II), Kannur District" mentioned below along with taking approvals and sanctions and submitting all documents as deemed necessary:**

S/N		MCC
1	Site Address	Malabar Cancer Centre, Thalassery (2nd Phase), Kannur
2	Capacity of Power plant	300 kWp

i. Requirement:- Prior visit to the Site must be carried out by the prospective bidders before submission of bids and no enhancement of rates shall be permitted thereafter.

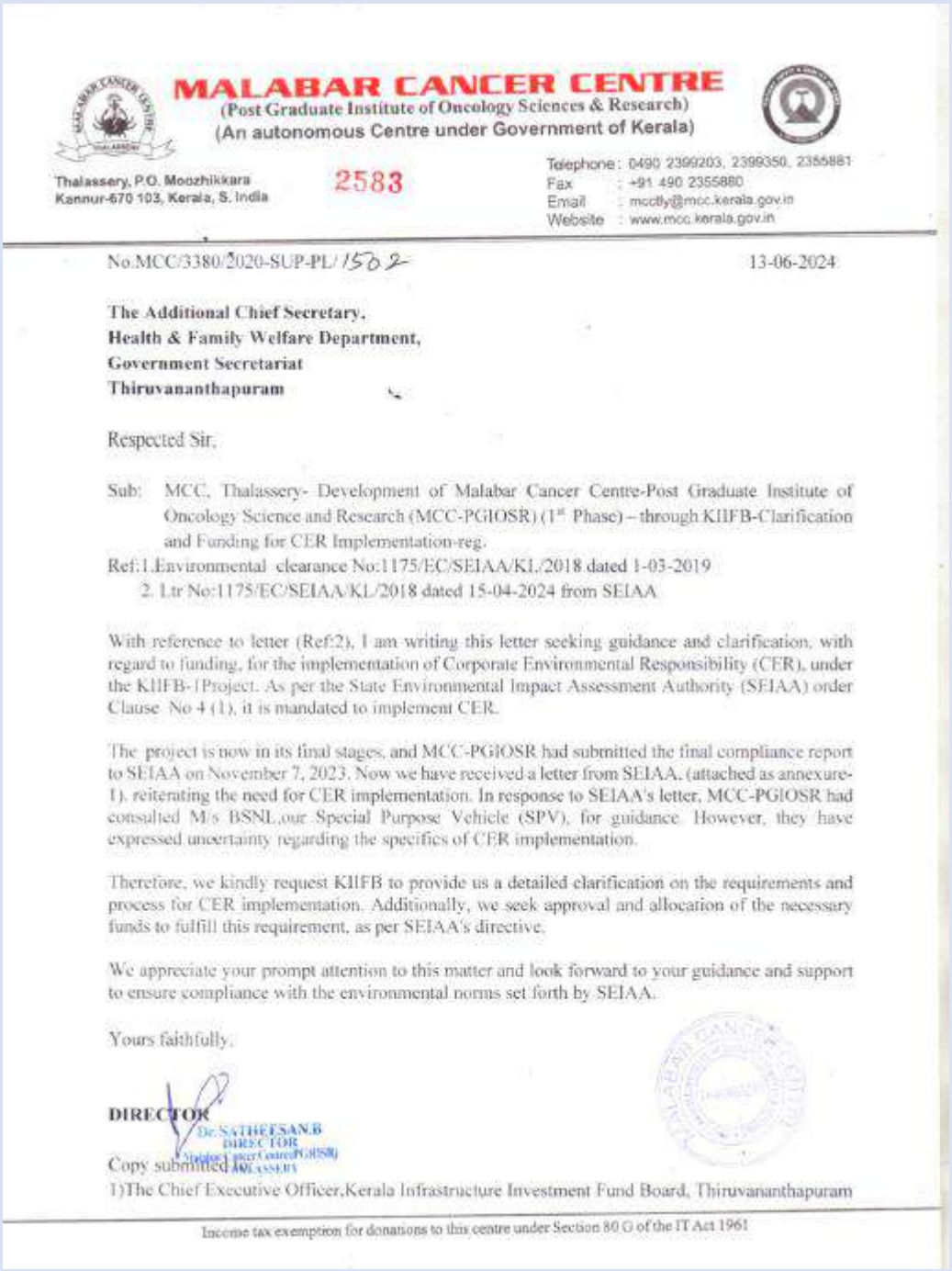
ii. Site details

The proposed location for installation of the SPV modules is on the Roof of the proposed project and the Grid Connected inverter and control units are to be placed in the electrical rooms in the roofs as shown in the drawings provided.

	Site	Rooftop to Proposed hospital building
a.	Roof Shape	Terrace floor
b.	Accessibility	Stairs available for access
c.	Type of Electrical Consumer	HT
d.	Type of Electrical connection	Three Phase
e	Voltage Level	415

737

Technical Specifications of Energy Conservation Measures in This Project

S. No	Photos
36	

Copy of the Letter to KIIFB Regarding CER Implementation

MALABAR CANCER CENTRE
(Post Graduate Institute of Oncology Sciences & Research)
(An autonomous Centre under Government of Kerala)

Thalassery, P.O. Moozhikkara
Kannur-670 103, Kerala, S. India

2583

Telephone : 0490 2399203, 2399350, 2355881
Fax : +91 490 2355880
Email : mcctly@mcc.kerala.gov.in
Website : www.mcc.kerala.gov.in

No.MCC/3380/2020-SUP-PL/1502

13-06-2024

The Additional Chief Secretary,
Health & Family Welfare Department,
Government Secretariat
Thiruvananthapuram

Respected Sir,

Sub: MCC, Thalassery- Development of Malabar Cancer Centre-Post Graduate Institute of Oncology Science and Research (MCC-PGIOSR) (1st Phase) – through KIIFB-Clarification and Funding for CER Implementation-reg.

Ref:1.Environmental clearance No:1175/EC/SEIAA/KL/2018 dated 1-03-2019
2. Ltr No:1175/EC/SEIAA/KL/2018 dated 15-04-2024 from SEIAA

With reference to letter (Ref:2), I am writing this letter seeking guidance and clarification, with regard to funding, for the implementation of Corporate Environmental Responsibility (CER), under the KIIFB-I Project. As per the State Environmental Impact Assessment Authority (SEIAA) order Clause No 4 (1), it is mandated to implement CER.

The project is now in its final stages, and MCC-PGIOSR had submitted the final compliance report to SEIAA on November 7, 2023. Now we have received a letter from SEIAA, (attached as annexure-1), reiterating the need for CER implementation. In response to SEIAA's letter, MCC-PGIOSR had consulted M/s BSNL,our Special Purpose Vehicle (SPV), for guidance. However, they have expressed uncertainty regarding the specifics of CER implementation.

Therefore, we kindly request KIIFB to provide us a detailed clarification on the requirements and process for CER implementation. Additionally, we seek approval and allocation of the necessary funds to fulfill this requirement, as per SEIAA's directive.

We appreciate your prompt attention to this matter and look forward to your guidance and support to ensure compliance with the environmental norms set forth by SEIAA.

Yours faithfully,

DIRECTOR

Dr.S.SATHEESAN.B
DIRECTOR
Malabar Cancer Centre(PGIOSR)
THALASSERY

Copy submitted to
1)The Chief Executive Officer,Kerala Infrastructure Investment Fund Board, Thiruvananthapuram

Income tax exemption for donations to this centre under Section 80 G of the IT Act 1961

