Ministry of Mining, Blue Economy and Maritime Affairs

REPUBLIC OF KENYA

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT SUMMARY REPORT

FOR

THE PROPOSED CONSTRUCTION OF LAMU FISHERIES HEADQUARTERS OFFICE AT MOKOWE, LAMU COUNTY.

Coordinate: Latitude 2°13'42.99"S and Longitude 40° 6'45.52"E.

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CERTIFICATION

This Environmental and Social Impact Assessment Summary Project Report has been prepared by a team of EIA experts lead by Mr. Godfrey Wabomba; NEMA registered EIA/EA Lead Expert No. 6127 and Mr. Antony P. Mbuthia; NEMA registered EIA/EA Lead Expert No. 7395. The Summary project report was prepared in accordance with the requirements of the Environmental (Impact Assessment and Audit) (amendment) Regulations, 2019, pursuant to *The Environmental Management and Coordination Act, (CAP 387).*

DISCLAIMER

This Environmental Impact Assessment Summary Project Report is strictly confidential to the proponent and any use of the materials thereof should strictly be in accordance with the agreement between the client/proponent, Mr. Godfrey Wabomba (a lead EIA Expert) and Mr. Antony P. Mbuthia (a lead EIA Expert). It is, however, subject to conditions in the Environmental (Impact Assessment and Audit) (amendment) Regulations, 2019.

We, the undersigned, certify that the particulars given in this report are correct to the best of our knowledge.

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Proponent

Kenya Marine Fisheries and Social Economic Development Project (KEMFSED) under the State Department for Blue Economy and Fisheries (SDBE&F)

Name: Mr Patrick Kiarah

National Project Coordinator (NPC)

Signature_____ Date……..

Stamp

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ABBREVIATIONS AND ACRONYMS

AOI	Area of Interest
CBO	Community Based Organization
CIDP	County Integrated Development Plan
CPIU	County Project Implementation Unit
DOSHS	Directorate of Occupational Health and Safety Services
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act
ESMoP	Environmental and Social Monitoring Plan
ESIA	Environmental Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FAO	Food and Agriculture Organization
GBV	Gender Based Violence
GO	Grievance Officer
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
JPSC	Joint Project Steering Committee
KeFS	Kenya Fisheries Service
KEMFSED	Kenya Marine Fisheries and Socio-Economic Development
KP&LC	Kenya Power and Lighting Company
KWS	Kenya Wildlife Service
NCA	National Construction Authority
NEMA	National Environmental Management Authority
NPCU	National Project Coordination Unit
OSHA	Occupational Safety and Health Act
PDP	Part Development Plan
PPE	Personal Protective Equipment
PvC	Polyvinyl Chloride
RH	Relative Humidity
SDBE&F	State Department for Blue Economy and Fisheries
SL-GRC	Site Level Grievance Redress Committee
SSS	Social Safeguards Specialist
STI	Sexual Transmitted Infection
LAWASCO	Lamu Water and Sewerage Company
VCT	Voluntary Counseling and Testing
VMGF	Vulnerable and Marginalized Group Framework
WIBA	Work Injury Benefit Act

EXECUTIVE SUMMARY

Marine fisheries are one of the key pillars in Kenya's Blue Economy development priorities and contribute to the economic pillar under the Kenya Vision 2030. Implementation of Fisheries functions under the Constitution fall under national, devolved government or concurrent levels of government. In the counties therefore, there will be personnel from the County government and national government namely Kenya Fisheries Service (KeFS) who have a critical role in service deliver to fishers at the coastal community level yet the fisheries infrastructure is very poor in most counties. Strengthening institutional capacity to better safeguard marine fisheries and improving fisheries management and governance is therefore critical. To exploit the potential and attain economic benefits from the coastal and marine resources, the Government of Kenya, through State Department for Blue Economy and Fisheries (SDBE&F), requested the World Bank to support the development of the sector through the Kenya Marine Fisheries and Socio-Economic Development (KEMFSED) project.

In spite of the Fisheries sector being critical in Lamu County, it remains underdeveloped with inadequate infrastructural development. The County Integrated Development Plan (CIDP) acknowledges the significance of the fisheries sub-sector to the county economic development. The fisheries sub-sector in Lamu County contributes to over 70% of households' income with an estimated annual turnover of about 1.5billion. Infrastructure development remains one of the key areas of focus if the fisheries sub-sector is to be transformed for socio-economic development in the County. The county is therefore committed to invest more resources in the fisheries infrastructural development among which construction and refurbishment of offices was proposed. The current proposed development under KEMFSED project is in line with the proposals to increase the number of offices by constructing the fisheries headquarter in the county.

The County Project Implementation Unit (CPIU) is currently hosted at the County Fisheries Office space which was previously used as a laboratory, sharing space with fisheries staff but it is inadequate. The office is highly congested and hence not conducive considering the current Covid 19 pandemic. However, through KEMFSED funding there is an opportunity to transform and strengthen sectors related to the blue economy, focusing on strengthening County infrastructure. The proposed construction works will improve fisheries management in the county in order to provide fisheries-related functions and services closer to the clients. The office is expected to host the CPIU and the fisheries departmental staff. The office block shall be three floors high with a height of 12m from the ground level. The area in space of Lamu CPIU office building is proposed to be 1,092m^2 with office space taking up (90%), of the total space area.

The proposed construction works can have social and environmental implications if not well anticipated and enhanced or mitigated. Therefore, it is essential to appreciate the environmental and social significance and site conditions likely to be influenced by the sub-project activities

through an assessment. This shall be in line with the World Bank OP/BP 4.01 and section 58 of the Environmental Management and Coordination Act CAP 387, which requires a project proponent to prepare Summary Project Report or an ESMP before being permitted to undertake any activities with potential harm to the environment or effect to social aspects. This includes observance of related national legislation guiding stakeholder consultation, work place safety, conservation, management and utilization of natural resources. In response to the requirements of the law, the NPCU and Lamu county safeguards team prepared the ESIA Summary Project Report for the proposed construction of Lamu County Fisheries Headquarter at Amu Island.

EIA regulation

In light of this and according to section 58 of the Environmental Management and Coordination Act CAP 387, it is a requirement under the national legal framework that a proponent carries out an ESIA study before being issued with an EIA license to undertake any project activities that may be considered harmful to the environment. This includes application of the "Environment Impact Assessment and Audit Regulations of 2003" and consideration of other national legislation as captured in Chapter 3 of this ESIA.. The proposed construction works also triggered the Bank's Safeguard Policies *(OP/BP 4.01 Environment Assessment)* which requires undertaking environmental and social due diligence for all sub project activities and preparing environmental and social impact assessment for sub-projects.

Proposed Project Objective

KEMFSED project development objective is to improve priority fisheries and mariculture management and increase access to complementary livelihood activities in coastal communities. The aim of the sub-project is to support County infrastructure development under KEMFSED through the construction of Lamu County Fisheries Headquarter at Amu Island. The proposed construction works will improve fisheries management in the county by providing fisheries-related functions and services closer to the clients.

Proposed Design

The proposed works under construction of Lamu fisheries headquarter office at Mokowe shall include; construction of One main office building of a two-storey building with a height of 9.9 meters from the ground level. The built-up space of the main office building is proposed to be 2153m^2 to host CPC, CPIU support staff, M&EO, Statistics Officer, Accountant, Internal auditor, Procurement Officer, Procurement Assistant, Technical Assistants, Safeguards Officers and MBU office. The fisheries officers to be hosted on the office shall include but not limited to Chief Officer Fisheries & BE, County Director of Fisheries, Assistant Director of Fisheries, County Department Accountant & Procurement and Kenya Fisheries Service Officer. The building shall have a ramp for accessibility for people with special needs, staircase for movement to upper floors, parking area, solar panels (80 No. 72- cell 575W Monocrystalline Solar Modules), rain water harvesting tank, bio-digestor and landscaped lawn with plants to play a role in

regulation of heat mostly during dry season. The description of the scope of works is as indicated in chapter 2 of this report and drawings as attached in annex I.

Project Location

The proposed project is located in Lamu County, Lamu West Sub- County, Hindi ward, Mokowe location and in Mokowe Sub-location. The office is located at Mokowe within the Lamu County headquarters compound as shown **Error! Reference source not found.**, from a Google image. The area has an elevation of 7m and about 9 m depending on which part of the compound (southern part seems to be lower than the office location site, with GPS coordinate of the project site being Latitude 2°13'42.99"S and Longitude 40°50'53.87"E.

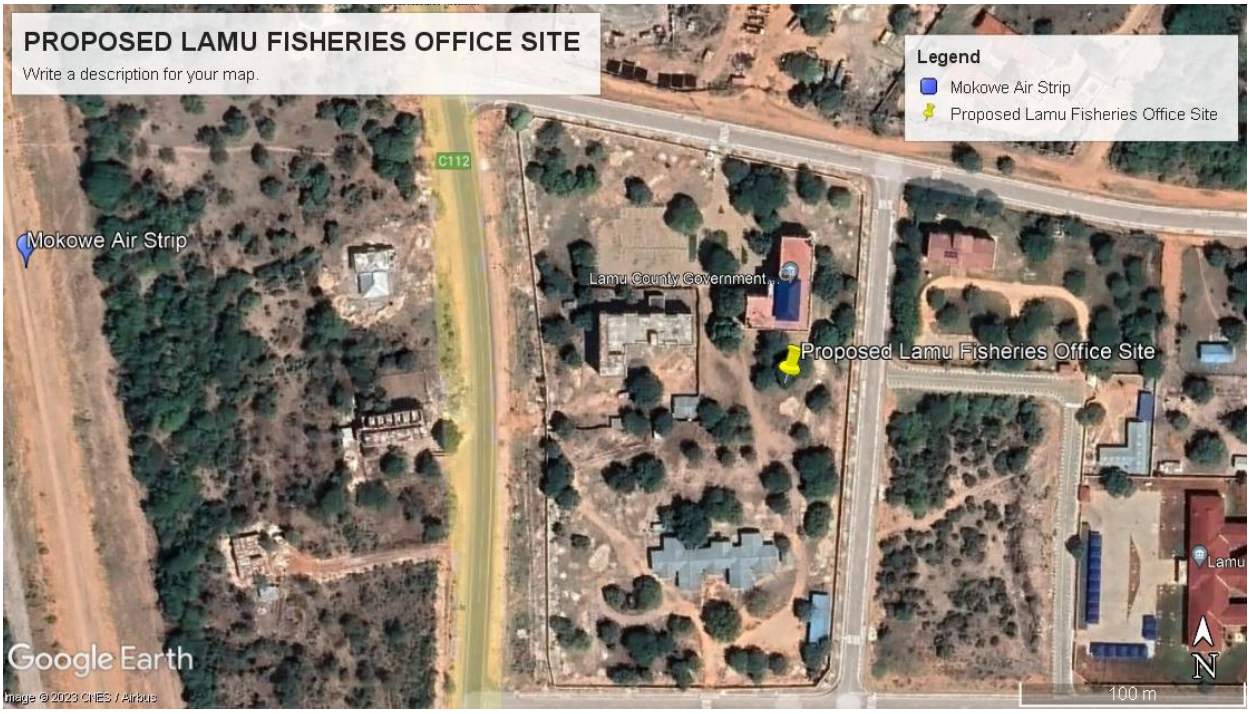

Figure 0-1: A Google map image showing the location of the proposed Lamu fisheries office (courtesy of Google Map pro.

Estimated Cost

The estimated cost for construction of the proposed Lamu County fisheries headquarter at Amu Island is about KShs. 125,116,200[1]. This cost includes structural works, mechanical works, services, labour, environmental and social management and monitoring costs, taxes and a factor on inflation. The breakdown of the project cost is as shown in **Error! Reference source not found.**.

Approach and Methodology

The approach and methods employed during the ESIA study were desktop literature review and field survey. The desktop study involved; reviewing available published and unpublished reports

[1] *The estimate cost is according to the figures provided in the bill of quantities as provided by the project engineer*

including previous ESIA reports, relevant policies, legal statutes and project design report to compile relevant baseline biophysical and socio-economic information about the study area. Field surveys were conducted on several occasions as indicated in section 1.6 and involved environmental and socio-economic data collection. Environmental profiling of the proposed project area was done through assessment of various environmental parameters, including; climatic factors, soils, solid and liquid waste, noise and vibrations receptors and sources, air quality sources and receptors, landscape, and aesthetic value of the proposed project area as indicated in sections 4.3 of this report. On the other hand, the socio-economic survey approach consisted of collecting data from community meeting and various key informants from institutions both at National government offices and County government levels as indicated in chapter 5. Twelve key informants were interviewed. Data needs were based on predetermined socio-economic parameters, as highlighted in Section 4.5 and Chapter 5.

Public Consultation and Stakeholder Engagement

Public consultations and stakeholders' engagement were undertaken through conducting community meeting in view of the existing Government Covid-19 protocol and limitation in the number of attendees' in public meetings by the Government. The summary of the discussion as captured in chapter 5 of this report were as indicated in the table below.

Summary of Stakeholder Concerns, Anticipations and Responses

Issue/Concern	Proposed Mitigation
BMU allocated a store on the ground floor	Mokowe BMU be allocated an office with a store with an external access on the ground floor
BMU Network does not have an office	Provide an office for BMU Network on the second floor
Water Supply for the Office Infrastructure	The water will be supplied by LAWASCO whose source is from Mbele Mbele area.
CPIU to do enhanced public participation on the project	Use of local media to publicize the proposed project and get community's concurrence and reduce speculations
Engagement of labour	Local youth should be involved during construction for semi-skilled and manual labour and only import foreign labour when locals lack the specialized skills. The skilled workers should work with locals to impart the specialized skills
Members requested that the contract be awarded to local contractors.	Due to the magnitude of this project, it falls under the category of National Competitive Bidding therefore not possible and local contractors will be encouraged to compete as they already have a competitive advantage.

Possibility of conflicts between workers and contractor on delayed payments	The contractor will sign and abide by a Code of Conduct and also the Tender Document has a Technical Clauses' meant to address these issues.
BMU members should be part of the Inspection committee	*CPC was to look into this as he forms the Inspection Committee.*
Risk of migrant workers spreading HIV/AIDS	Contractor to sensitize workers on HIV/AIDS and screening
Recruitment of workers	The women and the persons with disability should be given first priority in jobs like record keeping and store keeping.
Opportunities for small business	Women and minorities should be allowed to supply food as long as they comply with the public health regulations
Challenges in accessing water for construction activities	Contractor to rehabilitate existing shallow well
Disposal of construction waste materials be done at the construction site after completion of construction works	The contractor will either give out such materials to interested persons, sell them or hire a licensed NEMA-license waste handler for disposal at an approved site.

Impacts of the Project

The construction of the proposed Lamu County Fisheries headquarter at Amu Island is anticipated to have both negative and positive impacts on; county fisheries infrastructure development, contribution to the blue economy, staff working conditions, fisheries clients, the environment and on the project area in general, as indicated in chapter 6 of this report. Measures have been put in place to mitigate for the negative impacts at construction, operation stages and decommissioning phase.

Positive Impacts

The construction of the proposed Lamu County Fisheries headquarter office at Amu Island is anticipated to have an overall positive impact, particularly in enhancing the county fisheries infrastructure development, development and contribution to the blue economy in the county and improving of staff working conditions which influence service delivery. Some of the positive impacts are; Contribute to improved management of priority fisheries and mariculture, enhance general economic development at the county and nationally, maximize employee satisfaction, enhance synergy and efficiency among the CPIU team members, improve work productivity, employment opportunities, business opportunities, securing and better land utilization, acquiring fisheries office and improved service delivery to the fisher forks.

The Negative Impacts

The proposed project will comprise of a two-storied building and connected facilities. Construction of such a structure is anticipated to have some negative impacts. Some of the negative impacts are; Occupational Health and Safety hazard (*accidents and Injuries*), Public health and safety hazards (*accidents and Injuries*), Visual/ aesthetic Impacts, Leakages and spills, Noise and vibrations, Air pollution, Solid Waste generation, Waste water generation, Fire Hazards, Increased Energy consumption, Gender-based violence at community level, Increased Water consumption, Risk of Spread of HIV/AIDS and other STIs, increase in Grievances, effects of immigrant workers, risk of Child Labour, Gender inequity, Sexual Harassment and abuse amongst workers in the workplace, Gender-based violence (GBV) at community level,: Sexual exploitation and abuse (SEA), Spread of COVID-19 amongst community members during consultation processes, Spread of COVID-19 during construction at work sites and Spread of invasive species.

Environmental and Social Management Plan During Construction

ASPECT	MITIGATION MEASURES
Occupational Health and Safety hazards (*accidents and Injuries*)	▪ Contractor to develop a site safety action plan detailing safety equipment to be used, emergency procedures, restriction on site and personnel responsible for safety inspections and controls. This shall be ready and approved by the joint supervising committee before commencing of the proposed works. ▪ Train workers on safety and first aid skills before commencing works ▪ Ensure provision of fully equipped first aid facility and encourage injury reporting mechanism ▪ Provide appropriate personal protective equipment (PPE) to workers and training on appropriate use. *(Reflective jackets, helmets, face masks, ear plugs gloves, safety boots, etc.)* ▪ Adequate provision of requisite sanitation facilities for human waste disposal for workers on site ▪ Recording of all injuries that occur on site in the incident register, corrective actions for their prevention as appropriate. ▪ The contractor is required to have WIBA insurance policy to compensate workers in the event of injuries. ▪ Provide clean drinking water for the workers to mitigate against dehydration. ▪ Have an understanding with a nearby health facility for emergency cases on-site before decisions are made. ▪ Adherence to Covid-19 rules/guidelines as provided from time to time by the ministry of health and the bank with provision of easily accessible and adequate covid-19 PPE to all persons on site. The specific action to be captured in the contractor ESMP. ▪ Training of workers on covid-19 rules and requirements. ▪ As applicable, only qualified personnel shall be allowed to operate construction equipment on site that may require specialized skills
Public health and safety hazards (*accidents and Injuries*)	▪ Ensure the safety of residents and officers with offices near the site by providing safety signs at strategic places around the access roads. ▪ Hoarding off working sites to protect the public or unauthorized persons from entry into the construction areas.

ASPECT	MITIGATION MEASURES
	▪ Use of signs and warnings on sites on areas with high risks. ▪ Consider having a road marshal, particularly during delivery of construction materials to avoid any incidents when construction vehicles leave the construction site or deliver materials. ▪ Reduce unnecessary speeding by the construction vehicles to control for accidents from the movement of pedestrians in the area. ▪ Prior creation of awareness and sensitization of the public and the officers of any activities that is likely to have an impact in adequate time (*2 weeks)* before commencement.
Visual/ aesthetic Impacts	• Cleaning of the site and organized locating of different construction materials. • Backfilling of soil cuttings • Landscaping of the project site • hoarding of the construction site using appropriate screening materials
Leakages and spills	▪ In the event of hazardous waste leakage or spills, engage authorized waste handlers to dispose of contaminated soils. ▪ Disposing of contaminated soils in cutting pit if volumes are low. ▪ Use of NEMA licensed hazardous waste handlers to dispose off in licensed disposal areas. ▪ Development of site-specific incident management or response plan. ▪ Use of an authorized garage or fuel station in the project area by the contractor.
Excessive Noise	• The contractor to use equipment with low noise levels or fitted with silencers where appropriate. • Regular servicing of the equipment to reduce the possibility of noise from worn-out parts. • Informing the public about the possibility of unusual noise levels, particularly to residents and nearby offices, whenever working on such activities. • Ensure adherence to PPE by workers[2] working on excessive noise and vibration activities • Restricting noisy activities to be during the day and no noisy activities should be conducted on site at night. • Regular measurement of noise levels and devising control measures.
Air pollution	• Use of non-lead paints during construction. • Adherence to proper uses of PPE by the workers, especially those working on activities requiring mixing of cement. • Inform the public and residents about activities with possibility of unusual air pollutants • Use of dust screens/nets to reduce dust from site. • Consider wetting all the sand or soil materials being transported to or from the construction site. Where appropriate, cover the materials being transported to avoid being blown by the wind during transportation.

[2] The measure should be according to the law (Occupation safety and health Act 2007, National Construction Act

ASPECT	MITIGATION MEASURES
Increased Solid Waste generation	• Promotion and adoption of the principles of waste avoidance, reduction, reuse and recycle. Through avoiding unnecessary generation of waste, use of debris for backfilling where possible, use of waste materials on-site for other purposes where appropriate, or selling to recycling merchants. • Designate proper waste transfer stations onsite with controlled access. • Seek appropriate approvals from NEMA and County Government on management and Disposal of the waste[3].*(this may include using authorized disposal sites, use of NEMA authorized waste pickers/transporters, acquiring dumping certificates, and keeping proper records or use of authorized means to ferry waste from site)* • Consider formulating a site-specific waste management plan informed by waste characterization[4]. • Observing waste management standards proposed under NEMA waste management regulations 2006. *(with a particular focus on waste separation and management before disposal)*
Increased waste water generation	• Provision of mobile sanitation facilities for adequate human waste management[5] during the construction phase for workers and persons on site
Increased Water consumption for construction	• Sensitization and awareness creation among construction workers on significance of water conservation measures. • Curing the concrete structures during evening and early morning to reduce evaporation. • Covering the concrete structures to be cured with sand or any water retaining material to shield from direct sunlight • Regular maintenance and prompt response to leakage in the water system during construction phase. • Use of alternative water sources if available, particularly rain water if any during construction phase
Risk of Spread of HIV/AIDS	• Promote HIV/AIDS Prevention messaging • Access to safe sex (condoms-Male and female) • Install HIV testing services at the construction site or an MoU with an existing government health facility in the area. • Support infected workers with access to ARVs from local public health facilities. • Peer counseling services at the site
Grievances	• Establish grievance redress committees at the site • Ensure contractor staff grievance structures exist • Sensitization and awareness creation among workers and the public on

[3] Waste management and disposal procedures need to be in accordance to waste management standards proposed under NEMA waste management regulations of 2006 (legal notice 121).
[4] Waste characterization should consider waste from construction site and the contractors' camp if any.
[5] According to the Public Health Act Cap 242, 2012 and Occupation safety and Health Act 2007 requirements

ASPECT	MITIGATION MEASURES
	grievance redress mechanisms in place
Effects of Immigrant workers	▪ Contractor should use the local workforce as much as possible (preference to local community members on skills locally available). ▪ Effective community engagement and strong grievance redress mechanisms on matters related to labour ▪ All workers to sign an employment contract including a Code of Conduct governing appropriate behaviour ▪ The workforce should be sensitized to local social and cultural practices and be educated on the expected behaviour and conduct ▪ Contractor should prepare and enforce a No Sexual Harassment and Non-Discrimination Policy ▪ Contractor should prepare and implement a gender action plan ▪ The contractor as part of the C-ESMP will Prepare labor Management Plan (LMP) that included mandatory requirement to procure all unskilled (and as much as possible, semi-skilled) labour as well as locally available materials from the local community while ensuring equal pay for equal work for men, women and people with disability
Child Labour and Protection	▪ Ensure no children (below the age of 18 years) are employed on site in accordance with national labour laws. This can be done through incorporating prohibitive provisions in the code of conduct and also having the recruitment policies that prohibits child labour. ▪ Ensure that any child sexual relations offenses among contractors' workers are promptly reported to the police.
Gender Equity, Sexual Harassment and abuse amongst workers in the workplace	▪ The contractor should prepare and enforce a No Sexual Harassment and Non-Discrimination Policy ▪ The contractor will strive to ensure equitable distribution of employment opportunities between men and women. ▪ Provision of gender disaggregated bathing, changing, sanitation facilities ▪ Whenever harassment are recorded on site, the contractor should ensure prompt and effective remedial action ▪ The employees should be trained and sensitized on appropriate behavior ▪ All workers signing a code of conduct ▪ Sensitization and awareness creation
Gender-based violence at community level	▪ The contractor will implement provisions that ensure that gender-based violence at the community level is not triggered by the Project, including: ▪ Effective and on-going community engagement and consultation, particularly with women and girls; ▪ Review of specific project components that are known to heighten GBV risk at the community level, ▪ Specific plan for mitigating these known risks, e.g. sensitization around gender-equitable approaches to employment, representation, management, school pupils etc ▪ The contractor will ensure adequate referral mechanisms are in place if a case of GBV at the community level is reported related to project implementation.
Sexual exploitation and abuse (SEA)	▪ Develop and implement a SEA management action plan with an Accountability and Response Framework as part of the ESMP. The SEA action plan will follow guidance on the World Bank's Good Practice Note for Addressing Gender-based Violence in Investment Project Financing.

ASPECT	MITIGATION MEASURES
	▪ The SEA action plan will include how the project will ensure necessary steps are in place for: ▪ Prevention of SEA: including CoCs and ongoing sensitization of staff on responsibilities related to the CoC and consequences of non-compliance; project-level IEC materials; ▪ Response to SEA: including survivor-centred coordinated multi-sectoral referral and assistance to complainants according to standard operating procedures; staff reporting mechanisms; written procedures related to case oversight, investigation and disciplinary procedures at the project level, including confidential data management; ▪ Engagement with the community: including development of confidential community-based complaints mechanisms discrete from the standard GM; mainstreaming of PSEA awareness-raising in all community engagement activities; community-level IEC materials; regular community outreach to women and girls about social risks and their PSEA-related rights; ▪ Management and Coordination: including integration of SEA in job descriptions, employments contracts, performance appraisal systems, etc.; development of contract policies related to SEA, including whistle-blower protection and investigation and disciplinary procedures; training for all project management; management of coordination mechanism for case oversight, investigations and disciplinary procedures; supervision of dedicated PSEA focal points in the project and trained community liaison officers.
Spread of COVID-19 amongst community members during consultation processes	• Electronic means of consulting stakeholders and holding meetings shall be encouraged, whenever feasible. One-on-one engagements with stakeholders while observing social distance and adhering to PPE wearing shall be enforced; • Avoid concentrating more than 15 public members at a venue. Where two or more participants are gathered, maintain social distancing of at least 1.5 meters (5 feet); • The team carrying out engagements within the public on one-on-one basis will be provided with appropriate PPE for the number of people and stakeholders they intend to meet. • Use traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, public announcements and mail) when stakeholders do not have access to online channels or do not use them frequently. Ensure to allow participants to provide feedback and suggestions. • Hold meetings in small groups, mainly in form of FGDs if permitted depending on restrictions in place and subject to strict observance of physical distancing and limited duration. • In situations where online interaction is challenging, disseminate information through digital platform (where available) like Facebook and WhatsApp & Chat groups. • Ensure online registration of participants, distribution of consultation materials and share feedback electronically with participants.
Spread of COVID-19. During construction at work sites	• The Contractors will develop standard operating procedures (SOPs) for managing the spread of Covid-19 during project execution and submit them for the approval of the Joint Supervision committee and the client, before mobilizing to site. The SOPs shall be in line with the World Bank guidance on COVID-19, Ministry of Health Directives and site-specific project conditions;

ASPECT	MITIGATION MEASURES
	• Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel including workers and visitors; • Avoid concentrating more than 15 workers at one location. Where two or more persons are gathered, maintain social distancing of at least 1.5 meters; • Install hand washing facilities with adequate running water and soap, or sanitizing facilities at entrance to work sites including consultation venues and meetings and ensure they are used; • Ensure routine sanitization of shared social facilities and other communal places routinely including wiping of workstations, door knobs, hand rails etc.;

Environmental and Social Management Plan (ESMP) during Sub-project Operation

ASPECT	MITIGATION MEASURES
Occupational Health and Safety (*accidents and Injuries*)	• Ensure compliance to Occupational Safety and Health Act Cap. 514 and its Subsidiary Legislations standards including: registering the office as a work place, constituting a safety committee, providing first aid facilities, conducting emergency drills and annual office safety audits. • Provide personal protective equipment to operation and maintenance workers • Recording all injuries that occur on-site to workers while doing their daily duties in the incident register, corrective actions for their prevention should be initiated as appropriate. • Cordoning off working sites to protect the public or unauthorized persons during repair and maintenance of the different utility systems on site • Creation of awareness and training of workers on site on safety and first aid skills. • Hiring employees with proper qualifications for specialized and risky tasks during operation and maintenance of the various utility systems. • Adherence to Covid-19 rules as provided by the ministry of health and the bank while conducting daily duties. • Providing requisite PPE and training of workers on covid-19 rules and requirements.
Public health and safety (*accidents and Injuries*)	• using signage during cleaning, maintenance, or repair to warn the public • Easily accessible fire risk information to the public visiting the premise
Increased Solid Waste generation	• Sensitization and awareness creation among the office building users on the significance of waste separation and in addition provide for waste sorting bins at the premise with clear labeling. • Provide for a waste transfer station at the premise for temporal holding of waste before final disposal. • Sensitization and awareness creation among the office building users on the significance of waste recycling. • To engage the county government environment and natural resources

	department mandated with waste management to collect and properly dispose of the waste.
Waste water generation	• Regular sensitization and awareness to building users as well as discouragement on releasing detergents or other chemical solutions in black water system. • Regular cleaning of the wastewater drainage system • Regular and proper maintenance of the drainage system • Prompt response to any reported blockage and leakages • Sensitization and awareness of building users from discharging or emptying any chemical solutions or oils to the sewer system. • Treating the waste water through a biodigester and using the water for landscaping.
Fire Hazards	• Provide recessed swinging type hose reel complete with 30 meters of 20mm internal diameter rubber fire hose with nylon spray/jet shut off nozzle • Provision of a Fire assembly point in the design • Installation of fire extinguishers in the building • Provide signages of fire hose Reel, fire exits and fire instructions. • Provide for fire risk and appropriate response equipment as well as signages with short and clear information. • Train selected staff as fire marshals who can take lead in case of fire emergency in the building and conduct inspections to ensure that provided emergency equipment are always in good order • Regular fire drills for the building users • Regular awareness and sensitization on fire safety measures and response to the users of the building. • Clear fire incidents reporting procedures and response. Ensure regular provision of operational emergency reporting contacts. • Regular servicing and maintenance of the fire extinguishers. • Ensuring availability of adequate water resources at the premise at all times for the hydrants as per the OSHA requirements..
Increased Water consumption	• Sensitization and awareness creation among users of the building on significance of water conservation measures. • Use of water efficient appliance such as delay taps • Regular maintenance and prompt response to leakage in the water system. • Use of alternative water sources eg rain harvesting • Prompting reporting of leakages through sensitization of the public members
Increased Energy consumption	• Sensitization and awareness creation among office users on the significance of energy conservation measures • Sensitization and awareness creation among the maintenance team to continue observing the use of energy-saving electrical appliances on the building.