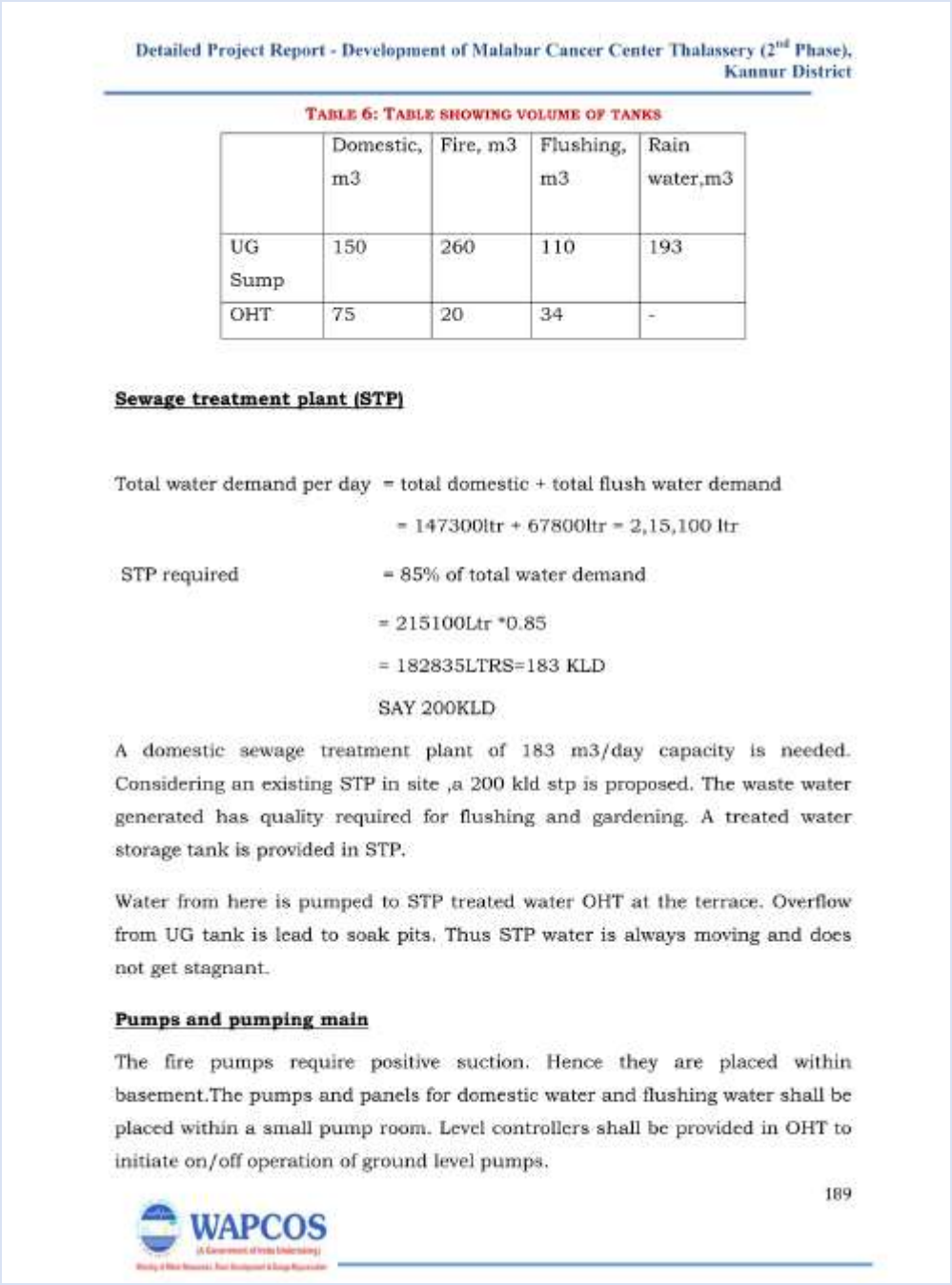
S. No	Photos
37	

TABLE 6: TABLE SHOWING VOLUME OF TANKS

	Domestic, m3	Fire, m3	Flushing, m3	Rain water,m3
UG Sump	150	260	110	193
OHT	75	20	34	-

Sewage treatment plant (STP)

Total water demand per day = total domestic + total flush water demand

= 147300ltr + 67800ltr = 2,15,100 ltr

STP required = 85% of total water demand

= 215100Ltr *0.85

= 182835LTRS=183 KLD

SAY 200KLD

A domestic sewage treatment plant of 183 m3/day capacity is needed. Considering an existing STP in site ,a 200 kld stp is proposed. The waste water generated has quality required for flushing and gardening. A treated water storage tank is provided in STP.

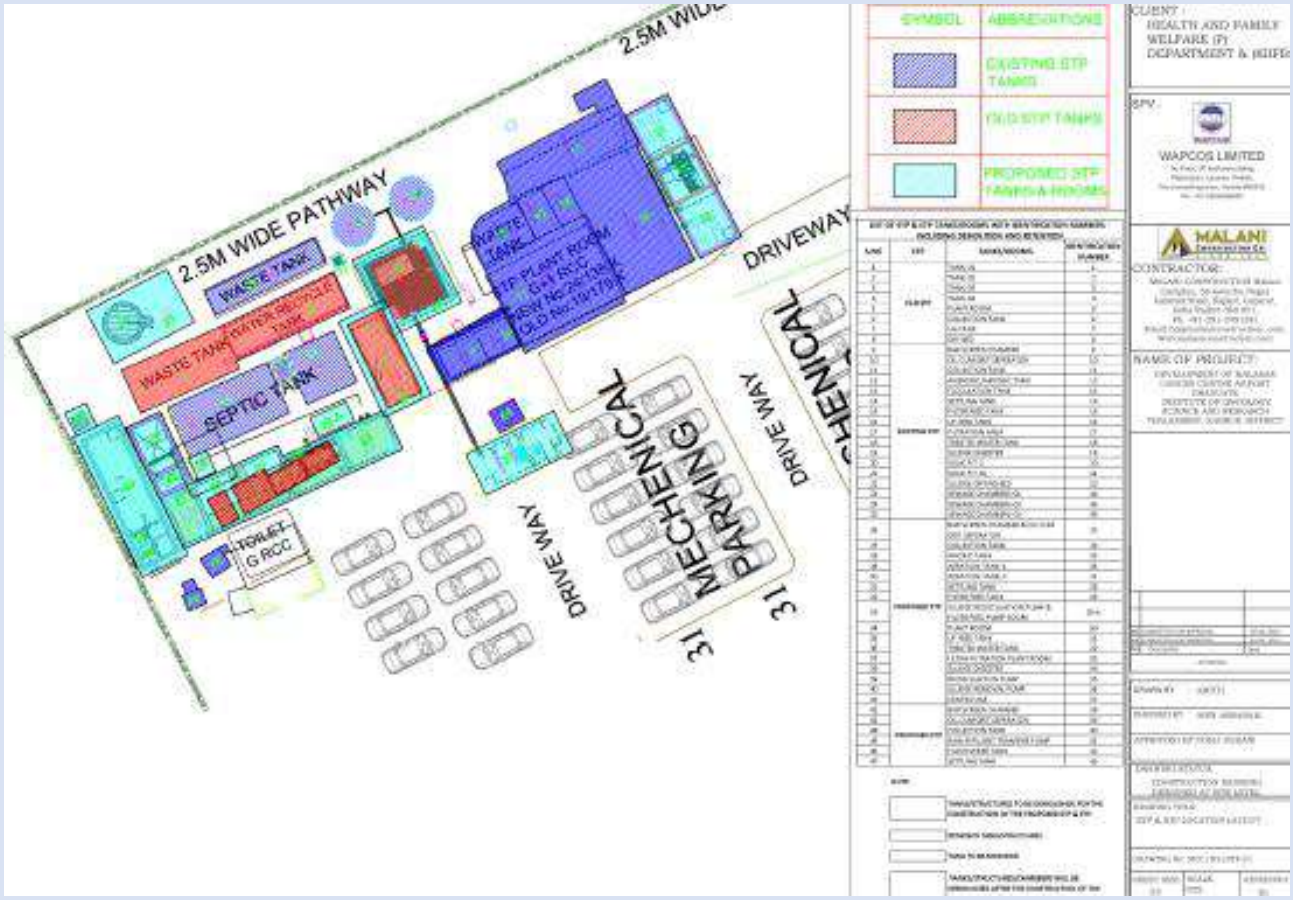
Water from here is pumped to STP treated water OHT at the terrace. Overflow from UG tank is lead to soak pits. Thus STP water is always moving and does not get stagnant.

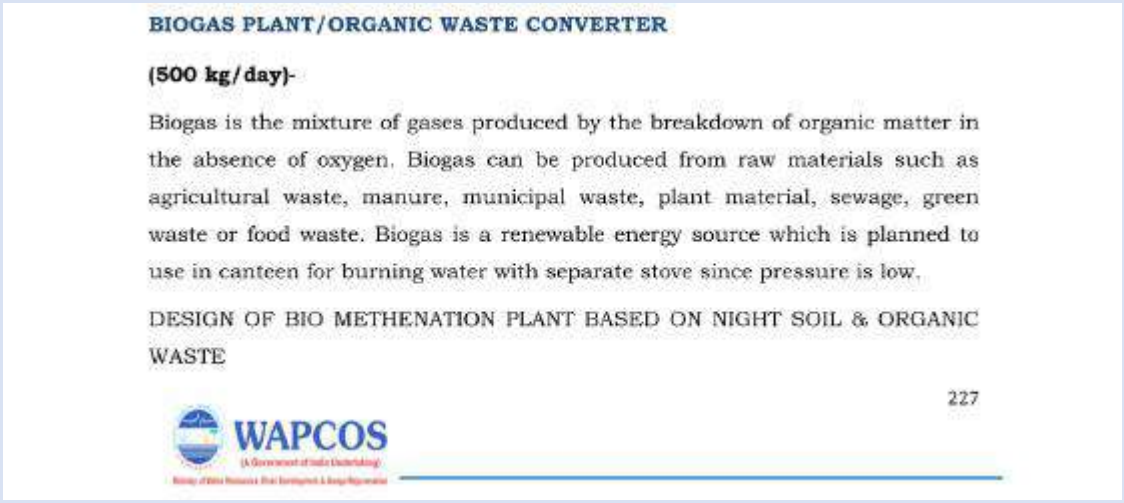
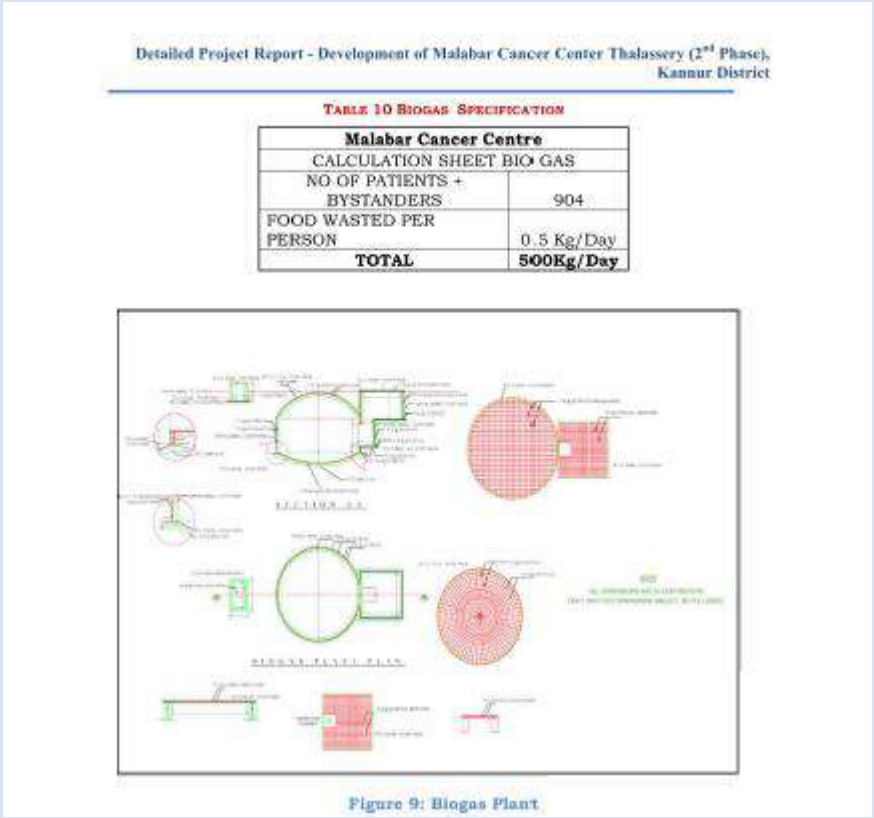
Pumps and pumping main

The fire pumps require positive suction. Hence they are placed within basement.The pumps and panels for domestic water and flushing water shall be placed within a small pump room. Level controllers shall be provided in OHT to initiate on/off operation of ground level pumps.