	• Proper and regular maintenance of the green energy appliances and equipment provided for in the design of the building. • Supplement grid power with solar power
Spread of COVID-19. During operation at work sites	• The county departments of fisheries to develop Standard Operating Procedures (SOPs) for managing the spread of Covid-19 during office operation and submit them for the approval by the county department of public health before use of the building. The SOPs shall be in line with the World Bank guidance on COVID-19, Ministry of Health Directives and site-specific conditions; • Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all office users including visitors; • Install hand washing facilities with adequate running water and soap, or sanitizing facilities at building entrance including consultation venues and meetings and ensure they are used; • Ensure routine sanitization of shared social facilities and other communal places routinely including wiping of workstations, door knobs, hand rails etc.;

Environmental and Social Management Plan (ESMP) during Decommissioning.

ASPECT	MITIGATION MEASURES
Occupational Health and Safety (*accidents and Injuries*)	• Preparation of project decommissioning plan. • Ensure the safety of the decommissioning workers by putting first aid area and injury reporting mechanism • The contractor should consider having a WIBA insurance policy to compensate workers in an event of an accident on site. • Provide personal protective equipment to workers. • Recording all injuries that occur on site in the incident register, corrective actions for their prevention. • Cordoning off demolition sites to protect the public or unauthorized persons • use of signs and warnings on sites with high risks • Creation of awareness and training of workers on-site on safety and first aid skills. • Hiring employees with proper qualifications for specialized and risky tasks. • Ensure compliance to Occupational Safety and Health Act Cap. 514 and it's Subsidiary Legislations.
Leakages and spills	• In the event of hazardous waste leakage or spills, engage authorized waste handlers to dispose of contaminated soils. • Disposing of contaminated soils in cutting pit if volumes are low. • Use of NEMA licensed waste handlers to dispose of in licensed disposal sites. • Development of site-specific incident management or response plan.
Excessive Noise	• Adequate use of PPE by the workers e.g. earplugs • Working on and restricting noisy activities during the day

	• Reducing the duration of exposure of workers to high occupational noise levels during demolition. • Acquisition of permits/Licenses for any activity with high noise levels eg drilling of walls or slabs for demolition. • Using models of machines and equipment with low noise levels. • workers using drilling or handheld pneumatic equipment to be provided with specialized anti-vibrating gloves, • Warnings to be issued to the locals in case of any unusual noise levels, • Ensure that NEMA noise and Vibration standards are observed in all project activities.
Air pollution	• Workers to use masks when working in dusty conditions during the decommissioning process. • Use all means possible to suppress dust if considered to be a menace during demolishing of obsolete walls or structures on-site
Solid Waste generation	• Proper disposal of any hazards waste from the decommissioned site. • Preparation of waste management plan to guide waste management and disposal activities of all debris from demolition activities. • Disposal of debris to NEMA authorized damping sites • Use of certified vehicles or NEMA licensed waste disposal firms for waste management and disposal
Spread of COVID-19. During construction at work sites	• The Contractors will develop standard operating procedures (SOPs) for managing the spread of Covid-19 during project decommissioning and submit for approval to the county department of public, before mobilizing to site. The SOPs shall be in line with Ministry of Health Directives and site-specific project conditions; • Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel • Install hand washing facilities with adequate running water and soap, or sanitizing facilities at entrance to work sites including consultation venues and meetings and ensure they are used; • Ensure routine sanitization of shared social facilities and other communal places routinely including wiping of workstations, door knobs, hand rails etc.;

ESMP Implementation and Institutional Management

The implementation of the proposed measures shall be by several actors including the client, State Department for Blue Economy and Fisheries (SDBE&F) through NPCU, the Joint Project Supervision Committee (JSPC), the supervising consultant, the Lamu County government and the contractor who shall be required to have environment, health and safety officer to implement and report on safeguard requirements. The contractor's Environment, Health and Safety Officer in consultation with the sub-project supervising consultant will prepare C-ESMP that shall guide the implementation of safeguards requirements.

Reporting on implementation activities of the proposed construction of Lamu County Fisheries Headquarter shall be done at several levels. The supervising consultant shall be in charge of the

daily reporting on site on behalf of the client (SDBE&F). The sub-project supervising consultant will prepare all the required reports including site meeting minutes and submit to the client (SDBE&F). In addition, the joint project supervising committee through the County Safeguards Officer and the contractor will be required to promptly report any major incidents on site to SDBE&F and relevant authorities as soon as possible. SDBE&F will subsequently report to the Bank, within 24 hrs of the incident occurrence.

The progress reports prepared shall be on monthly and quarterly basis. On behalf of the client (SDBE&F), the County and NPCU safeguard specialists shall review the reports and submit to the World Bank for comments. The project JPSC through the county safeguards officer shall on a daily basis during project implementation supervise the implementation of the C-ESMP and ESMoP. NPCU Environmental and Social safeguards specialists shall also conduct regular and impromptu monitoring to ensure that all the requirements of the World Bank and National laws are adhered to as captured in the C-ESMP and ESMoP. Although the estimated cost for the implementation of the ESMP and ESMoP is about 3.52M, the actual costs shall be prepared by the contractor and captured in the C-ESMP. Provisions for the construction phase ESMP will be incorporated in the work's contract and bidding documents.

Conclusion and Mandatory Requirements

Conclusion

The fisheries sub-sector in Lamu County contributes to over 70% of households' income with an estimated annual turnover of about 1.5billion. Infrastructure development remains one of the key areas of focus if the fisheries sub-sector is to be transformed for socio-economic development in the County. The CPIU is currently hosted at the County Fisheries Office space which was previously used as a laboratory, sharing space with fisheries staff but it is inadequate. The office is highly congested and hence not conducive considering the current Covid 19 pandemic. However, through KEMFSED funding there is an opportunity to transform and strengthen sectors related to the blue economy, focusing on strengthening County infrastructure. The proposed construction works will improve fisheries management in the county in order to provide fisheries-related functions and services closer to the clients. The sub-project generally has positive impacts, and for the negative impacts, mitigation measures have been proposed. The proposed project area was noted to be a highly modified habitat through anthropogenic activities, mainly from the settlement. The environmental and social assessment findings indicated that the project is of low impacts. The implementation of the project therefore is not anticipated to significantly influence the physical, biological and social environment. It was further noted that the anticipated impacts shall be of low magnitude due to the size of the project and with mitigation measures having been proposed in this report.

Mandatory Requirements

The development of the proposed Lamu County Fisheries Headquarter is anticipated to have negative impacts socially and to the physical environment. In spite of the anticipated environmental and social impacts, with proper mitigation measures, the project is environmentally viable. The environmental assessment team proposes the implementations of the sub-project with the following recommendations which are a requirement for the implementation of the sub-project;

- The contract shall be between the National Project Coordination Unit of the State Department for Blue Economy and Fisheries (SDBE&F) and the contractors
- The subcontracts under the contractor will be accepted and cleared by the consultant in charge of the supervision of the works. The supervision consultant will be responsible to ensure the subcontractors enforce and apply all measures included in this ESIA including the Environmental Technical clauses included in the bidding document and contracts.
- The sub-project supervision consultant to ensure full implementation by contractors and subcontractors of the ESMP requirements during construction/implementation stage
- The contractor's project Engineer and the Environmental, Health and Safety Manager in charge of Environmental and Health and Safety, Labor and Social safeguards officer in consultation with the supervision consultant to prepare a Construction ESMP to be implemented during construction by the contractor and all its subcontractors.
- The contractor's project Engineer and the Environmental, Health and Safety officer in charge of Environmental and Health and Safety, Labor and Social safeguards officer to prepare an Operation ESMP to guide the operation and maintenance of the building by the fisheries department under Lamu County Government during operation and decommissioning stages of the project as required.
- The project supervising consultant and the contractor shall implement a project Grievance Mechanism (GM), and ensure that sensitization and awareness is created among construction workers, contractor, subcontractors and the general public, on project GRM structures in place in the event of a need to address or report any emerging issues, Gender based violence and Sexual Exploitation Abuse on site or any complains by any aggrieved party in the area.

1. INTRODUCTION

1.1. Background

Although Kenya's marine resources are of strategic value to national and local coastal communities for economic development, the blue economy sector remains hindered by several challenges. To exploit the potential and attain economic benefits from the coastal and marine resources, the Government of Kenya, through SDBE&F, requested the World Bank to support the development of the sector through the Kenya Marine Fisheries and Socio-Economic Development (KEMFSED) project. The project is part of efforts to enhance the development of blue economy sector to support coastal livelihoods and contribute to food security. As part of the efforts under KEMFSED project to strengthen fisheries management institutions established under the Fisheries Management and Development Act, 2016. And the Constitution of Kenya to effectively and efficiently participate in the development of Kenya's blue economy, funding has been committed for the development of fisheries office infrastructure in all the five participating coastal counties (Lamu, Tana River, Kilifi, Mombasa and Kwale). In spite of Lamu County having a shoreline and high potential of quality fish catch, the management of the fisheries sector remains inadequately developed with the main concern being the development of fisheries infrastructures.

The CPIU is currently hosted at the County Fisheries Office. Apart from the project activities, the routine fisheries departmental activities have to proceed simultaneously. The CPIU members and fisheries departmental staffs work from a shared common office room which was previously used as a laboratory. The size of office is approximately 16 feet by 12 feet which is multipurpose. It acts as the common staff room and board room. Considering the total number of staffs (the CPIU which is comprised of 15 members and departmental staffs), the current shared office is inadequate in terms of space and office equipment. When the CPIU staffs are holding a meeting in the very office, the departmental staffs have nowhere to work from. The office is highly congested and hence not conducive considering the current Covid 19 pandemic. The department has been receiving insufficient funds from the government exchequer which has hampered infrastructural development in the department. It is evident that at one given time, all the staffs cannot sit comfortably in this office. The necessary crucial amenities such as the toilets are also inadequate. A registry is also lacking. These will definitely hamper the effective and efficient implementation of the project activities and service delivery to the deserving communities in the County. Consequently, a quick remedy is required to salvage the situation.

The proposed construction works could have social and environmental implications if not well anticipated and enhanced for positive impacts or mitigated for the negatives, it is therefore essential to appreciate the environmental and social significance and site conditions likely to be influenced by the sub-project activities through an assessment. This shall be in line with the World Bank OP/BP 4.01 and section 58 of the Environmental Management and coordination Act CAP 387; which requires a project proponent to prepare Summary Project Report or an ESMP

before being permitted to undertake any activities with potential harm to the environment or effect to social aspects. This includes observance of related national legislations guiding stakeholder consultation, work place safety, conservation, management and utilization of natural resources.

In response to the requirements of the law, the NPCU and the county government safeguards team prepared the ESIA project summary report for the proposed construction of Lamu County Fisheries Headquarter at the current County headquarter in Mokowe. Undertaking the study for the proposed sub-project has allowed for early identification of key environmental and social issues that need to be considered during implementation of construction works, operation and decommissioning activities. This will improve the overall understanding of the project's possible positive impacts and risks, hence increasing its environmental and social sustainability. It is also a requirement under the World Bank to prepare an Environmental and Social Impact Assessment for low risk sub-projects under KEMFSED.

1.2. The rationale for the ESIA study

The proposed construction of Lamu County Fisheries office sub-project falls under the World Bank's support to the government through investment lending towards transforming and strengthening sectors related to the blue economy, focusing on strengthening County infrastructure. The proposed construction works will thus trigger the Bank's Safeguard Policies *(OP/BP 4.01 Environment Assessment)* which requires undertaking environmental and social due diligence for all sub project activities and preparing environmental and social impact assessment for sub-projects.

Also, according to Kenya's EIA requirement of Section 58 of the Environmental Management and Coordination Act CAP 387, it is a requirement that a proponent prepares a summary project report for the authority to approve any development activities. This includes compliance with the Environment Impact Assessment and Audit Regulations of 2003 and consideration of other national legislations guiding conservation, management, and utilization of natural resources. Therefore, the assessment under this study was to identify significant potential impacts of the sub-project works to the project site's physical, biological, social, and economic aspects.

1.3. Objectives and Scope of the ESIA Project Study

1.3.1. General Objectives of the ESIA study

The main objectives of the study were to conduct environmental and social assessment for the proposed construction works in line with NEMA and World Bank requirements. The specific objectives of the assessment therefore, focused on;

- Identifying significant potential impacts of the proposed sub-project to the physical, biological, social, cultural, and economic environment during all the project phases (construction, operation and decommissioning).

- Propose mitigation measures to adverse environment, social and occupational health, and safety impacts throughout all phases of the project while enhancing the positive changes.
- Assess the considerations of climate change adaptation, green building and green energy in the designs of the building ensure the proposed project is environmentally friendly, socially acceptable, and sustainable.

1.3.2. The Scope of ESIA Assignment

The scope of the assignment was to;

- Describe the national environmental legislative and regulatory framework for construction and managing the proposed fisheries office and the associated facilities.
- Description of the proposed sub-project design and proposed works including technology, materials, by products, procedures and processes to be used during construction operation and decommissioning.
- Description of the project area's physical, biological, social, cultural, and economic environment.
- Conduct an assessment of environmental and social impacts due to the proposed construction works.
- Conduct consultations with key stakeholders
- Identify mitigation measures for negative impacts as well as enhancing measures for the positive impacts of the project.
- Develop an environmental and social management plan (ESMP), capturing aspects of gender-based violence GBV, sexual exploitation, and abuse (SEA) and child labor issues.
- Develop an environmental and Social Monitoring Plan (ESMoP)
- Prepare Grievance Redress Mechanism (GRM)
- Acquire NEMA EIA license

1.4. The Study Approach and Methodology

The main approaches applied in the course of collecting environmental and social baseline data, were desktop literature review and field surveys for environmental and social data.

1.4.1. Desktop Review

A desktop study was conducted to review available published and unpublished reports in order to compile relevant baseline biophysical and socio-economic information about the study area. The biophysical information was compiled on environmental aspect such as flora, fauna, climate and general environmental management. On the socio-economic aspects, the study compiled information on factors such as population, social amenities and physical infrastructure, land use and ownership, water and sanitation coverage, cultural heritage and properties, livelihood systems, gender based violence and sexual harassment, HIV/AIDS and child labour.

1.4.2. Field Survey

The study team conducted field survey within the project area on several occasions in June and 5th November 2021, on 14th April, 13th, 24th and 25th May 2022. However, the original site for the project was shifted from Amu Island to Mokowe mainland within Lamu County Headquarter offices. There was need to update the site specific assessment findings which was conducted between 1st and 6th of October, 2023. The main objective of the activity was to carry out on-site field assessments on the expected effects of the planned developments on the physical, biological and socio-economic environment. The physical assessment included hydro-geological surveys and flood risk assessment for the proposed site. The field work exercise involved visiting and paying courtesy calls to the area chief, key informant interviews with county officers and conducting public meeting and consultations. The survey team further conducted a site visit to familiarize and appreciate the general setting in respect to the proposed project site accessibility, social amenities, environmental setting and physical features among others. The team took the opportunity to conduct community stakeholder consultations meetings and consultations on social economic related issues

1.4.3. Environmental Data Collection

The environmental study team carried out environmental profiling of the proposed project area, by conducting a transect walk through the proposed project site, the transect walk was conducted by a team of representative from fisheries department of Lamu, NPCU environmental and social safeguards, CPIU safeguards, NPCU engineer and architect from public works, CPIU architect and county survey officer from the physical planning office. The aim was to assess waste generation and management within the area of interest, sanitation and existing impacts to water resources, identifying potential sources of noise and vibrations as well as likely receptors, potential sources of air quality issues, vegetation type and cover, invasive species management if any, habitats types in the area, landscape and aesthetic value of the proposed project area. The main data collection methods were through observations, photo taking, expert judgment and informal consultations with members of the public. The data collected was triangulated with data from secondary information sources.

1.4.4. Socio-Economic Data Collection

The socio-economic data for the report was collected using qualitative technique through key informants and public consultative meeting. Key informant consultations targeted senior fisheries departmental officers, officers from lands and physical planning, ward administration, Department of Water, Department of Environment and Natural Resources, trade and tourism, Department of Social Services and the Department of Public Health among others. The process of consulting key informant was conducted over several occasions in May and November 2021 and on 11th to 13th of April 2022. Additional consultations were done from 2nd to 6th October 2023. Public consultation meeting was organized on 13th of May 2022 to seek opinion of the public on the possible impacts of the project and due to change of site, another consultation for

the new site was organized on 5th of October 2023. The findings during the discussions of the consultative process were as indicated in chapter 5.

1.5. ESIA Project Report Study Team

The Environmental and social Impact Assessment summary project report for the proposed construction of County fisheries headquarter office at Mokowe County Headquarters site was prepared by a team of county government officers. Environmental and social scoping and subsequent preparation of the ESIA summary project report were accomplished through several experts' involvement with differing inputs. The SPR preparation team composition is as indicated in Table 1-1.

Table 1-1: ESIA SPR Preparation Team

NO	NAME OF EXPERT	POSITION
1.	Muhammed Athman	County Project Coordinator
2.	Antony P. Mbuthia	Environment Safeguards Officer-KEMFSED
3.	Mohamed Abubakar	County Environment Safeguards Officer - Lamu County
4.	Salim Suleiman	Civil/Structural engineer
5.	Maulama Abubakar	Architecture
6.	Abdulfatah Kassim	County Quantity Surveyor
7.	Joseph Onyango	Social Safeguards Officer
8.	Godfrey Wabomba	Environmental Safeguards Specialist NPCU -Reviewer
9.	Lazarus Kubasu	Social Safeguards Specialist NPCU -Reviewer

1.6. Content and Structure of the Report

1.6.1. Purpose of the report

This report is intended to meet the overall assignment objectives of carrying out environmental and social due diligence for the construction works for the proposed Lamu County fisheries headquarter office and the associated facilities in accordance with statutory requirements by NEMA on projects under EMCA CAP 387 schedule II. The report will assist NEMA and lead agencies in decision-making process and ensure that the sub-project activities comply with sound environmental management practices. The report is also intended to assist the project proponent State Department for Blue Economy and Fisheries, (SDBE&F), Lamu County Government, Joint Project Supervising Committee (JPSC), sub-project supervising consultant and the contractor in their obligation of maintaining environmental integrity during the overall management of the project activities during office construction, operation and decommissioning. The report is also meant to meet the World Bank safeguards requirements on KEMFSED project, to conduct environment and social assessments before undertaking any sub-project activities.

1.6.2. Structure of the Report

The report has been structured in 10 chapters to capture requirements under KEMFSED project ESMF, VMGF, EMCA CAP 387 and Environmental Impact Assessment and Audit regulations 2003. The report is also consistent with the international best practices as outlined below;

- Chapter 1 introduces the sub-project activities in general, giving the background, project justification, study methodology, and rationale used to achieve the objectives of the study.
- Chapter 2 describes the proposed project design and the various alternatives considered for implementation.
- Chapter 3 highlights the environmental policy, legal and institutional framework that will inform the overall management of the works and its components at various phases of the project cycle.
- Chapter 4 briefly outlines existing environmental baseline information including physical, biological and socio-economic conditions of the project area. The content in the chapter also highlights how the project will influence or be influenced by the baseline conditions,
- Chapter 5 summarizes public and key stakeholder consultative process and the outcomes,
- Chapter 6 give the project impacts both positive and negative impacts associated with proposed project activities at the three phases (construction, operation and decommissioning),
- Chapter 7 presents the project Environmental and Social Management Plan (ESMP) at project constructions, operation and decommissioning,
- Chapter 8 presents Environmental and Social Monitoring Plan (ESMoP),
- Chapter 9 captures the grievance redress mechanism on the sub-project,
- Chapter 10 presents the ESMP assessment team's conclusions and recommendations.

2. PROJECT DESCRIPTION

2.1. Chapter Overview

This chapter highlights the project location, sub-project objectives, proposed project design, project activities, project resources and by-products, project alternatives and the estimated financial cost for the proposed construction of Lamu County fisheries headquarters at Mokowe Lamu County headquarters.

2.2. Project Location

The proposed project is located in Lamu County, Lamu West Sub- County, Hindi ward, Mokowe location and in Mokowe Sub-location. The office is located at Mokowe within the Lamu County headquarters compound as shown **Error! Reference source not found.**, from a Google image. The area has an elevation of 7m and about 9 m depending on which part of the compound (southern part seems to be lower than the office location site, with GPS coordinate of the project site being Latitude 2°13'42.99"S and Longitude 40°50'53.87"E.

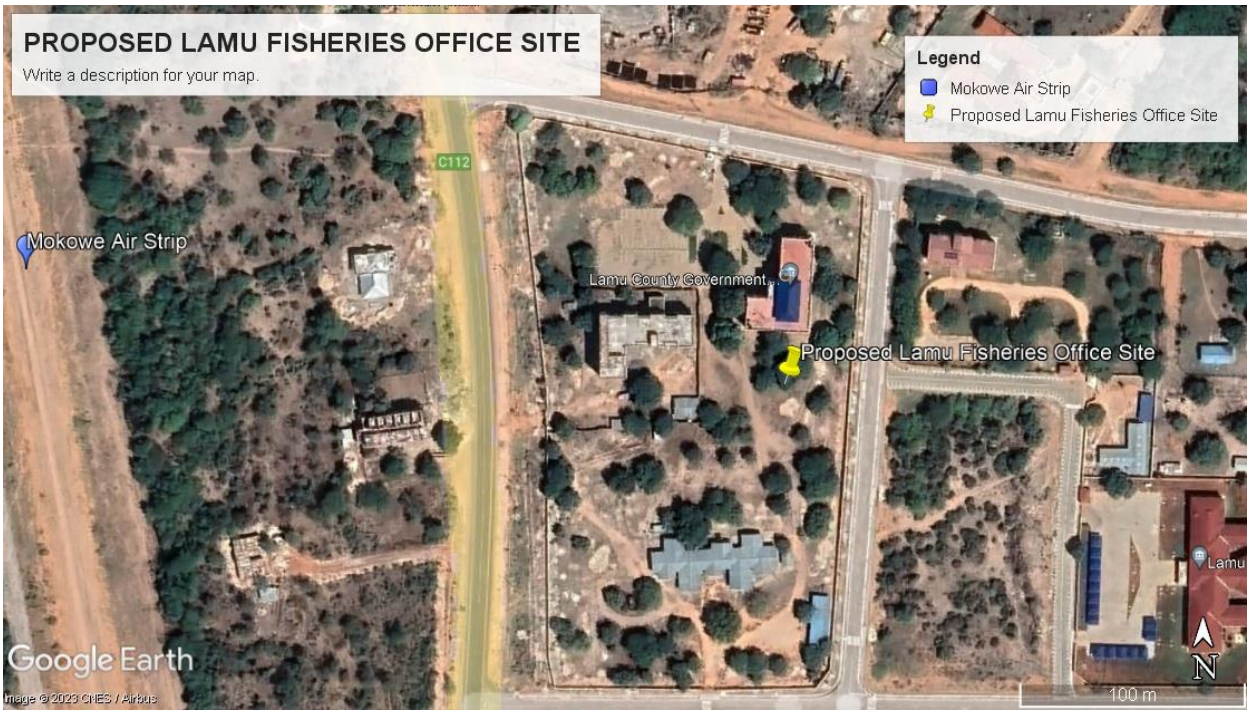

Figure 2-1: A Google map image showing the location of the proposed Lamu fisheries office (courtesy of Google Map pro.

2.3. Proposed Project Objectives

KEMFSED project development objective is to improve priority fisheries and mariculture management and increase access to complementary livelihood activities in coastal communities. The aim of the sub-project is to support County infrastructure development under KEMFSED through the construction of Lamu County Fisheries Headquarter at Mokowe. The proposed construction works will improve fisheries management in the county by providing fisheries-related functions and services closer to the clients. Therefore, the construction of Lamu County

Fisheries office is anticipated to contribute towards enhancing fisheries management in Lamu County.

2.4. Current Status of the Office

The CPIU is currently hosted at the County Fisheries Office. Apart from the project activities, the routine fisheries departmental activities has to proceed simultaneously. The CPIU members and fisheries departmental staffs work from a shared common office room which was previously used as a laboratory. The size of office, which is multipurpose, is approximately 16 feet by 12 feet. It acts as the common staff room and board room. Considering the total number of staffs (the CPIU which is comprised of 15 members and departmental staffs), the current shared office is inadequate in terms of space and office equipment. When the CPIU staff are holding a meeting in the very office, the departmental staffs have nowhere to work from. The office is highly congested and hence not conducive considering the current Covid 19 pandemic. The department has been receiving insufficient funds from the government exchequer which has hampered infrastructural development in the department.

It is evident that at one given time, all the staff cannot sit comfortably in this office. The necessary crucial amenities such as the toilets are also inadequate. The registry is also lacking. These will definitely hamper the effective and efficient implementation of the project activities and service delivery to the deserving communities in the County. Consequently, a quick remedy is required to salvage the situation.

2.5. Justification of the Project

The devolved fisheries sector in coastal counties play a critical role in service delivery to fishers at the coastal community level yet the fisheries infrastructure that provides a conducive working environment is very poor in some counties. Strengthening institutional capacity to better safeguard marine fisheries and improving fisheries management and governance is therefore critical. In spite of the Fisheries sector being critical in Lamu County, it remains underdeveloped with inadequate infrastructural development. The CIDP acknowledges the significance of the fisheries sub-sector to the county economic development. The fisheries sub-sector in Lamu County contributes to over 70% of households' income with an estimated annual turnover of about KES 1.5billion. Infrastructure development remains one of the key areas of focus if the fisheries sub-sector is to be transformed for socio-economic development in the County. The county is therefore committed to invest more resources in the fisheries infrastructural development among which construction and refurbishment of offices was proposed. The current proposed development under KEMFSED project is in line with the proposals to increase the number of offices by constructing the fisheries headquarter in the county. As identified in section 2.4 above, the current office space is inadequate and unsuitable.

Plate 2-1: Common Staff Office which Was initially a laboratory

Plate 2-2: CPIU Staff holding a meeting in the Office

Plate 2-3: CPC presenting in one of the meetings

Plate 2-4: CPIU holding a meeting in office

2.6. Proposed Project Design

2.6.1. Proposed Main office Building

The main office building shall be a three-storey building with a height of 9.6meters from the ground level. The built-up space of the main office building is proposed to be 1576m^2 with ground floor space taking up taking up (32%),first floor space taking up taking up (23%), second floor space taking up taking up (23%) and roof Space (23%) of the total space area. The proposed space accommodation of the building is as captured in the design drawings attached in Annex I.

Table 2-1 below is a summary of proposals of how the spaces of the Main office building shall be utilized and the type of finishing envisioned for each space as captured from the design report.

Table 2-1: Proposed Space Accommodation for the Main Office building

SPACE	SUB-SPACES
Ground Floor	Entry ramp, entry stairs, verandah, foyer, entrance lobby, 2 no. staircases, access ramp, reception and waiting area, corridor, 1 No. Amu B.M.U office, Accountant's office, Safeguard's office, registry's office, technical team's pool office, boardroom, kitchenette, gents' washroom with an airlock, 1 no PWD toilet, 1 no gents' toilet, 2 No. Urinals and 2 No. wash hand basins, ladies' washroom with an airlock, 1 no PWD toilet, 1 no ladies' toilets and a 2no. wash hand basins, lactating room with a kitchenette, 1 no toilet, 1 no shower and 1 no. wash hand basing, exit area with 2no exit ramps and 2 no. stairs
First Floor	Corridor, 2 no. staircase, access ramp, CPC's office with a washroom comprised of 1 no. shower, 1 no. toilet and 1 no. wash hand basin, CEC'S secretary's office, CO'S secretary's office, waiting area, species preservation room, 1 no pool office, Procurement's office with 1 No. store, 1 No. Technical Team's office, boardroom, Kitchenette, gents' washroom with an airlock, 1 no PWD toilet, 1No gents' toilet, 2 No. Urinals and 2 No. wash hand basins, ladies' washroom with an airlock, 1 no PWD toilet, 1No. ladies' toilets and a 2no. wash hand basins.
Second Floor	Corridor, 2 no. staircase, access ramp, Executive's office with and resting lounge and a washroom comprised of a walk-in closet, 1 No. shower, 1 no. toilet and 2 no. wash hand basin, secretary's office, waiting area, Chief of staff's office, 1 No. boardroom, Kitchenette, CCTV'S control room, server's room, gents' washroom with an airlock, 1 no PWD toilet, 1No. gents' toilet, 2 No. Urinals and 2 No. wash hand basins, ladies' washroom with an airlock, 1 No. PWD toilet, 1No. ladies' toilets and a 2no. wash hand basins.
Roof Slab	• Access staircase, Roof slab terrace, water tank area, solar panels area, solar power back-up room, Aluminum roofing on steel trusses and 1100mm high parapet wall

Proposed Finishes

The finishes are proposed to entail paving slabs for paving finishes while the external wall to have rendered finish, stone cladding, marine grade bituminous and exterior silicone paint to rendered surfaces. The internal wall finishes will also be plastered and painted with emulsion paint and with glazed ceramic wall tiles. The floor will have terrazzo paving, granite and ceramic floor tiles. The timber doors will be painted with clear varnish, window grilles are proposed to

have corrosion resistant marine metal paint and the ceiling will also be partially chipboard ceiling and partially plastered then all painted with emulsion paint. The roof terrace floor will be finished with concrete interlocking tiles, on bituminous membrane on water proofing floor screed and a precast concrete coping on parapet wall. Worktops will have granito tiles finish.