WAPCOS

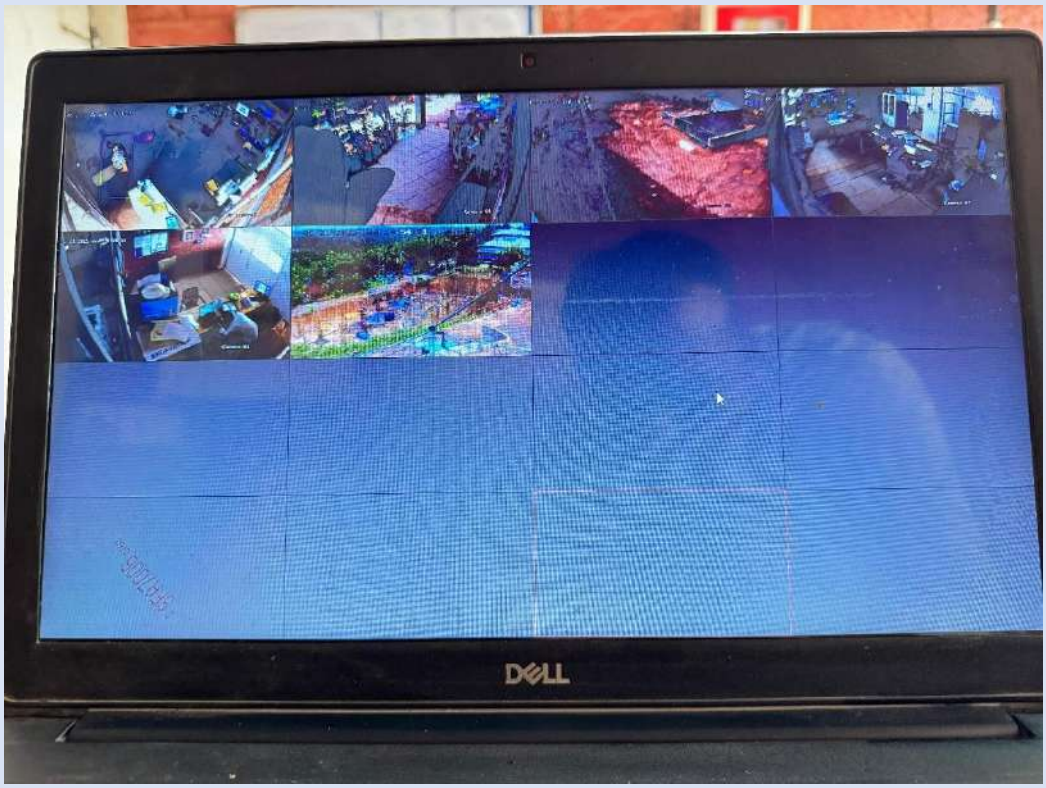
Proposed sewage treatment plant

S. No	Photos
38	 **Proposed sewage treatment and effluent treatment plant**

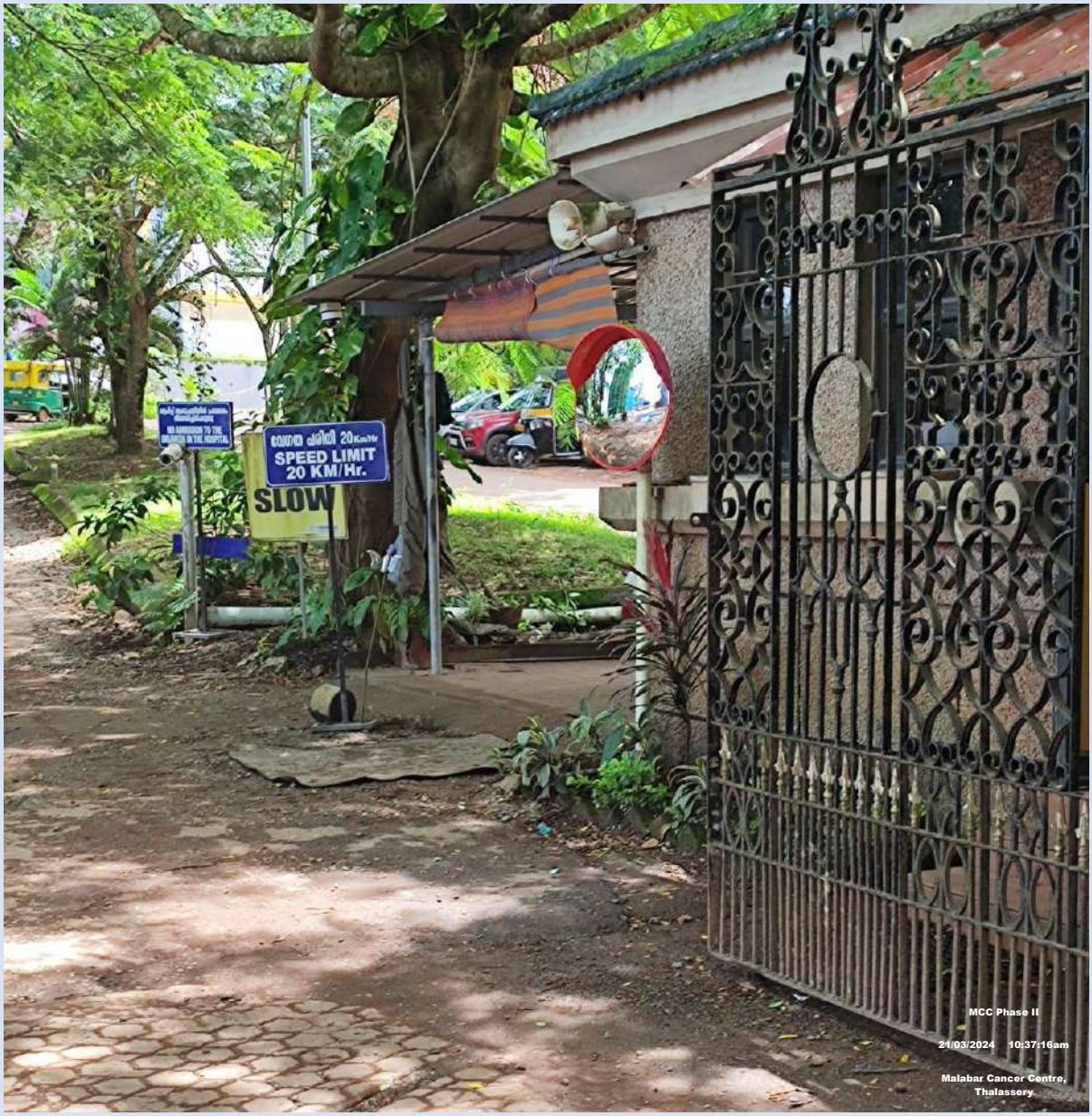
S. No	Photos
39	 **BIOGAS PLANT/ORGANIC WASTE CONVERTER** **(500 kg/day)-** Biogas is the mixture of gases produced by the breakdown of organic matter in the absence of oxygen. Biogas can be produced from raw materials such as agricultural waste, manure, municipal waste, plant material, sewage, green waste or food waste. Biogas is a renewable energy source which is planned to use in canteen for burning water with separate stove since pressure is low. DESIGN OF BIO METHENATION PLANT BASED ON NIGHT SOIL & ORGANIC WASTE 227 WAPCOS  Detailed Project Report - Development of Malabar Cancer Center Thalassery (2nd Phase), Kannur District TABLE 10 BIOGAS SPECIFICATION **Malabar Cancer Centre** CALCULATION SHEET BIO GAS NO OF PATIENTS + BYSTANDERS: 904 FOOD WASTED PER PERSON: 0.5 Kg/Day **TOTAL: 500Kg/Day** Figure 9: Biogas Plant **Biogas plant with a capacity of 600 kg/day**