2.6.2. Proposed external works

The landscaping work which will including planting 300SM of grass, 100SM of ground covers, 100m of shrubs, 40 No. Assorted species of palm trees, 30 No. assorted species of indigenous trees and 6No. Standard swivel 68L stainless steel liter bins. The external works will also have civil works which will include a concrete paved driveway and parking of 1680sm, walk way of 250sm, storm water drains of 140m and 100m foul drain.

2.6.3. Electrical Design for the Proposed Mukowe Fisheries Office

Electrical Supply and Distribution System is essential as a vital means for the operation of the Mukowe Fisheries Office during normal utility power, utility power failure, and emergency operation periods. System Supply will be a 3-phase power supply of 11kV step down to 415/240Volts. The proposed electrical works that shall be provided to the proposed building will include:

- Main Power Distribution.
- Stand by Power Generating System.
- Solar supply system.
- General Lighting will be provided for all buildings.
- Interior and external, Landscape and Façade Lighting by Specialist Lighting Consultant
- General Emergency Lighting and Exit Signs will be provided.
- Lightning Protection System.
- Earthing and Equip-potential Bonding System.
- Telecommunication and Data System.
- Fire Detection and Alarm System
- Security and surveillance system

2.6.3.1. Electrical MV Intake and Solar System

Electricity will be provided by Kenya Power & Lighting Company Ltd at 11KV and will be distributed at 415/240V. A dedicated intake space at the office building will be provided for Kenya Power & Lighting Company MV equipment and will serve as Utility Company point of isolation at MV side. The Power intake point will connect the Kenya Power & Lighting Company supply, and the whole Development electrical system. The power intake space will be turn-over to Kenya Power & Lighting Company and the facility's maintenance staff for their exclusive access and maintenance. The power intake space will house one (1) no. distribution board with a 150/5A current transformer and its associated fittings, as well as 12 chamber control

panel. To ensure power supply reliability, there will also be a 80kw Grid-Tied solar system serving the fisheries headquarters with 160 No. 72- cell 575W Monocrystalline Solar Modules, Efficiency 80%, Cell Specific Safety - Class II, Application Class A, Life time - 25Years, Guarantee - 10Years No. 70 Rated Current (lm) 8.8A Rated voltage (Vm) 17,5v, Cell Efficiency - 15.0% and 25KWh Lithium Battery Pack Smart Stirng Energy Storage System (ESS) including a smart Rack Controller. Max Charging & Discharge power: 25kW, IP65, Class A EMC Protection Rating, Type II DC Lightning Protection. Smart Rack efficiency: +98.5%.

2.6.3.2. Medium Voltage Distribution System

Kenya Power & Lighting Company will provide 11 kV electricity supply to the site from Existing Utility 11kV Substations. The proposed LV rooms will be located on the Ground Floor of each facility. The 11kV cables will run from the nearest utility infrastructure manhole just outside the plot boundary to the Utility Company MV room. The exact location of the 11kV supply point or nearest infrastructure manhole shall be consulted to Kenya Power and Lighting Company.

2.6.3.3. Power Supply

Low Voltage distribution for major mechanical and services plants will be provided using a respective Sub-Main Distribution Board/s, Motor Control centre/s, Local Motor Control Panel/s, Distribution Board/s, and feeder/s emanating from respective Low Voltage Switchboard. All major plants will be sub-metered via an electronic digital meter connected to Building Management System for history, event recording, and monitoring. The Electrical Board supplying power will be located near the equipment or within the nearest electrical room. The entire building as a whole will be metered in bulk at the secondary of the dedicated transformer. Utility Company electricity consumption bulk meter is expected to be at the **11kV** voltage. The bulk meter will be located in the main LV space

2.6.3.4. Main Switchboard

A dedicated set of LV switchboards (MDB) will be provided for the building. The LV switchboard will be located in the main LV rooms. The Low Voltage switchboard (MDB) will be Form 4, Type 6, free-standing, type-tested, fully certified with a minimum fault capacity of 50kA for 1 sec, and fully rated to operate at 50ºC. The Low Voltage Switch Board will comprise but not limited to: The main incoming ACB from utility power and the main incoming ACB from the emergency supply will be electrically and mechanically interlocked and will serve as the Automatic Transfer Switch (ATS) to avoid parallel supply coming from utility and emergency supply at the same time. Where spare capacity permits, a minimum of 20% spare switchgear space will be provided for all low voltage switch boards.

2.6.3.5. Power Factor Correction

Every installation shall have a power factor within the range of 0.9 lagging to unity. The installation of suitable correction equipment may improve a lagging power factor of less than

0.9. Where a capacitor is installed for power factor correction, it must be provided with a means for its automatic prompt discharge immediately after the supply is disconnected. Power factor correction will be provided at each LV Main Switchboard.

2.6.3.6. Automatic Voltage Regulator (AVR)

A-line Automatic Voltage Regulator (AVR) to compensate voltage variance and ensure safe operation of the electrical system has been provided. AVR shall be an industrial type with a rectifier/ filter circuit to ensure a clean power supply to the electrical system. The AVR will be provided adjacent to each Main LV switchboard to automatically mitigate and improved any voltage variation before entering the building electrical system

2.6.3.7. Final Circuit Distribution Board (DB)

Each Floor will have a number of final circuit distribution boards. All distribution boards will be at least three (3) sections. Each section will be provided with appropriate Earth Leakage Circuit Breaker protection in accordance with Local Authority requirements. It will also include the main isolation switch, with outgoing circuits protected by miniature circuit breakers. Distribution boards will be metal-clad type, complete with a lockable hinged front cover. Distribution boards within the front of house areas will be located within dedicated lockable enclosures or flush into the wall. Distribution boards in plant spaces, back of the house, and service areas will be surface mounted within plant room or dedicated electrical rooms.

2.6.3.8. Lighting

General lighting for public areas such as staircases, corridors, reception and waiting areas, carparks, and staff circulation areas will be provided with LED luminaries for energy-saving purposes and supplied with solar PV. All luminaries in all potentially wet areas and exterior installation shall be IP55 minimum. Lighting for the office buildings will take into consideration both functional and aesthetic aspects. Lighting System for spaces and other Front of Building Areas will be designed in collaboration with the specialist and interior designer. Lighting control, in general, will be a Centralized Automatic Lighting Control System using workstation computers, control module, dimmer modules, gateways, user interface, motion and occupancy detectors, etc.

2.6.3.9. Lightning Protection System

The Lightning Protection System will utilize the steel reinforcement in concrete structures as down conductors. Exposed horizontal copper tapes will be provided at roof levels around all roof parapets, and earth electrodes at ground level will be designed. Lightning protection system shall be designed in accordance with the BS EN 62035.

2.6.3.10. Fire Detection and voice evacuation System

The buildings will be provided with a complete fire alarm system designed and installed in accordance with the NFPA-72 and local Authority Having Jurisdiction (Lamu County

Government). The whole building will have about Fire alarm and detection system points, including the smoke detectors, the break glasses, the washers, and the sounders. These devices will be placed at strategic locations such as corridors, entrances, and exit areas where they can be easily accessed in the event of a fire. Each alternate floor of every building in the office will have a Fire Alarm Repeater Panel (FARP).

2.6.4. Mechanical Design for the Proposed Mukowe Fisheries office

2.6.4.1. Domestic Water Supply

Water supply will be by gravity from holding tank at roof level. Water will be stored in the UpVC water tank at ground level, including both shallow well and municipal water. Distribution will be via a transfer pump to the UpVC roof water tanks located on the Roof Floors of buildings. There will be no hot water provision for toilets, office spaces.

2.6.4.2. Rain/Storm Water Drainage

All building roof drainage will be collected and piped to the storm water drainage system and collected in 2 No. tanks for onsite use for washing and landscaping. This will be so because the quality of the water may not be good. Surface running storm water will be collected and directed to storm water utilities of road drainage and channels. In view of potential flooding effects on the plot, the drainage system has been designed as indicated in the civil engineer's design detail to manage surface water flows.

2.6.4.3. Plumbing and drainage fittings

i. **PP-R Pipes:** Due to the light-weight nature, chemical inert, corrosion, scaling and erosion resistant nature of PP-R pipe, they are easy to install, durable and will not react with water or dissolved chemicals in water. Therefore, these pipes will be used instead of copper and many plastic pipes which will not leach harmful chemicals to the water supply in buildings for human consumption.
ii. **Pipes (uPVC Pipes):** Due to the resistance of uPVC pipes to acids and sulphates, this material will be used instead of concrete pipes for ND not exceeding 250 mm in the sewer network. uPVC pipes will also be used for diameters exceeding 200 mm for locations where jointed concrete pipes are unsuitable, such as embankments which are likely to settle, or where very steep gradients result in high velocity and possible pipe erosion, or where water logged areas have to be traversed and concrete pipes become unsuitable because of their porosity.
iii. **Manholes:** There shall be 17 No Manholes size 600 x 450mm and averaging 750mm deep constructed in 100mm thick concrete base(1:3:6), approved 150mm block sides rendered all around in cement and sand (1:4). They shall have an approved heavy-duty Fiber Reinforced Plastic cover and frame, Including all necessary excavations, disposal and form work.
iv. **Gulley traps:** There shall be 8 No 200 x 200 x 300mm deep gulley traps complete with 400 x 400 x 10mm thick mild steel grating welded to 10mm thick mild steel frame at

30mm centers, hot galvanized and Sand blasting, with 2 pack epoxy zinc phosphate primer and painted with three coats of marine grade gloss oil paint to approval, 150mm thick plastered masonry walls, class 25/20 concrete base, concrete cover too receive grating and all surface finishes.

2.6.4.4. Waste Water Treatment Plant

Biodigester and Soak Pit- There shall be 1 No. reinforced concrete biodigester of accommodating 1,000 users to treat toilet waste/sewage through an anaerobic process where microorganisms break down the organic matter in the sewage into a nutrient-rich digestate which can be used as fertilizer for agricultural purposes and effluent treated water. The treated water will soak away in a soak pit of 1.2m internal diameter with 150mm thick perforated stone walling and 100mm thick concrete base class 25/20 and 150mm thick RC slab class 25/20; including 600 x 450mm heavy duty manhole cover and frame and 200mm diameter crushed stone chips filling. The biodigester has a great advantage over the conventional septic tank as it covers a smaller land footprint, and it using an anaerobic process to treat waste, it emits less odor, provides a cleaner effluent and a more nutrient rich digestate.

2.6.4.5. Air Conduiting units

The air conditioning units include the following; -

Indoor units - 24000btu/ hr (7.5KW) hi- wall split unit air conditioner set inclusive of wireless remote and wall mounted outdoor unit complete with all the support brackets and anti- vibration mountings. The unit shall operate on a non- ozone depleting refrigerant. The entire system should be able to restart automatically within three minutes after failure. – **1 No.**

Condensing/Outdoor units - 24000btu/ hr (7.5KW) ceiling cassette split unit air conditioner set inclusive of wireless remote and wall mounted outdoor unit complete with all the support brackets and anti- vibration mountings. The unit shall operate on a non- ozone depleting refrigerant. The entire system should be able to restart automatically within three minutes after failure. – **1 No.**

2.7. Project Resources and By Products

The following are the main resource input in the proposed project but not limited to**:**

i. **Land:** Land is critical for the location of the proposed fisheries headquarters, and has been provided by Lamu County Government at Mukowe, Lamu County. The land title is as attached in Annex II.

ii. **Water:** Water supply shall be from LAWASCO whose main source is the existing mbele mbele borehole and rainwater harvesting, which will be used for construction of the building. The design has also considered for rain water harvesting and grey water treatment by a biodigester and soak pit is proposed and the water shall be used for landscaping purposes.

iii. **Labour:** Different forms of labour, both skilled and unskilled, will be utilized. It is a requirement under KEMFSED project that the contractor provides long term contracts to the workers and that child labour in any form shall not be allowed on site or activities associated with the project. This shall apply to the sub-contractors who will be engaged on proposed component activities.

iv. **Construction Materials:** Cement, Sand, Ballast, murram, reinforcement steel bars, Coral Blocks, Aluminum Windows and Doors, wooded Doors, Emulsion Paint, Textured Paint, Granitto and ceramic Floor Tiles, PPR and PVC pipes, Ceramic Sanitary Fittings, Gravel, Water, Soil, Electrical wires, gadgets and equipment, Steel (reinforcement, casement, wiring, and standard fittings), Glass, PVS Material: (tiles, PVC pipes, conduits, and fittings), Concrete and paving, Paints and vanishes, Plant materials –grass and trees seedlings for landscaping. Sand, ballast and murram will be sourced from local commercial quarries while other inputs will be purchased from local hardware stores.

v. **Electrical Works:** Electrical work during construction of the fisheries office will include installation of electrical gadgets and appliances including conduit cables, lighting apparatus, bulb, sockets, etc. In addition, there will be other activities involving the use of electricity, such as welding and metal cutting, to attain the desired results. The building will also have solar panels that shall supply 80Kw to the fisheries headquarters' facilities. A qualified and experienced professional will carry out all the electrical works.

vi. **Plumbing:** Installation of pipe-work for water supply will use PvC pipes and distribution will be carried out within the component layout and associated facilities. In addition, pipe work will be done to connect grey water from the headquarters' buildings to a biodigester and to drain storm water from the rooftop into rain water harvesting facilities. Plumbing activities will include plastic cutting, the use of adhesive and wall drilling, among others.