S. No	Photos
40	 **Proposed sewage treatment and effluent treatment plant**

S. No	Photos
41	 **Special attention is given to dust control in the residential areas**

S. No	Photos
41	  

S. No	Photos

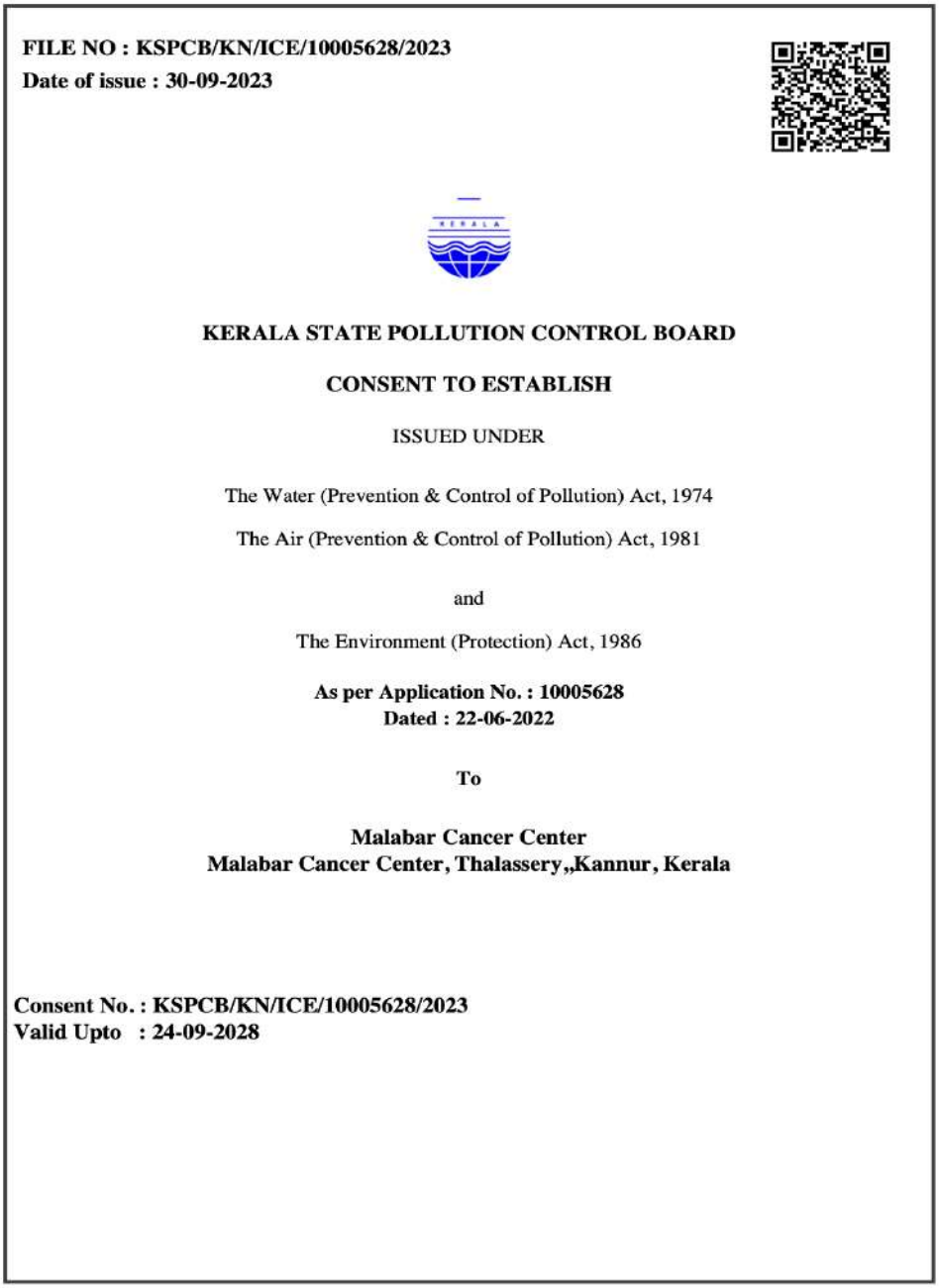


We strictly monitor the speed of our vehicles and have installed a traffic mirror to enhance road safety

S. No	Photos
43	 **We have removed the accumulated soil from the culvert area**

S. No	Photos
44	   **We arrange regular training sessions on-site and conduct pre-monsoon cleaning and awareness campaigns. Additionally, we implement monitoring and prevention methods to control mosquito breeding**

S. No	Photos
45	 **We have installed a green net to prevent dust from entering**

S. No	Photos
46	

FILE NO : KSPCB/KN/ICE/10005628/2023
Date of issue : 30-09-2023

KERALA STATE POLLUTION CONTROL BOARD

CONSENT TO ESTABLISH

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. : 10005628
Dated : 22-06-2022

To

Malabar Cancer Center
Malabar Cancer Center, Thalassery,,Kannur, Kerala

Consent No. : KSPCB/KN/ICE/10005628/2023
Valid Upto : 24-09-2028

Kerala State Pollution Control Board Consent to Establish

S. No	Photos
47	

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	**VALIDITY**	24-09-2028
2	Name and Address of the establishment	Malabar Cancer Center Malabar Cancer Center, Thalassery,,Kannur, Kerala E-Mail : sreenath@sumanam.co.in Contact Number : 8592859317
3	Occupier Details	SATHEESAN BALASUBRAMANIAN DOCTORS QUARTERS M C C, KODIYERI , MOOZHIKKARA P O, THIRUVANGAD S O KANNUR, KERALA 670103 E-Mail : sreenath@sumanam.co.in Contact Number :
4	Local Body	Thalassery Municipality
5	Survey Number	34/3C2, 39/8, 1/132, 37/3, 36/8, 44/188, 45/8, 41/12, 39/9, 39/10, 36/1, 42/10, 46/7, 36/2, 34/171, 39/11, 45/3, 44/12, 42/9, 42/8, 42/1, 41/13, 38/3, 38/4, 37/1
6	Village	Kodiyeri - CT
7	Taluk	Thalassery
8	District	KANNUR
9	Capital Investment(Rs in Lakhs)	19995.43001
10	Scale	Large
11	Category	RED
12	Annual fee(Rs) Total Fee remitted(Rs)	423500.0 111750.0
13	Activity	Expansion of existing hospital with 199 beds to 651 beds. Establishment of new 200 kLD STP, 3 nos of 600 kVA DG sets.
14	Machinery details	DG set of 600 KVA - 3 nos.

Kerala State Pollution Control Board Consent to Establish (Page 1)

S. No	Photos
48	

2. CONDITIONS AS PER
The Water(Prevention and Control of Pollution)Act, 1974

2.1 Sewage Treatment Plant (STP) consisting of following treatment units having adequate capacity shall be made functional/ arrangement for sewage treatment shall be provided, as per the proposal submitted along with the application, before commissioning of the establishment. Additional facilities required, if any, to achieve the standards laid down by the Board u/s 17(1)(g) of the Water Act shall also be made along with.

Sewage Treatment Plant treatment units: Coarse bar screen, Equalization cum aeration tank, Moving Bed Bio Reactor, Settling tank with scrapper , Chlorination , Filter , Sterilization, Ultra-Filtration

2.2 Water Consumption : 220 kLD
2.3 Effluent Generation : 176 kLD

2.4 The characteristics of effluent after treatment shall confirm to the following tolerance limits:

Sl.No	Characteristics	Unit	Tolerence limit for Irrigation/Soak pit	Tolerence limit for flushing/gardening	Into public drain
1	pH	-	6.5-9.0	6.5-8.5	6.5-8.5
2	BOD (5 day)	mg/l	<10	<3	<3
3	TSS	mg/l	<10	<10	<10
4	Oil & Grease	mg/l	<10	<1	<1
5.	COD	mg/l	<50	<25	<25
6	Total Nitrogen	mg/l	<10	<10	<10
7.	Ammoniacal Nitrogen	mg/l	<5	<5	<5
8.	Fecal Coliform	MPN/100ml	<230	<230	<100
9	Total phosphorous	mg/l	<2	<2	<2

2.5.Mode of disposal of treated effluent : Reuse for irrigation and cooling tower make-up.
2.6 There shall be easy access to each and every treatment unit for inspection. Sufficient sampling points shall be provided to facilitate collection of samples. Lighting arrangements shall be provided in the sewage treatment plant area. Each and every sewage treatment unit shall be labeled.
2.7 The effluent treatment plant consisting of treatment units as per the proposal submitted along with the application shall be constructed above ground level/cellar room and having adequate space for inspection so as to achieve the specified standards before commissioning the project.

3. CONDITIONS AS PER
The Air(Prevention and Control of Pollution)Act, 1981

3.1 Adequate air pollution control measures shall be provided before commissioning of the hospital. Additional facilities required, if any, to achieve the standards laid down by the Board shall also be made along with.

Stack	Source of	Emission Rate (Nm	Stack height above	Stack height above	Control

Kerala State Pollution Control Board Consent to Establish (Page 2)

S. No	Photos

49

No	emission	^{3}/Hr)	ground level	roof level	equipment
1	600 kVA D.G.set	-		5 m	Acoustic enclosure
2	600 kVA DG set			5 m	Acoustic enclosure
3	600 kVA DG set			5 m	Acoustic enclosure

4. CONDITIONS AS PER
The Environment (Protection) Act, 1986.

4.1 The construction activities shall be carried out strictly in compliance with the provisions of the Noise Pollution (Regulation and Control) Rules 2000.
4.2. Necessary arrangement for collection, segregation, storage, handling and disposal of bio-medical waste shall be provided, as per the Bio-medical Waste Management Rules, 2016, before commissioning.
4.3. Necessary arrangement for collection, segregation, storage, handling and disposal of solid waste shall be provided, as per the Solid Waste Management Rules, 2016.
4.4 Biodegradable waste shall be seggregated from non biodegradable waste at source
4.5 Biodegradable shall be treated in biobins/aerobins/biogas plants.
4.6 Non biodegradable wastes shall be disposed to authorised collectors namely Haritha Karma Sena for the disposal of wastes for authroised treatment.
4.7 Plastic Waste Management Rules, 2016 and amendments shall be followed for the management of plastic waste. Single use plastic ban as per notifications and orders for Kerala shall be strictly be followed.
4.8. Hazardous waste generated if any, shall be disposed of in compliance with the provisions of the Hazardous and other Wastes (Management and Trans boundary Movement) Rules, 2016.
4.9.Waste batteries shall be disposed of as per the Battery Waste Management Rules, 2022.
4.10 E-wastes shall be disposed of as per the provisions of E-waste management Rules, 2016 and amendments.
4.11 Conditions of Environmental Clearance shall be strictly followed.

5. GENERAL CONDITIONS

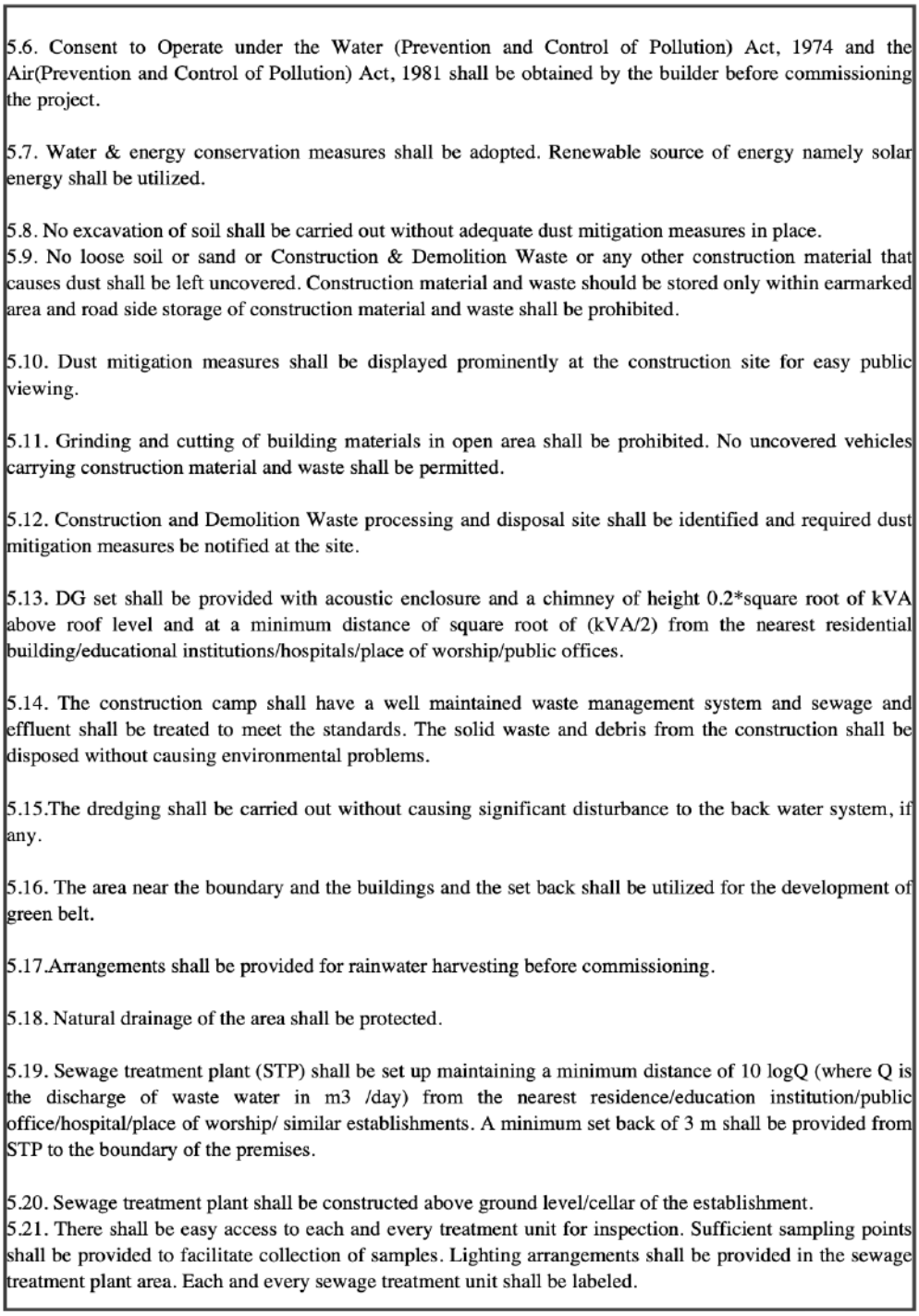
5.1. This consent is granted subject to the power of the Board to review and make variations in all or any of the conditions as per section 21 of the Air (Prevention and Control of Pollution) Act 1981 and section 25 of the Water (Prevention and Control of pollution) Act 1974.

5.2. At the end of the validity period if the construction is in progress, the same shall be got renewed.
5.3. This consent is granted based on the particulars and affidavit submitted by the Entrepreneur and any violation/non-compliance/submission of false information will lead to cancellation of consent and stringent action against the applicant and occupier.

5.4. The applicant shall comply with the instructions that the Board may issue from time to time regarding prevention and control of air, water, land and sound pollution.

5.5 The date of commissioning of the project shall be intimated at least one month in advance to the District Office of the Board.

Kerala State Pollution Control Board Consent to Establish (Page 3)

S. No	Photos
50	

5.6. Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and the Air(Prevention and Control of Pollution) Act, 1981 shall be obtained by the builder before commissioning the project.

5.7. Water & energy conservation measures shall be adopted. Renewable source of energy namely solar energy shall be utilized.

5.8. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
5.9. No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.

5.10. Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.

5.11. Grinding and cutting of building materials in open area shall be prohibited. No uncovered vehicles carrying construction material and waste shall be permitted.

5.12. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.

5.13. DG set shall be provided with acoustic enclosure and a chimney of height 0.2*square root of kVA above roof level and at a minimum distance of square root of (kVA/2) from the nearest residential building/educational institutions/hospitals/place of worship/public offices.

5.14. The construction camp shall have a well maintained waste management system and sewage and effluent shall be treated to meet the standards. The solid waste and debris from the construction shall be disposed without causing environmental problems.

5.15.The dredging shall be carried out without causing significant disturbance to the back water system, if any.

5.16. The area near the boundary and the buildings and the set back shall be utilized for the development of green belt.

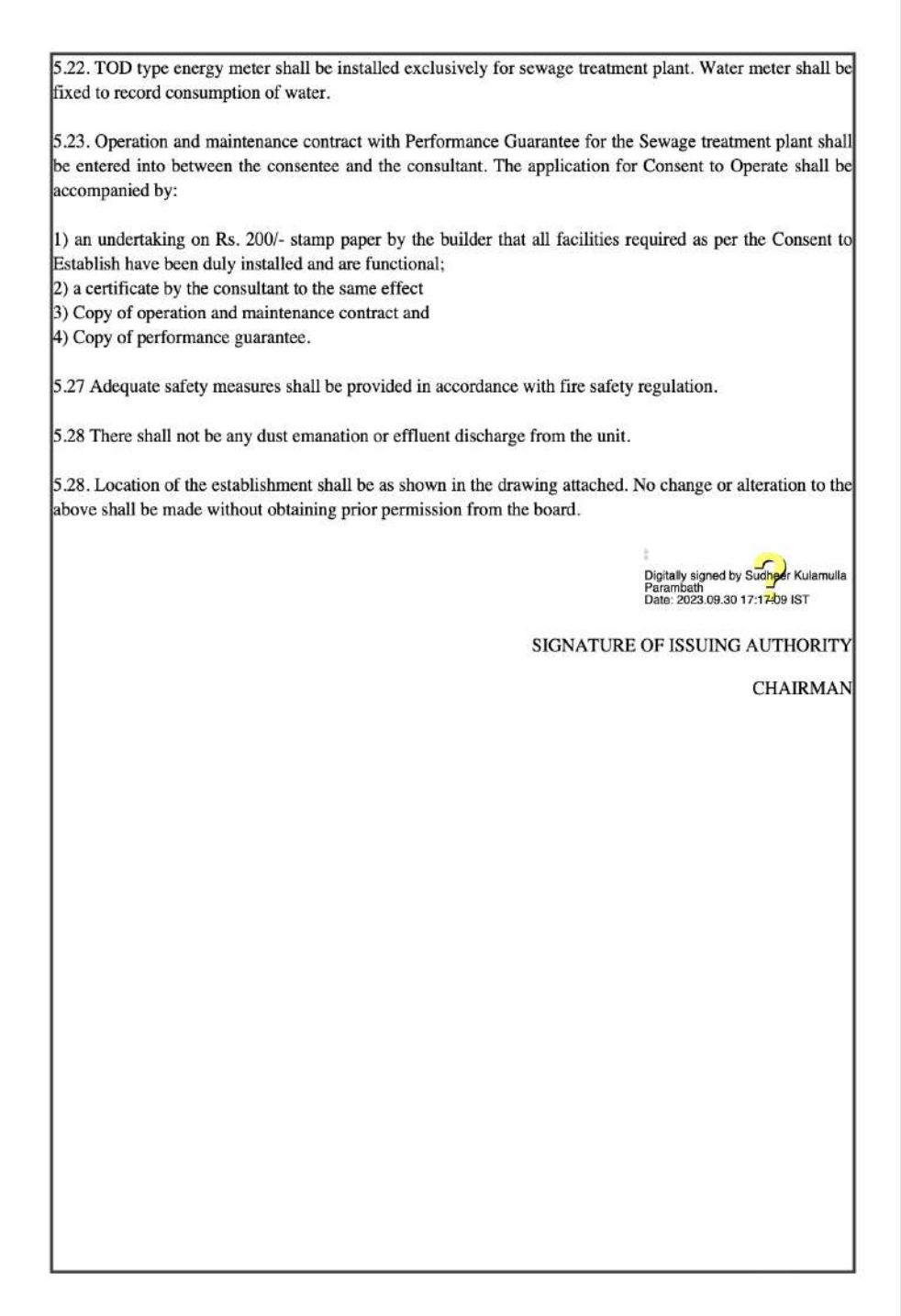
5.17.Arrangements shall be provided for rainwater harvesting before commissioning.

5.18. Natural drainage of the area shall be protected.

5.19. Sewage treatment plant (STP) shall be set up maintaining a minimum distance of 10 logQ (where Q is the discharge of waste water in m3 /day) from the nearest residence/education institution/public office/hospital/place of worship/ similar establishments. A minimum set back of 3 m shall be provided from STP to the boundary of the premises.

5.20. Sewage treatment plant shall be constructed above ground level/cellar of the establishment.
5.21. There shall be easy access to each and every treatment unit for inspection. Sufficient sampling points shall be provided to facilitate collection of samples. Lighting arrangements shall be provided in the sewage treatment plant area. Each and every sewage treatment unit shall be labeled.