vii. **The proposed Sanitary fittings of the facilities will be as follows;**

- Close Couple water closet suite in approved color comprising of W.C. bowl,'p'or's' trap connector, heavy duty matching plastic seat and cover with metal top fixed to (chrome plated) hinges and secured to floor or wall and complete with horizontal outlet to BS 3402 with 6-liter valveless Ceramic cistern and fittings including siphon,15mm diameter side inlet ball valves,20mm diameter side overflow, plastic flush bend, inlet connection, and chrome-plated lever. **- 14 NO.**
- Wash Hand Basin 470mm by 470mm by 170mm counter top with one tap hole and chain stay hole,32 mm diameter chrome-plated pop up chain waste and fittings, approved first quality plastic bottle trap(32mm bottle trap) with 75mm seal.The basin to be supplied and installed complete with 15mm diameter heavy duty chrome plated -Brass Basin Tap **– 12 NO.**
- Semi recessed toilet roll holder in approved Vitreous of size 165 x 165mm in approved color. **– 15 NO.**

- Wall mounted soap dispenser with a capacity of about 1.5 Liter and having a press action soap release mechanism complete with fixing screws including allowing for initial soap supply as approved. The soap dispenser shall be size125x100x290mm high and shall be as approved. **– 14 NO.**
- 610 X 610 X 6mm thick polished plate silver backed with beveled edges mirror fixed with clear silicon to 100 x 25mm thick wrot mahogany molded framing in 4 labors plugged to wall using 4No. Wall plugs with 75mm long stainless-steel screws, painted in three coats polyurethane varnish all to approval. **– 7 NO.**
- 15mm diameter heavy duty bib tap or other equal and to approved catalogue. **– 5 NO.**
- 15mm diameter x 300mm long flexible connectors complete with Integral brass angle valve for connecting the Sanitary fitting to water supply, to be as approved. **– 45NO.**
- Robe hook in vitreous china mounted to concealed screw to wall wedges as approved. **– 15 NO.**
- Concealed shower fitting consisting of 25mm diameter x 2500mm long PPR riser pipe for showers,25mm diameter Stainless-Steel cold-water swivel/adjustable shower rose, Carina handle and 'Cobra' Stop Cock. **– 1 NO.**
- Wheel chair accessible W.C facility Comprising of the following:

-Close coupled W.C with 7.5-liter cistern with bottom inlet and overflow. The bowl shall e of size 375 x 560 x 420mm high. The bowl and cistern shall be manufactured from vitreous china complying with B.S 3402.The unit shall be complete with valveless cistern fitting including syphon,15mm side inlet ball valve,20mm diameter side overflow, plastic flush bend, inlet connector and reversible metallic chrome plated cistern lever. There shall also be a heavy-duty seat (25mm high) and cover with chrome plated metal hinges, toilet roll holder,900 x 450 x 6mm thick mirror and Robe hook

-Semi-recessed wall mounted W.H.B of size 600 x 500 x 545mm high with flexible connectors to water taps. The basin shall be manufactured from vitreous china complying with B.S 3402.It shall have one L/H tap hole with 15mm chrome plated lever action pillar tap, chrome plated waste, first quality bottle trap, pedestal and wall fixing bolts. 4 SET (iii) Hinged support rail with toilet roll holder 770mm long manufactured in nylon coated aluminum and mounted on a wall fixing plate size 230x100mm,4No. 600mm grab rails with covered wall plates. The Disabled set shall be as approved. **– 6 SETS**

- Urinal system comprising of approved 1No. Ceramic urinal bowl and division complete with doomed waste fitting, sparge and spreader including concealed Push Button-Type Urinal Flush Valve for 3/4" top spud urinals and accessories for proper functioning of the set. **– 3 SET.**
- Arabic Shattaf Bidet spray c/w tube and head and fixing to wall. – **16 NO.**
- Semi recessed built in soap dish in vitreous china of size 150x150mm in approved color as approved. **– 15 NO.**
- Automatic Hand Drier in approved color operating on infra-red automatic sensing system with heating element, safety cut-out complete with a 30-seconds safety timer, plastic rawl

plugs and fixing screws. The hand drier to have a heating capacity of 3.1Kw and performance flow rate of 3.82 Liters/Min and to be of size270x264x143mm deep. It shall have anoise level of below72.5dBA at 1.5m. – **12 No.**

- Chrome plated 20mm diameter x 800mm long approved towel rail and brackets as one piece, plugged and screwed into the wall. **– 1 NO.**
- 16SWG Double Bowl, single Drainer, stainless steel (Grade 316) kitchen sink suitable for mounting on counter of size 1200x600mm.The bowl size to be 450x420x 300mm deep complete with chrome plated 40mm diameter waste fittings, plugs, chain stays, overflow including 1No.15mm diameter heavy duty wall mount stainless steel bib tap. **– 5 NO.**

viii. Fire Fighting System; The following firefighting equipment will be provided; -

Hose reels

-5 No. Non recessed swinging type hose reel complete with 30 meters of 20mm internal diameter rubber fire hose with nylon spray/jet shut off nozzle, conforming to BS 5274; all wire brushed, cleaned, and painted complete with installation with one coat of red oxide primer, undercoat, and gloss coat to Architects color including banding and color coding to British Standard.

Portable Fire Extinguishers

Portable fire extinguishers will be provided in accordance with NFPA 10; Standards for Portable Fire Extinguishers. Extinguishers will be provided at all hazard areas such as kitchens, electrical rooms, garbage rooms, and generators. The Extinguisher types to be provided are:

- Carbon Dioxide gas
- Water Carbon dioxide
- Dry Chemical

In rooms protected by FM-200 type, ABC and CO2 fire extinguishers will be provided in accordance with NFPA requirements.

Signages and Fire exits

There will be signages of fire hose Reel, fire exits and fire instructions all as described in the particular specifications and to the Project Engineers' Approval. The building has a fire escape ladder on the top floors of the building, and 2 No fire escape points at the ground floor of the building which will be the at the entry lobby and exit of the building where people can safely evacuate in the event of a fire.

Fire assembly points

There will be 1 No. Fire assembly points next to the parking area and pedestrian footpath to provide a safe and organized location for people to evacuate to, and to ensure that everyone is accounted for in the event of fire. All this is shown in the site plans.

2.8. Project Activities, Material and Waste during Construction

Table 2-2 highlights anticipated project activities, materials and source as well as anticipate waste that shall be generated during the implementation of project activities.

Table 2-2: Proposed Construction Material, equipment and Waste

Element	Proposed Activities	Materials	Equipment's	Expected waste	Sources of materials
Foundation	• Excavation of trenches and column bases. • Foundation walling • Hardcore filling • Murram blinding • Antitermite treatment • Damp proofing course • Concrete works (Blinding, footing, column bases and columns, ground beam, floor slab)	• Coral stone walling • Reinforcement bars • BRC • Hardcore • Antitermite • Murram • Hardcore • DPC and DPM • Cement • Ballast • Formwork • water	• Excavators • Tippers • Jembes • Mattock • Fork jembe • Spades • Concrete mixer • Poker vibrator • PPEs • Drum vibrator • Pneumatic hammer (25kg)	Debris, waste, Dust, Soil	Quarry, Hardware Manufactures and general suppliers.
Reinforced Superstructure (Beams, Columns and Floor Slabs etc.)	• Formwork placing • Steel fixing • Concreting • Curing of concrete	• Cement • Ballast • Formwork • Reinforcement bars • DPM	• Spades • Concrete mixer • Concrete pump • Poker vibrator • Wheelbarrows • PPEs • Scaffolding • Hoists • 60m3/hr Concrete Pump	Dust, Concrete wastes and steel debris.	Quarry, Hardware Manufactures and general suppliers.
Walling and partitions	• Coral Block Walling	• Coral stones • Sand	• Levers. • Drills	Dust, Concrete	Quarry, Hardwares,

		• Cement • Hoop Iron • Aluminum frame sections	• Grinder • Pickups 3 tons • Tippers 10 tons • Water pump 1000lts/hr	wastes and steel debris.	Manufactures and Suppliers
Windows	• Windows fitting • Burglar proofing • Painting • Window Blinds	• Aluminum windows • 6mm Glazing • Steel Burglarproof • Window Blinds	• Drills • Grinder • Paint brush • Portable Electrical welding	Dust, Metal debris, Paint.	Hardware Manufactures and general suppliers.
Doors	• Door fittings • Painting • Ironmongery	• Aluminum doors • Hardwood timber doors • Ironmongery	• Drills • Grinder • Paint brush • Portable Electrical welding	Dust, timber Metal debris, Paint.	Hardware Manufactures and general suppliers.
Finishes	• Ceiling finishes	• Sand • Cement • Lime • Paint • Steel sections • Cornice	• Drills • Grinder • Paint brush • Trowel • Spades • Scaffold	Dust, Metal debris, Paint.	Hardware Manufactures and general suppliers.
	• Wall finishes	• Sand • Cement • Lime • Ceramic Wall tiles • Stone cladding • Paint	• Drills • Grinder • Paint brush • Trowel • Scaffold • Tile cutter	Dust, Metal debris, Paint.	Hardware Manufactures and general suppliers.
	• Floor finishes	• Sand • Cement • Granitto Floor tiles • Non-Slip ceramic tiles	• Drills • Grinder • Trowel • Scaffold • Tile cutter Drills • Grinder • Trowel • Scaffold • Tile cutter	Dust, Metal debris, Paint.	Hardware Manufactures and general suppliers.
Roofing	• Slab casting	• High yield steel bars to Bs 4461	• Human labour, • Concrete	Dust, glass, bituminous and Metal	• Quarry in case of clay tiles

		• Cement • Bituminous water proofing • Interlocking clay tiles	mixing machine, • Spades, • Poker Vibrator • Drills • Grinder • Trowel • Scaffold • Tile cutter	debris, Paint.	• Sand and Ballast, Hardware in cases of roofing sheets, bituminous membrane, steel and Cement
Mechanical Installations	• Sanitary Fittings Installations • Internal Plumbing works • Rainwater harvesting facilities • Drainage works • Firefighting • Air-conditioning • Waste water treatment plants	• Sanitary Fittings (Water Closet, Wash Hand Basis, Kitchen Sinks, Mirrors, Urinals, Soap Dispensers etc.) • PPR and UPVC plumbing and drainage pipes and extra over. • Firefighting systems (Hose reel system, fire extinguishers • Submersible pumps, water tanks • Air-conditioning units • Moving Bed Biofilm Reactor (MBBR) and Bio- Reactor DAF-Dissolved Air Floatation-system	• Drills • Grinder • etc.	Dust, Metal and Plastic debris, Soil debris.	Hardware Manufactures and general suppliers.
Electrical Installations	• Lighting points, fitting and	• UPVC conduits • Copper Cables	• Drills • Grinder • Snake wire	Dust, Metal and Plastic debris, Soil	Hardware Manufactures and general

	fixtures • Power points fittings and fixture • Power Supply and Distribution • Solar Installation	• Lighting and Power Fittings and Fixtures (Sockets, Switches, LED lights) • Distribution Board • Solar panels & Batteries.	• etc.	debris.	suppliers.
Parking	• Site clearance and excavation • Hardcore filling • Murram blinding • Cabro paving and sanding • Roofing	• Antitermite • Murram dust • Hardcore • Cabro Blocks • Kerbs • Cement • Sand • Roof structure	• Compactor • Drills • Grinder • etc	• Excavated materials, • Steel and Cabro Debris.	Quarry, Hardware Manufactures and general suppliers.
	•	•		•	•

2.9. Sub-Project Activities during Operation

There are several activities that shall be implemented during the operation of the office building that will include but not limited to; Cleaning of the building, repair and maintenance of the building components and facilities, maintaining the lawn, watering the lawn and vegetation within the compound, ventilation and air conditioning, Human waste management, solid waste management, serving clients, cooking and use of fire for different purposes, power consumption, using of electronic gadgets, water consumption and interaction among the users of the building among others. The activities shall have different impacts and risks during the operation of the building.

2.10. Sub-Project Alternatives

2.10.1. No Action Option

The **"No project"** alternative represents the potential scenario if the construction of the proposed sub-project works is not implemented in the project area. Under this alternative, no construction activities of the proposed Lamu County fisheries headquarters at Mokowe will be done in order to influence the local physical environment, biological, socio-economic, land use patterns and no investment in enhancing fisheries management in the County shall be done. This option is suitable from an environmental and social management perspective with no negative impacts or changes to the status quo but not good for social-economic purposes within the project area. The

opportunity cost incurred will imply that the challenges affecting fisheries-related services delivery in the County shall continue. Of major concern is the inadequate space for the fisheries officers and the CPIU staff to operate efficiently. The proposed project is therefore anticipated to address these challenges by improving the existing situation by centralizing the administration of key officers in the blue economy, minimize operating costs for the clients and the department of fisheries, maximize employee satisfaction and improve work productivity as well as create harmony among the CPIU team to enhance synergy and efficiency if proposed construction of the sub-project is implemented.

2.10.2. Project Development Option

The construction of the proposed Lamu county fisheries headquarters is anticipated to bring services closer to fishers, enhance rapid easy response to fisheries related issues, improve the working conditions of the officers and enhances marine fisheries management and governance in the county, contribute towards the counties objective of improving the extension services to fish farmers and to consolidate all CPIU team members under one roof to improve staff productivity. The implementation of the sub-project is anticipated to enhance: Development of fisheries infrastructure in the county, improved management of priority fisheries and mariculture in Lamu county, improving local communities' livelihoods, improved service delivery to the fish farmers, improving the productivity of county fisheries' workers, improving extension services among the farmers, landscaping, increase cash flow in the area for construction materials, jobs opportunities and contribution to the national economic development through the blue economy.

2.10.3. Alternative Site Selection Option

Relocation to a different site is another option available for consideration, but currently, the proponent does not have an alternative site since the proposed point is on land earmarked for construction of Fisheries offices. Land issues in Lamu County remains a challenge to the land office as most land parcels remains unregistered yet most individuals claim ownership. The physical plan for Mokowe area showed that zoning of the land has been done and the site is allotted for county government offices. There are no environmental or social concerns with the current proposed site that would necessitate relocation. Considering the above concerns and assessment of the current proposed site, relocation of the project is not a viable option as most land parcels remain unregistered. Besides, it is not easy to find a similarly suitable site to accommodate the proposed development. This is because the site is already developed and has connection to most social amenities, which could not be a guarantee if an alternative plot is sought.

2.10.4. Alternative Technologies

The application of the best technology is important in reducing the impacts of the project to the environment. Therefore, the project design team took cognizance of appropriate technology existing on the market in the proposed project facilities and activities. Sun shading around the

windows to reduce heating as well as use of large sizes window, energy saving appliances, use of renewable energy, use of recyclable construction material for instance metallic doors instead of wood, use of water saving appliances and cleaning of grey water through a bio-digester are some of the technologies that have been incorporated in the design of the project to improve green building concepts and climate change adaptations.