Kerala State Pollution Control Board Consent to Establish (Page 4)

S. No	Photos
51	

5.22. TOD type energy meter shall be installed exclusively for sewage treatment plant. Water meter shall be fixed to record consumption of water.

5.23. Operation and maintenance contract with Performance Guarantee for the Sewage treatment plant shall be entered into between the consentee and the consultant. The application for Consent to Operate shall be accompanied by:

1) an undertaking on Rs. 200/- stamp paper by the builder that all facilities required as per the Consent to Establish have been duly installed and are functional;
2) a certificate by the consultant to the same effect
3) Copy of operation and maintenance contract and
4) Copy of performance guarantee.

5.27 Adequate safety measures shall be provided in accordance with fire safety regulation.

5.28 There shall not be any dust emanation or effluent discharge from the unit.

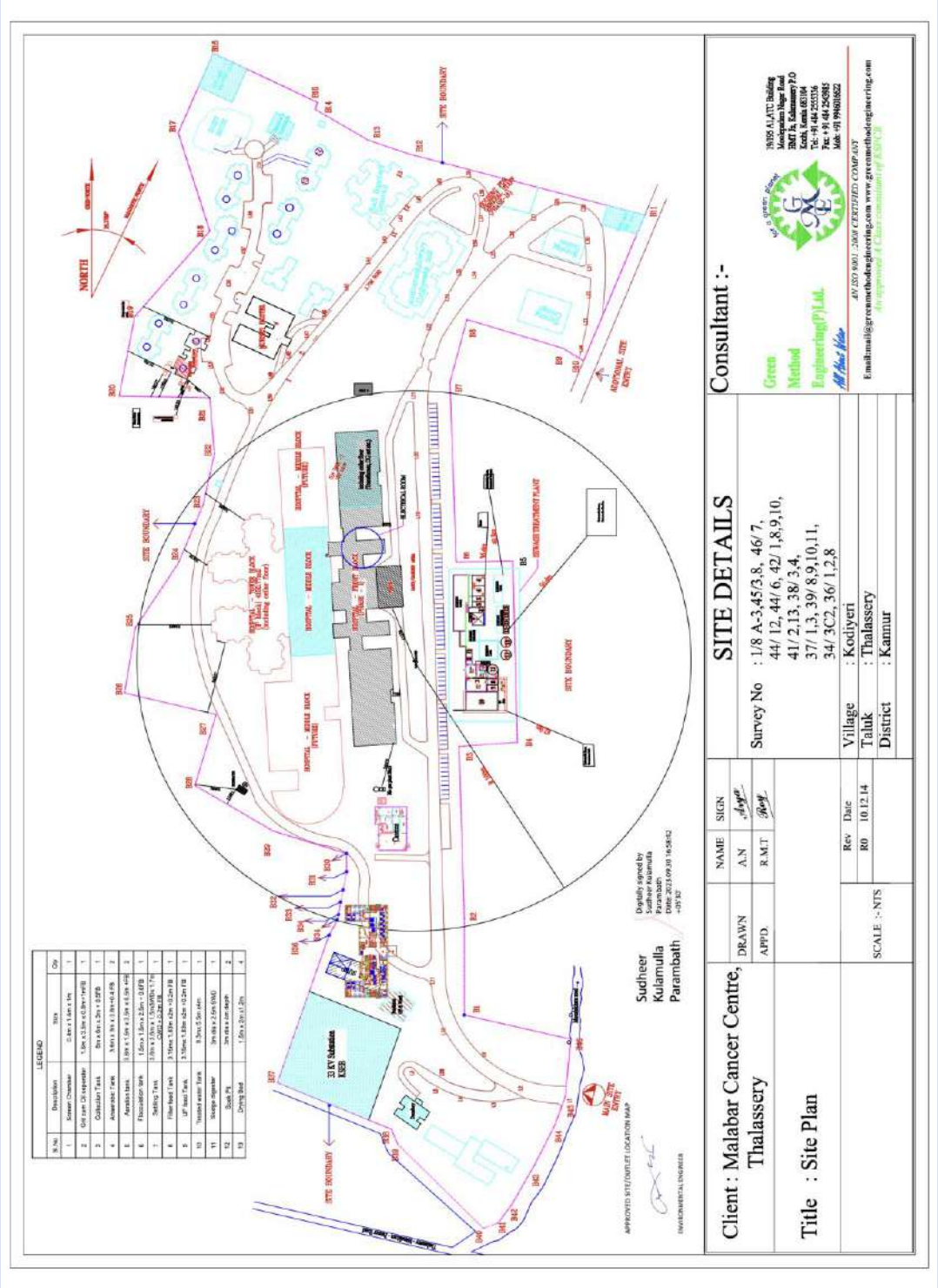
5.28. Location of the establishment shall be as shown in the drawing attached. No change or alteration to the above shall be made without obtaining prior permission from the board.

Digitally signed by Sudheer Kulamulla Parambeth
Date: 2023.09.30 17:17:09 IST

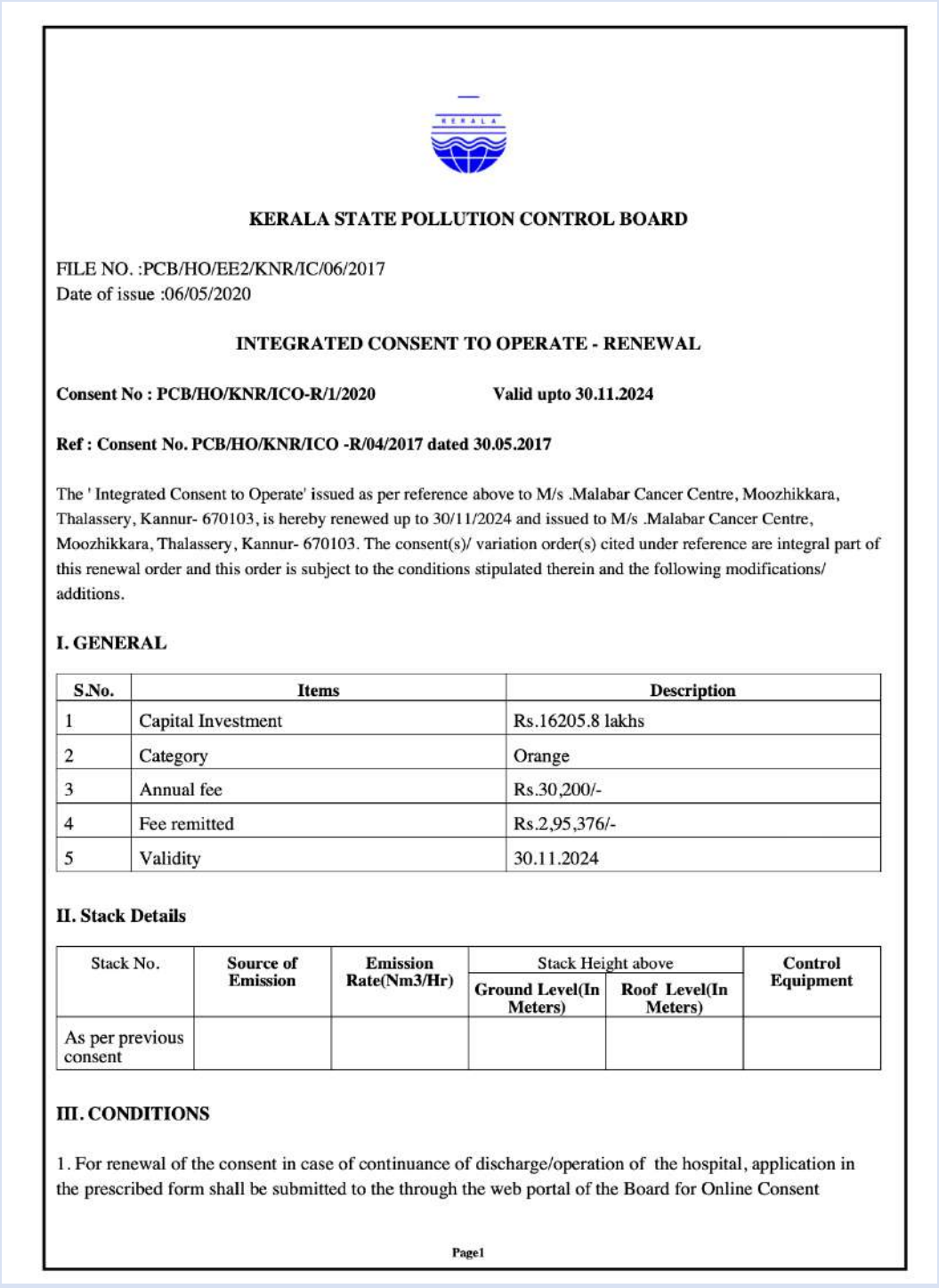
SIGNATURE OF ISSUING AUTHORITY

CHAIRMAN

Kerala State Pollution Control Board Consent to Establish (Page 5)

S. No	Photos
52	

Kerala State Pollution Control Board Consent to Establish (Page 6)

S. No	Photos
53	

KERALA STATE POLLUTION CONTROL BOARD

FILE NO. :PCB/HO/EE2/KNR/IC/06/2017
Date of issue :06/05/2020

INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No : PCB/HO/KNR/ICO-R/1/2020 **Valid upto 30.11.2024**

Ref : Consent No. PCB/HO/KNR/ICO -R/04/2017 dated 30.05.2017

The ' Integrated Consent to Operate' issued as per reference above to M/s .Malabar Cancer Centre, Moozhikkara, Thalassery, Kannur- 670103, is hereby renewed up to 30/11/2024 and issued to M/s .Malabar Cancer Centre, Moozhikkara, Thalassery, Kannur- 670103. The consent(s)/ variation order(s) cited under reference are integral part of this renewal order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