2.11. Project cost

The estimated cost for constructing the proposed Mukowe Fisheries office in Lamu is about **KShs. 125,116,200.00.** This cost include preliminaries, office building works, electrical works, mechanical works, builder's work in connection to specialized works, external works, day works, environmental management and social monitoring costs, taxes and a factor on inflation and contingencies for the proposed structures. The breakdown of the project cost is as shown in Table 2-3 The proposed project shall be implemented within a period of 12 month with an addition of 6 month for defect liability period.

Table 2-3: Project Cost for Proposed Lamu County Fisheries Office

ITEM	DESCRIPTION	AMOUNT
1.	Particular Preliminaries	1,000,000.00
2.	General Preliminaries	7,110,000.00
3.	Environment and Social Management Plan	3,520,000.00
4.	Office Building	36,451,000.00
5.	Foul Water Drainage	3,369,600.00
6.	Driveway and Parking	40,716,900.00
7.	Landscaping Works	1,560,000.00
8.	Electrical Works	1,356,300.00
9.	Mechanical Works	12,811,300.00
10.	Day Works	309,340.00
11.	Provisional Sums	16,000,000.00
	Grand Total	**125,116,200.00**

3. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

3.1. Chapter Overview

The chapter highlights significant policy, legal framework, international best practice and project implementation and operation institutional framework.

3.2. Project Policy Framework

The proposed construction activities of Lamu fisheries offices will need to comply with various policies and regulations in existence to safeguard the environment and the social fabric of the local communities. Input shall be required from different institutions both at the national and county governments as different policies and institutional interventions will be triggered at different phases of the proposed project. The main policies and institutional interventions triggered at different phases of the proposed project are highlighted in the subsections below.

The major laws and regulations include the Constitution of Kenya 2010, the Environment Management and Coordination Act (Cap 387), Environmental Impact Assessment and Audit (Amendment) Regulations (2019), The Public Health Act Cap 242, Revised Edition 2012 [1986], The Physical and Land Use Planning Act 2019, The Occupational Safety and Health Act Revised Edition 2020 [2007], The County Governments Act (2012), The Building Code (Adoptive by-laws) 1968, The National Environment Policy Session paper No. 10 of 2014, and the Environment and Land Court Act, among others. The proposed sub-project activities shall also be implemented in accordance with project documents

3.3. Policy Framework

Table 3-1 highlights the policies that shall be triggered during the proposed project's implementation and operation. There will be a need to ensure the proposed project activities are in tandem with the policies' requirements as noted in the table below.

Table 3-1: Relevant National Plans and Policies:

NO.	POLICY INSTRUMENT	KEY PROVISIONS	RELEVANCE OF POLICY TO THE PROJECT
1.	Kenya Vision 2030	The vision is a government development strategy to steer Kenya to a middle-income country by the year 2030. It is based on the three pillars of political, social, and economic advancement, and it aims to transform the economy and achieve sustainable growth. The vision recognizes the significance of public sector reform as a key	The construction of the proposed Lamu fisheries office building project enhances the objectives of the policy paper of reforming the fisheries, aquaculture, and blue economy sector to play its key role in the country's socio-economic development. The sub-project shall offer the people of Lamu County a chance to access service delivery by ensuring efficiency, quality,

		enabler. The sector was to be transformed by building and implementing service delivery systems that ensure efficiency, quality, speed, convenience, and dignity in service delivery as well as being globally competitive	speed, convenience, and dignity in service delivery with a global competitiveness
2.	Lamu County Integrated Development Plan 2018-2022	The CIDP acknowledges the significance of the fisheries sub-sector to the county economic development. The fisheries sub-sector is reported to contribute to over 70% of households' income in Lamu County with an estimated annual turnover of about 1.5billion. To further transform the fisheries sub-sector in the County for socio-economic development, several strategies have been proposed in the plan including; fisheries production and productivity, fisheries infrastructural development, product development and marketing, and fisheries extension and training.	The county is committed to invest more resources in the fisheries infrastructural development among which construction and refurbishment of offices was proposed. The current proposed development is in line with the proposals to increase the number of offices by constructing the fisheries headquarter in the county.
3.	National Climate Change Action Plan 2018-2022	The action plan aims to reduce the impact of climate change to the environment, livelihood and property, food and nutritional security, accessibility to natural resources, health, sanitation and human settlement	KEMFSED project takes deliberate measures to incorporate climate change adaptation measures into the sub-project design. The design of the project has incorporated concepts of promoting water efficiency, climate proof coastal infrastructure and increased use of renewable energy. The plan has been used to guide the design by providing for green building concepts, efficient waste water management.
4.	The National Environment Policy- Sessional paper No. 10 of 2014	The policy provides comprehensive strategies for government action regarding the quality of the environment and development.	The project has complied with the policy by integration of environmental sustainability principles during implementation, operation, and decommission stages of the proposed Lamu County

			fisheries headquarter offices building project at Mokowe within the Lamu County headquarters.
5.	National Gender and Development Policy (2000)	The overall objective of the Gender and Development Policy is to facilitate the mainstreaming of the needs and concerns of men and women in all areas in the development process in the country. The construction sector plays a key role in socio-economic development.	Deliberate and affirmative action to encourage all genders to contribute to the proposed sub-project activities has been inculcated in the ESMP. The construction of Lamu County Fisheries Headquarter at Mokowe provides an opportunity for the engendering of the construction sector as a means towards poverty reduction and inclusive socio-economic development.
6.	National Policy for Prevention and Response to Gender Based Violence 2014.	The main objective of the policy is to accelerate the elimination of all forms of gender-based violence in Kenya.	The proposed project shall comply with the policy through the contractor workers signing a code of conduct committing not to engage in any form of GBV whether at the work place or in the community. The project shall also ensure the workers receive training on sensitization and awareness on GBV and on Sexual Exploitations and Abuse SEA
7.	National Land Policy, Sessional Paper No. 3 of 2009.	To provide an overall framework required to address the critical issues of land administration, land access, land use planning, restitution of historical injustices, environmental degradation, conflicts, unplanned proliferation of informal urban settlements, outdated legal framework, institutional framework and information management	The project shall ensure sustainable utilization of land, particularly public land which has been set aside for construction of the proposed project facilities within the project area. The land at Lamu County headquarters is owned by the county and the title for the land is available.
8.	Kenya National Youth Policy 2019; Empowered Youth for Sustainable Development	The policy recognizes the significance of the role of youth in social-economic and political development of the nation and therefore, the policy takes deliberate measures to promote youth empowerment and participation to harness their potential for	The current development process took into consideration the objective of the policy. The youth were involved in community consultation process and making decisions on the project. The contractor will undertake to

	productive engagement at local, county and national level.	consider employment of local youth during the construction phase. The department of fisheries and blue economy will give priority to local youth for employment during the operation phase when vacancies arise.

3.4. Legal Framework

During the design of the proposed Lamu County fisheries headquarters office, the ESIA team took cognizance of the legislations that will govern the proposed sub-project activities during implementation, operation and decommissioning phases. Table 3-2 highlights the general legal framework for the coordination of project activities at all phases of the sub-project.

Table 3-2: Legal Framework

NO.	LEGAL INSTRUMENT	PROVISIONS	APPLICATION OF REGULATIONS TO THE PROJECT
1.	Constitution of Kenya, 2010	The constitution outlines principles of environmental and social sustainability. The constitution in article 42 emphasizes the need for a clean and healthy environment by managing substances that may pollute the environment or cause harm to human health. The right to a clean environment is further enforced by article 70. The constitution in article 54(c) requires ensuring people with disabilities have reasonable access to all places, public transport, and information.	The construction, operation and decommissioning of Lamu County fisheries headquarter offices shall uphold environmental and social considerations through the implementation of the ESMP and ESMoP. The focus shall be on ensuring a clean and healthy environment for all as well as taking into consideration the requirements for people with special needs. The requirements for people with special needs has been considered in the design of the building
2.	The Fisheries Management and Development Act No. 35 of 2016	The main aim of the Act is to promote conservation, management and development of fisheries and other aquatic resources to enhance the livelihood of the communities dependent on fishing. This is to be achieved through establishment of	KEMFSED project is as an effort of the National government to mobilize resources partly to develop county infrastructures and the county government is expected

		Kenya Fisheries Service. The act also highlights the functions of the two levels of governance, of significance to this project is the function of SDBE&F to develop fisheries related infrastructure and resource mobilization for conservation management of the fisheries development. And the function of the county government of managing of fisheries related infrastructure.	to manage the infrastructure as indicated in the institutional framework of the proposed sub-project. The development of the county fisheries headquarter office is anticipated to enhance the management and governance of fisheries resources.
Building and Construction			
3.	The National Construction Authority Act No. 41 Revised Edition 2012 [2011]	The Act establishes the National Construction Authority (NCA) which is mandated among other functions to; Oversee the construction industry and coordinate its development; Promote and stimulate the development; improvement and expansion of the construction industry; Prescribe the qualification or other attributes required for registration of contractors; promote and ensure quality assurance in the construction industry; encourage the standardization and improvement of construction techniques and materials; Accredit and certify skilled construction workers and construction sites supervisors and development and publish a code of conduct for the construction industry.	The Act shall be applied in the management of the construction site of the proposed sub-project by ensure qualified site personnel safety and construction quality standards are adhered.
4.	The National Construction Authority regulation 2014	The Regulations requires that any contractor or construction workers working on any construction site in Kenya be registered and accredited by the National Construction Authority. Such persons or firms shall annually renew the certificate of registration according to the provisions of the Act. Other than registration of construction workers and contractors, the Act requires that all construction works, contracts or projects either in the public or private sector be registered with the authority. The owner of	The regulations requirements shall guide on the qualification of contractors and construction workers that shall be allowed to work on site for the proposed Lamu fisheries office block. NCA shall issue approvals regarding site activities.

		such construction sites or contracts shall designate a contact person to liaise with the Authority. And that all construction workers and supervisors be accredited and certified by the Authority.	
5.	The Draft National Building Code 2020	The main objective of the National Building Code is to promote order and safety in construction works and the health and safety of persons in or about construction works. The code provides for the design, construction, operation, inspection, and maintenance of buildings. Sets standards for building materials, products, elements, systems, and services. Provides standards for infrastructure services sets standards for the operations and works at construction sites provides for disaster management at construction sites and Provides for the safety and security of building users and occupants.	The building codes shall guide the contractor, project supervising engineer, and Lamu CPIU on the expectations of NCA on quality standards regarding construction, operation, and decommissioning activities of the proposed office sub-project.
Environment and Natural Resources Management			
6.	Environmental Management and Coordination Act, EMCA CAP 387	It sets the legal and institutional framework for the management of environmental issues in the country.	The project triggers the Act to assist in managing and coordinating potential environmental issues likely to emanate from proposed project activities during implementation, operation, and decommissioning. The Act shall guide the relationship between SDBE&F, Lamu CPIU, Contractor and NEMA on matters regarding the environment and public concern. This ESIA report is required by the Act and must be approved before works can commence
7.	The Environment	The Environmental Regulations (2003) are	The Regulations guided the

	(Impact Assessment and Audit) Regulations, 2003	ingrained under section 147 of the EMCA (Cap 387). The regulations provide the framework for carrying out EIAs and EAs in Kenya. This EIA project report has been conducted in conformity with these regulations and EMCA, Cap 387	development of the ESIA report and shall also come in hand to ensure preparation of annual environmental and social audit reporting during operation as well as decommissioning of the project
8.	EMCA Waste Management Regulations 2006	Provide for management of different forms of waste streams in the country, given that the project activities during implementation, operation, and decommissioning will result in waste generation.	An increase in waste generation is anticipated during project implementation, and the regulations will come in hand to guide its proper management and disposal. Relevant regulation requirements has been captured in the ESMP
9.	EMCA Air quality regulations of 2014	The regulation prohibits emissions of air pollutants exceeding permissible levels from controlled areas, stationery sources, mobile sources, occupational exposure, material handling, demolition areas, and waste incineration, open burning of hazardous waste, or from cross-border. The regulation also requires that all emissions be licensed.	The proposed sub-project is anticipated to compromise air quality within the proposed project area during construction, operation and decommissioning and therefore the regulations shall come in hand to guide air quality management standards.
10.	EMCA Noise and Excessive Vibration Pollution Control Regulations, 2009	The regulations prohibit loud, unreasonable, unnecessary, or unusual noise which annoys, disturbs, injures, or endangers the comfort, repose, health, or safety of others and the environment. Occupational noise and vibration need to be controlled during the project implementation process. The main sources of noise shall be due to vehicle movement that will be involved in the construction of the project, particularly during the transportation of materials to the site.	The proposed sub-project is anticipated to have an impact on ambient noise levels within the proposed project area during construction, operation and decommissioning and therefore the regulations shall come in hand to guide noise level management standards. Some of the requirements of the regulations have been incorporated in the project ESMP
11.	EMCA Water Quality Regulations, 2006	Water quality regulations lay down the standards of domestic water and waste water. The regulations are meant for pollution control and prevention and provide for the protection of water	The regulations shall come in hand to ensure that water supplied to the building meet domestic water supply standards. The regulations shall

		sources.	also ensure that waste water produced from the building is impounded into a bio-digester. The quality of the water reused shall ensure that is free of pathogens.
12.	The Environment and Land Court Act, 2011	This is an Act of Parliament formulated to give effect to Article 162(2) (b) of the Constitution; to establish a superior court to hear and determine disputes relating to the environment and the use and occupation of, and title to, land, and to make provision for its jurisdiction functions and powers, and for connected purposes. In this regard, those affected by various development ventures that are considered harmful to the environment have structures in place to seek justice, and in so doing, the environment will be safeguarded at all times.	In the event of any environmental-related dispute between NEMA and project contractor, Lamu County CPIU or SDBE&F, the Act will be triggered in resolving the issues for any aggrieved party.
		Devolved Governance	
13.	County Government, Act 2012	The County Government Act provides local governance principles, guides the planning and development process, and community participation in the development process.	The Act will come in handy to reduce conflicts between project and county government physical planning priorities. The Act should be read together with the physical and land use planning Act, 2019 to guide on institutional management framework, land use planning being a devolved function. The statutory approvals for the proposed office building shall be acquired from Lamu County Government.
14.	The Physical and Land Use Planning Act, 2019	The Act provides for planning and controlling physical development in the country in general. The Act read together with the county government Act 2012 will assist in synchronizing the national, local, and project physical planning, controlling for any possible conflicts.	The Act shall also assist Lamu CPIU in planning for connection to social amenities such as sewerage services, power, or water services, based on the existing physical planning of the proposed project area. The sub-projects