I. GENERAL

S.No.	Items	Description
1	Capital Investment	Rs.16205.8 lakhs
2	Category	Orange
3	Annual fee	Rs.30,200/-
4	Fee remitted	Rs.2,95,376/-
5	Validity	30.11.2024

II. Stack Details

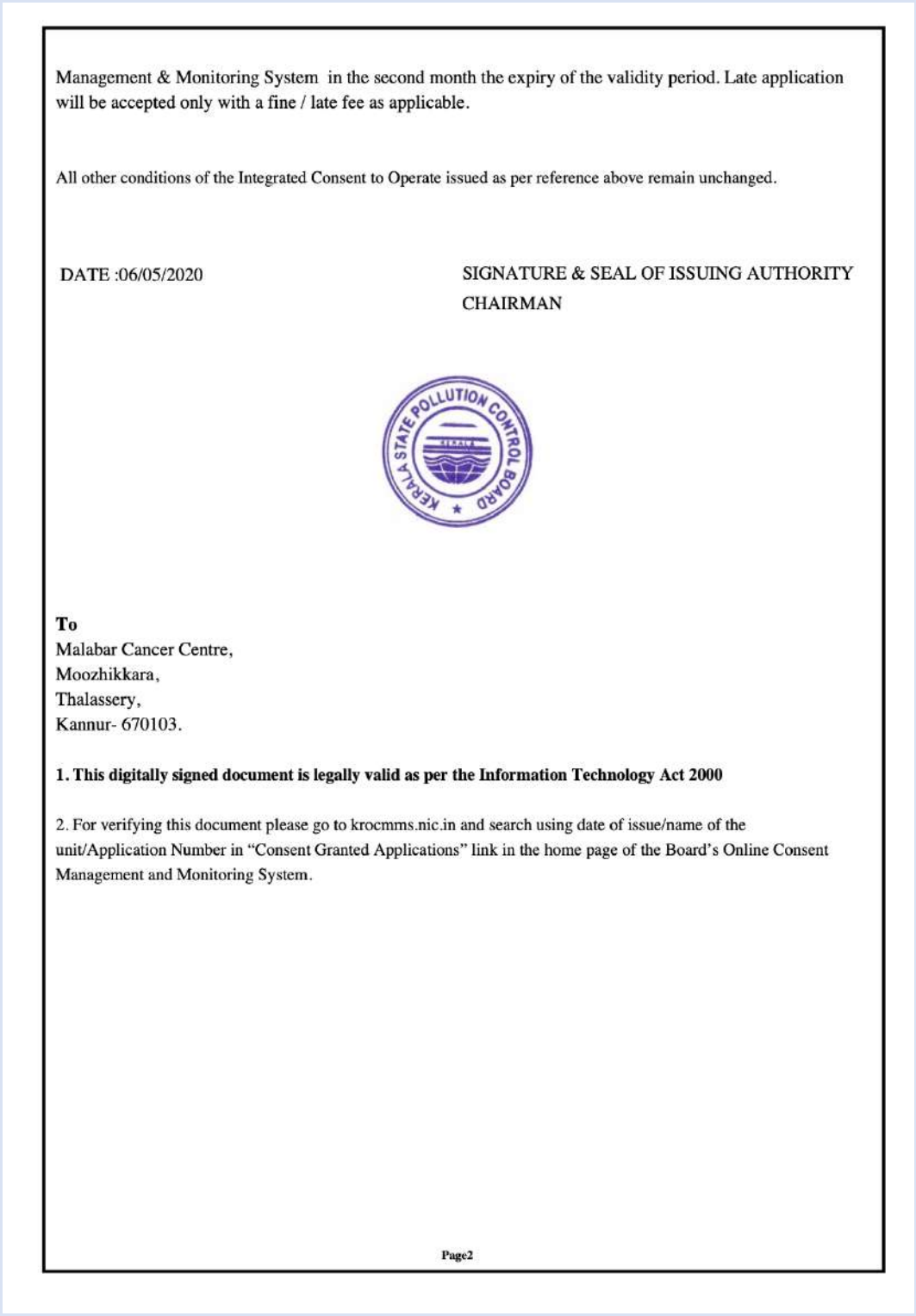
Stack No.	Source of Emission	Emission Rate(Nm3/Hr)	Stack Height above		Control Equipment
			Ground Level(In Meters)	Roof Level(In Meters)	
As per previous consent					

III. CONDITIONS

1. For renewal of the consent in case of continuance of discharge/operation of the hospital, application in the prescribed form shall be submitted to the through the web portal of the Board for Online Consent

Page1

Integrated consent to operate

S. No	Photos
54	

Management & Monitoring System in the second month the expiry of the validity period. Late application will be accepted only with a fine / late fee as applicable.

All other conditions of the Integrated Consent to Operate issued as per reference above remain unchanged.

DATE :06/05/2020

SIGNATURE & SEAL OF ISSUING AUTHORITY
CHAIRMAN

KERALA STATE POLLUTION CONTROL BOARD

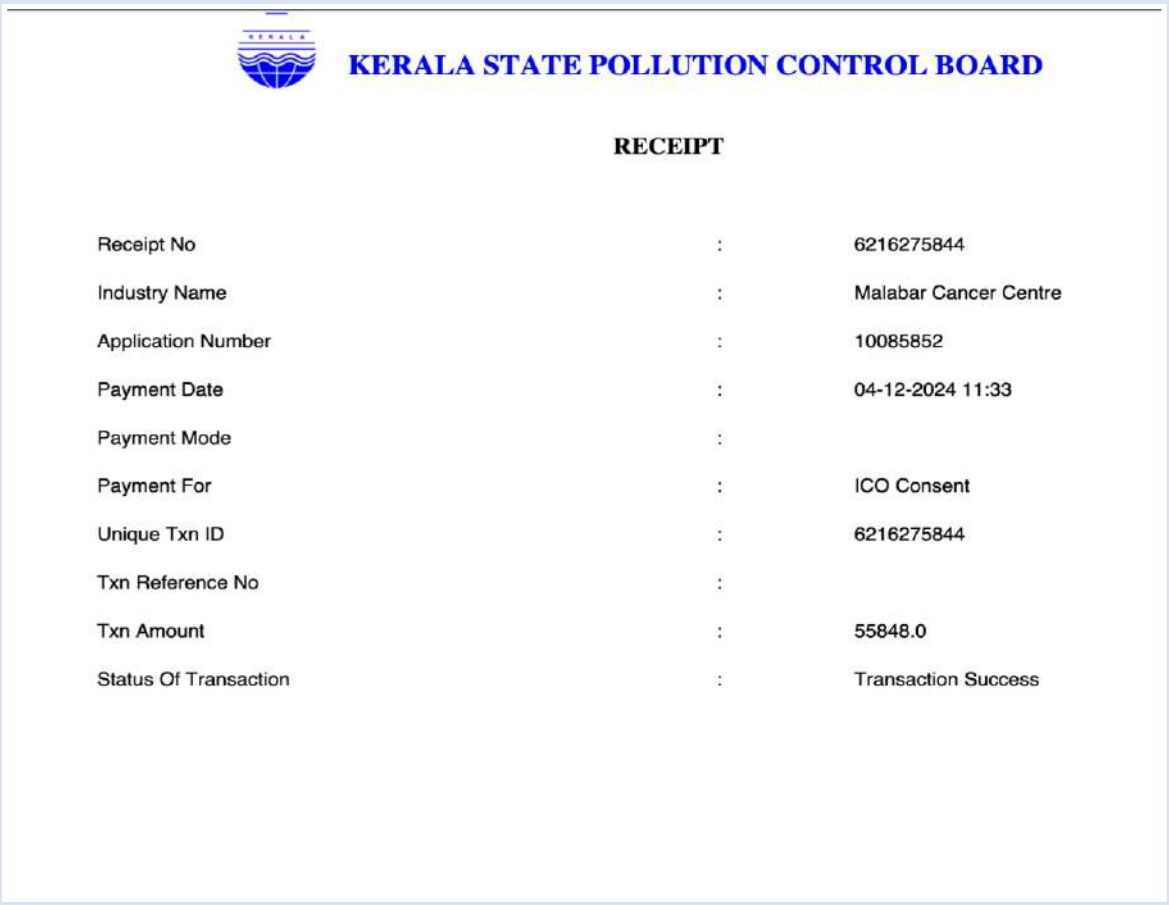
To
Malabar Cancer Centre,
Moozhikkara,
Thalassery,
Kannur- 670103.

1. This digitally signed document is legally valid as per the Information Technology Act 2000

2. For verifying this document please go to krocmms.nic.in and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Online Consent Management and Monitoring System.

Page2

Integrated consent to operate

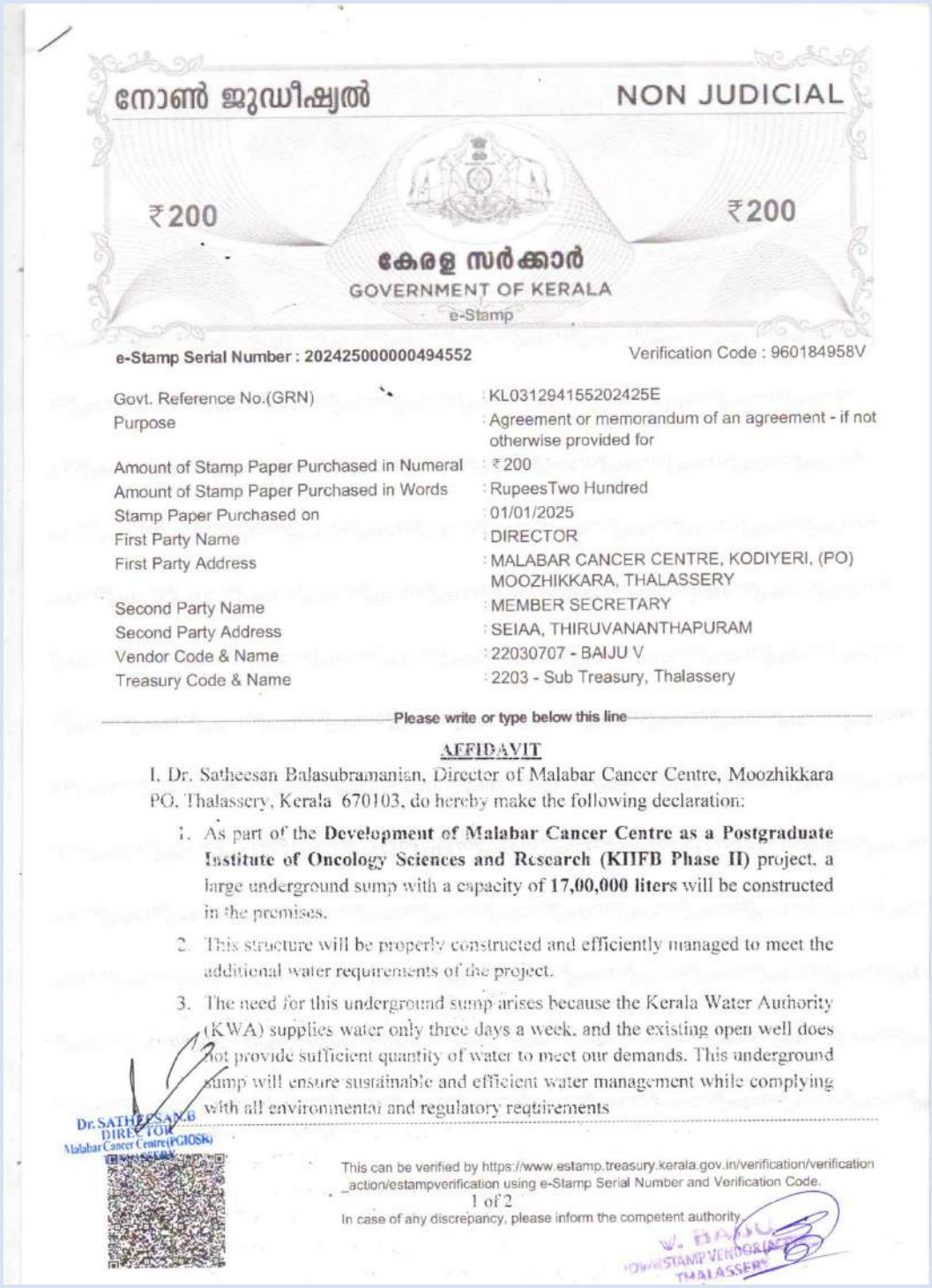
S. No	Photos
55	

KERALA STATE POLLUTION CONTROL BOARD

RECEIPT

Receipt No	:	6216275844
Industry Name	:	Malabar Cancer Centre
Application Number	:	10085852
Payment Date	:	04-12-2024 11:33
Payment Mode	:	
Payment For	:	ICO Consent
Unique Txn ID	:	6216275844
Txn Reference No	:	
Txn Amount	:	55848.0
Status Of Transaction	:	Transaction Success

Payment receipt

S. No	Photos
56	

നോൺ ജുഡീഷ്യൽ NON JUDICIAL

₹200 ₹200

കേരള സർക്കാർ
GOVERNMENT OF KERALA
e-Stamp

e-Stamp Serial Number : 202425000000494552 Verification Code : 960184958V

Govt. Reference No.(GRN)	: KL031294155202425E
Purpose	: Agreement or memorandum of an agreement - if not otherwise provided for
Amount of Stamp Paper Purchased in Numeral	: ₹ 200
Amount of Stamp Paper Purchased in Words	: RupeesTwo Hundred
Stamp Paper Purchased on	: 01/01/2025
First Party Name	: DIRECTOR
First Party Address	: MALABAR CANCER CENTRE, KODIYERI, (PO) MOOZHIKKARA, THALASSERY
Second Party Name	: MEMBER SECRETARY
Second Party Address	: SEIAA, THIRUVANANTHAPURAM
Vendor Code & Name	: 22030707 - BAIJU V
Treasury Code & Name	: 2203 - Sub Treasury, Thalassery

Please write or type below this line

AFFIDAVIT

I, Dr. Satheesan Balasubramanian, Director of Malabar Cancer Centre, Moozhikkara PO, Thalassery, Kerala 670103, do hereby make the following declaration:

1. As part of the **Development of Malabar Cancer Centre as a Postgraduate Institute of Oncology Sciences and Research (KIIFB Phase II)** project, a large underground sump with a capacity of **17,00,000 liters** will be constructed in the premises.
2. This structure will be properly constructed and efficiently managed to meet the additional water requirements of the project.
3. The need for this underground sump arises because the Kerala Water Authority (KWA) supplies water only three days a week, and the existing open well does not provide sufficient quantity of water to meet our demands. This underground sump will ensure sustainable and efficient water management while complying with all environmental and regulatory requirements

Dr. SATHEESAN.B
DIRECTOR
Malabar Cancer Centre(PGIOSR)

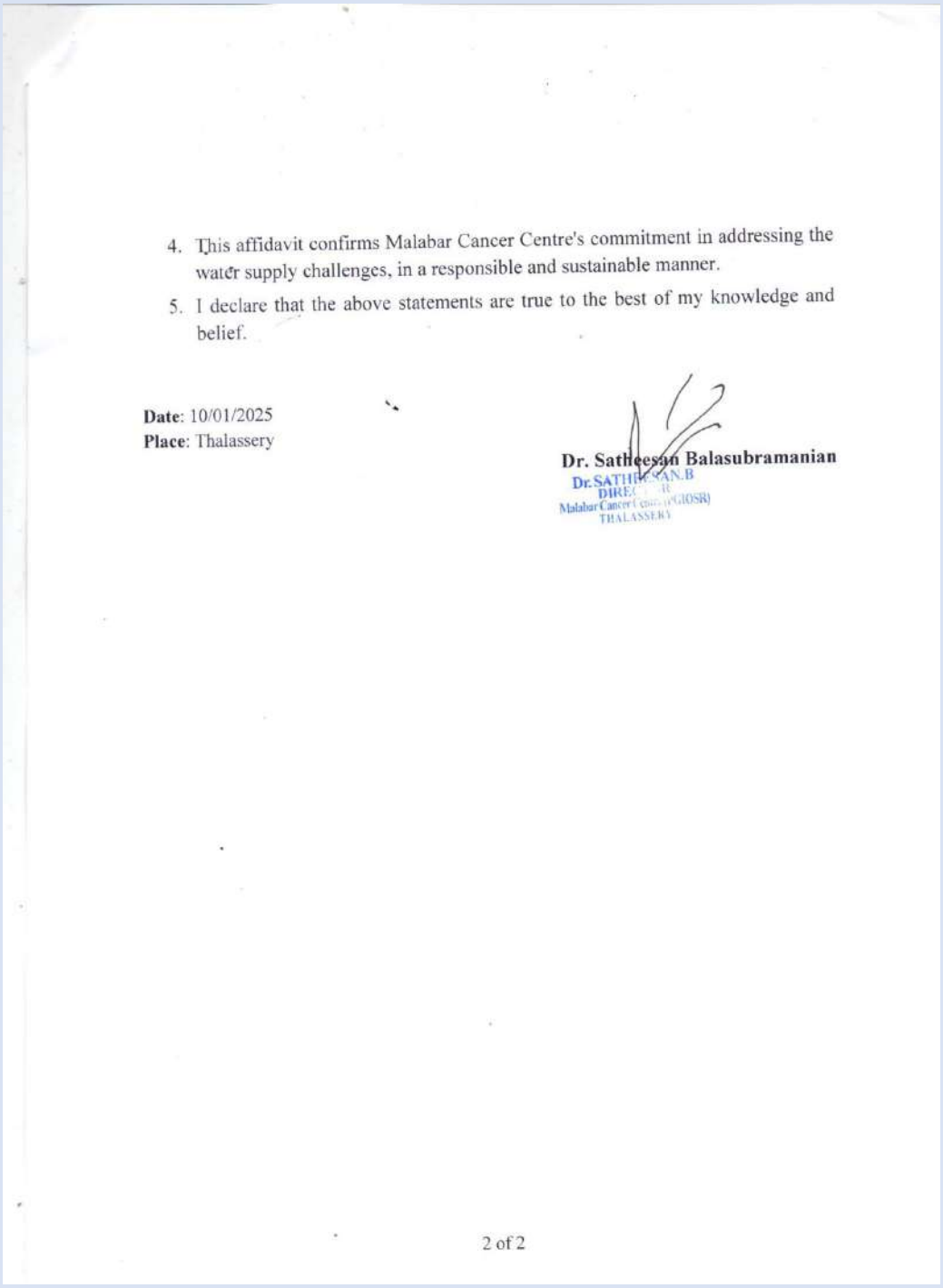
This can be verified by https://www.estamp.treasury.kerala.gov.in/verification/verification_action/estampverification using e-Stamp Serial Number and Verification Code.

1 of 2

In case of any discrepancy, please inform the competent authority.

STAMP VENDOR (LIC)
THALASSERY

Affidavit stating that a large water harvesting structure will be developed and managed to meet the additional water demand as the water supply from KWA

S. No	Photos
57	

4. This affidavit confirms Malabar Cancer Centre's commitment in addressing the water supply challenges, in a responsible and sustainable manner.
5. I declare that the above statements are true to the best of my knowledge and belief.

Date: 10/01/2025
Place: Thalassery

Dr. Satheesan Balasubramanian
Dr.SATHEESAN.B
DIRECTOR
Malabar Cancer Centre (MCC&RI)
THALASSERY

2 of 2

Affidavit stating that a large water harvesting structure will be developed and managed to meet the additional water demand as the water supply from KWA

THANK YOU