			should also meet planning requirements of the area. The project shall be approved by the County Government of Lamu after meeting the requirements of the Act.
15.	Lamu County Public Participation Act, 2014.	An act of Lamu County Assembly to provide for the establishment of legal framework for facilitating public participation in county government policy processes and service delivery and for connected purposes.	The Act will ensure that stakeholder consultation is done and concerns incorporated in the designs of the sub-project and also during the operation phase.
		Labour Relations	
16.	Occupational Safety and Health Act, 2007	The Acts aim to ensure the safety, health, and welfare of persons at work and non-workers as well as cushion workers against loss of income or livelihood due to occupational accidents or diseases.	The Act shall be applied for the safety of workers and the general public to be ensured during project implementation, operation, and decommissioning phases. The site shall be registered under the Act as a work place at all phases of the sub-project before commencement of any activities. Relevant requirements of the Act have been incorporated in the ESMP
17.	Employment Act 2007	The main Objectives of the Act is to improve the working condition of employees and protecting their welfare as well as that of the employer	The Act shall be applied to protect workers against; discriminations, sexual harassment, forced labour, protection of wages, employment relations, settlement of disputes and protection of rights and duties in employment.
18.	Work Injury Benefits Act, (2007)	This provides compensation to employees for work-related injuries and diseases contracted in the course of employment.	Requirements of the Act will be applied to ensure that income for workers on the project is assured even where they are not able to work for some reasons related to working conditions while still under contract.
19.	Labour Relations Act 2012	The Act promotes sound labour relations through the protection and promotion of freedom of association, the encouragement of effective collective bargaining, and the	The Act shall apply to ensure that workers welfare is entrenched into the activities of the proposed sub-projects particularly at construction and decommissioning phases. The

		promotion of orderly and expeditious dispute settlement, conducive to social justice and economic development and connected purposes. The Act in Section II Part 6 provides for employees' freedom to associate; section 7 provides for the protection of rights of employees; Part 9 provides for adjudication of disputes, and Part 10 provides for the employees' protection to hold strikes lockouts.	workers to be allowed to form associations to air out their grievances. Some of the requirements have been captured in the ESMP. The contractor as required under the project will institute grievance redress mechanism where all grievances from workers or the general workers will be promptly addressed as means to improve the Lamu office sub-project implementation and operation.
		Public Health	
20.	Tobacco Control Act No 4 of 2007	Promote and protect the rights of non-smokers to live in a smoke-free environment.	Contractor to provide and label the designated smoking area. Same shall be done during operation by Lamu CPIU
21.	Public Health Act, 1986 (Cap 242 Revised edition 2012)	The Act addresses matters of sanitation, hygiene, pollution, and general environmental health and safety, which are directly related to cases of pollution and contamination of water sources, be it ground or surface. The management of waste water that shall be generated should be managed in a way that shall not cause any public nuisance.	The Act shall be applied to ensure that all sanitation systems of Lamu fisheries offices operation activities meet the requirements of the Act. Any food vendors to the workers during construction will also be expected to meet the requirements of the act.
		Cross Cutting Issues	
22.	The National Gender and Equality Commission Act 2011	The Act seeks to promote gender equality and prohibit any form of discrimination against any; women, men, persons with disabilities, the youth, children, the elderly, minorities, and marginalized communities.	That Act shall be triggered particularly during the project construction phase to ensure equal opportunities for all gender. Some of the requirements of the Act have been captured in the ESMP. The design has incorporated requirements for people with disability.
23.	Persons with disability Act No. 14 of 2003	The Act requires conducive environment to operate for persons with disability to enable such persons to have ease of access and mobility in all public spaces. The Act in section 21 stipulates that	The design of Lamu fisheries offices building is compliant to the requirements of the law by ensuring ease of accessibility and mobility within the building for such persons

		persons with disabilities are entitled to a barrier-free and disability-friendly environment to enable such persons to have access to buildings, roads, and other social amenities, and assistive devices and other equipment to promote their mobility.	with disabilities.
24.	Public Participation Act 2016	The Act provides a general framework for effective public consultations. It gives effect to the constitutional principles of democracy and the participation of the people. The Act, therefore, gives effect to the principles of public participation as provided for in the constitution. Participation is anticipated to promote transparency and accountability in decision making, promote community ownership of public decisions and promote public participation and collaboration in project governance processes.	The Activities of the proposed sub-project shall require participation by different stakeholders in order to ensure compliance with the principles of the Act. Stakeholder engagement shall be a continuous process throughout the project cycle in addition to the consultations that has been done so far.
25.	Sexual Offences Act, 2006	This Act protects people and employees from any unwanted sexual attention or advances by staff members. This act ensures the safety of women, children, and men from any sexual offences, including rape, defilement, and indecent acts. This law will govern the code of conduct of the Contractor's staff and provide repercussions of any wrongdoing. The sexual offense act, 2006 supports the Kenya Employment Act of 2007 that a worker should not be harassed sexually to receive preferential treatment at the workplace or detrimental treatment on present or future employment	Any form of GBV and sexual harassment shall not be tolerated on the project site. The Act will come in hand to ensure that all matters related to GBV at workplace are managed appropriately. GRM has been incorporated under this report to ensure that such cases are reported and handled appropriately. All the contractor workers shall be required to sign a code of conduct not to engage in any form of sexual offences while working on the office construction. Sensitization and awareness shall be created among workers
26.	HIV and AIDS Prevention and Control Act, 2006	This is an Act of Parliament to provide measures for the prevention, management, and control of HIV and AIDS, to provide for the protection and promotion of public health, and for the appropriate treatment, counseling,	Requirements of the Act will ensure that the contractor together with Lamu County public health department provide for VCT services for employees and locals where appropriate and promotes

		support, and care of persons infected or at risk of HIV and AIDS infection, and for connected purposes.	public awareness. This will go a long way in ensuring stigmatization of HIV and AIDS is reduced as well as managed during the construction period. The project ESMP budget has provided for sensitization and awareness to contractor workers.
27.	The Children Act, 2001	This Act protects the welfare of children within the Country. The Act identifies Children as a person below the age of 18 years old and protects them from exploitation. Of particular importance to this project is section 10, which protects the child from: • Economic exploitation. Any work that interferes with his/ her education or is harmful to the child's health or physical, mental, spiritual, moral, or social development.	The Act shall be applied to regulate any kind of engagement for underage to the project activities on site. Child labour in any forma shall not be tolerated on the project site and the contractor shall be required under the contract not to engage in any form of child labour on site.

3.5. International Conventions and Treaties

The United Nations and other international institutions have draft several international treaties and convections aimed at enhancing social economic development, environmental sustainability and the fundamental human rights. The proposed sub-project has incorporated some of the principles from international conventions into mitigation measures under the ESMP as indicated in Table 3-3

Table 3-3: International Conventions and Treaties Ratified by Kenya Triggered under the sub-Project

NO	TREATY/CONVENTION	OBJECTIVE	APPLICABILITY TO THE PROJECT
1.	Convention on the right of the child	The objective of the convention is to protect the rights of a child against abuse and exploitation	The project has considered the convention by not allowing any underage persons to be employed to work at the office construction site or during operation.
2.	Convention on the rights of people with disabilities	The intention of the convention is to protect the rights and dignity of persons with disability	Lamu fisheries office design has considered the rights of people with disability by providing for ease of access and mobility within the fisheries office premise.
3.	Constitution of the	To advance social and	The project has applied the requirements of ILO

	International Labour Organization and the eight fundamental Convections	economic justice through setting international labour standards.	in the management of the workers working on site. The contractor and the workers shall be required to sign the code of conduct to adhere to fundamental safety requirements at the workplace. Project ESMP in addition has proposed mitigation measures to protect the rights, welfare and safety of all workers.
4.	Kyoto protocol and Paris agreement	To mitigate against climate change impacts through climate change adaptation measures.	Climate change adaptation measures such as green energy among others have been considered in the design of the project to mitigate against carbon foot print impacts of the project.

3.6. World Bank Safeguards Policy

The proposed sub-project falls under the World Bank's support to the government through investment lending towards transforming and strengthening sectors related to the blue economy as part of KEMFSED project, improving of marine fisheries governance. The proposed construction of Lamu County fisheries headquarter office block will thus trigger the Bank's Safeguard Policies requirements *(OP/BP 4.01 Environment Assessment)* as depicted in Table 3-4, requiring undertaking of environmental and social due diligence through sub-project screening and preparation of ESIA document.

Table 3-4: Applicable World Bank Safeguards Policies for the Proposed Construction of Lamu County fisheries Headquarter.

CODE	NAME OF THE POLICY	OBJECTIVES	APPLICATION TO PROJECT
OP 4.01	Environmental Assessment	To ensure that environmental and social considerations are integrated into KEMFSED and construction of county office infrastructure sub-project's decision making process. The aim is to enhance positive impacts and mitigate negative impacts of the sub-project	The policy is triggered under KEMFSED project and the county infrastructure sub-projects. The policy informed ESIA preparation for Lamu County fisheries headquarter office block, guiding on enhancing positive impacts of the project and mitigating negative ones.
	World Bank Environment, Health and safety guidelines		
	World Bank Environment, Health and	The proposed sub-project under KEMFSED triggers: environment, health and safety issues, and considerations of the guidelines	Relevant requirements of the guidelines informed the mitigation measures in the

	safety guidelines	shall come in hand to guide on the best course of action on different project activities, especially during project implementation, operation decommissioning, regarding air quality issues, waste water management, construction waste management and noise from the construction activities on site	ESMP of this report.
	World Bank policy on access to information, 2010	The World Bank policy on access to information sets out the principles on public access to information in its possession. The Policy is based on five principles which include: Maximizing access to information, Setting out a clear list of exceptions, Safeguarding the deliberative process, Providing clear procedures for making information available and Recognizing requesters' right to an appeals process.	The ESIA document prepared under the sub-project shall be disclosed to the public ones approved by the bank. The Lamu county offices designs and other related documents shall also be available for any parties interested to scrutinize the documents. The due procedure to access the documents shall be followed through the NPC office.

3.7. Project Institutional Framework

3.7.1. Regulatory Institutional Framework

Table 3-5 highlights the key regulatory institutions/agencies that shall be involved in overseeing the project activities during the implementation and operation phases to ensure that sub-project activities meet regulatory standards. Coordination and consultations shall therefore be required at different levels depending on the activity at hand.

Table 3-5: Regulatory Supervision of Lamu County Fisheries Headquarter Office during Construction and Operation Phases.

NO.	INSTITUTION	RESPONSIBILITY
1.	*National Construction Authority (NCA)*	Monitor compliance to design, construction, operation, and maintenance standards of the proposed building and the associated facilities. The authority ensures that all construction workers and the contractor are accredited and licensed to carry out the construction activities. The Authority shall also monitor the safety of workers and the general public during project implementation and decommissioning. The Authority will in addition register the site during construction.
2.	*Lamu County Government*	The County Government Act 2012 sets the development agenda in the counties by indicating the functions of the devolved system. Land use planning, waste management, fire and disaster management services, water and sanitation services provision are devolved functions. The County government shall approve the

		structural and architectural design; approve construction; provide water and sanitation services; ensure fire safety; issue the occupational safety certificate before operation and use of the building. The county is addition through the fisheries department will oversee daily operation and maintenance of the proposed office building at the operation phase.
3.	*County Environment Committee*	Ensuring the project adheres to physical planning and environmental standards set by NEMA under various legislations and regulatory standards.
4.	*Lamu Water and Sanitation Company (LAWASCO).*	Provision of water and sewerage services to the proposed office block.
5.	*National Environmental Management Authority*	Shall be in charge of overall management and coordination of all matters relating to the environment in the proposed development area through Lamu County Director of Environment (NEMA). The Authority shall issue the ESIA license authorizing commencement of the sub-project activities following review and approval of the ESIA project report. The officers from the Authority will conduct periodic inspection of the project site to monitor adherence with the ESMP developed during the ESIA process
6.	*National Environment Tribunal*	Resolves conflicts between NEMA and any of their clients (KEMFSED Lamu CPIU or SDBE&F) regarding any environment matters arising during project implementation or operation.
7.	*Environment and Land Court*	Any matter that cannot be resolved amicably between Lamu CPIU and NEMA pertaining to the environmental matters arising from the sub-project shall be addressed by the court
8.	*Directorate of Occupational Health and Safety Services (DOSHS)*	The directorate shall ensure compliance with the OSH Act 2007 and promote workers' safety and health, particularly during the operation of the proposed building. The office shall be registered as a workplace by the department for occupational health and safety. DOSHS shall issue certificate of occupation. The officers from the directorate will Arbitrate any compensation claims for workers in the project occasioned by incidents of occupational diseases or accidents
9.	*Interior and National Coordination–Lamu County Commissioner*	Resolve any security issues, disputes on site and maintaining public order.
10.	*Kenya Power and Lighting Company (KPLC)*	Supply electricity to the proposed building and ensure that all electrical connections comply with safety standards.

3.7.2. Project Implementation and Operation Institutional Framework

Table 3-6 highlights the key project institutional framework that shall be involved in implementation and supervision of safeguards triggered by the sub-project activities during implementation and operation phases to ensure that they meet regulatory standards and World Bank requirements. Therefore, coordination and consultations shall be required at different levels depending on the activity at hand.

Table 3-6:Project Institutional Framework for construction of Lamu County fisheries headquarter Office

NO.	INSTITUTION/PERSONS	RESPONSIBILITY
1.	SDBE&F	The state department shall oversee the implementation and supervision of project related activities in consultation with the County Government, including all safeguards requirements, during construction phase of the project.
2.	National Project Coordinator KEMFSED	Provide the linkage, supervision guidance between the NPCU and CPIU.
3.	Sub-project Supervising Engineer	• The client procured a supervising consultant who shall act as the supervising engineer on site. The consultant will link the construction team and KEMFSED National project coordinator unit (NPCU). Representing the client, supervising contractor at the site in consultation with Joint Project Supervision Committee (JPSC), Works Engineers and general contract management of the contractor. The consultant's safeguards officer will guide the contractor in preparation of the C-ESMP.
4.	NPCU- Safeguards Specialists (ESS & SSS)	• Ensure the environmental and social requirements are prescribed in contractors bidding documents • Take overall responsibility of ensuring that the mitigation measures proposed in the ESIA/ ESMP and C-ESMP are implemented. • Ensure construction activities are carried out in line with national laws, World Bank safeguards operational policies and safeguards instruments prepared under the project (ESIA). Undertake environmental and social audits, EHS audits, capacity building of the contractor's team on safeguards issues and Joint Project Supervision Committee (JPSC) • conduct periodic monitoring and surveillance of all project's investment to ensure compliance with the mitigation measures as set out in the ESMP and other contractual requirements, • Ensure a functioning grievance redress mechanism and follow-up all environment and social issues raised, • Report immediately to the World Bank upon occurrence of any significant environmental, social, or health and safety incidents • Develop and fully implement including the necessary resources, all operational phase EHS plans

		• Share the monthly and quarterly monitoring reports with the bank
5.	Joint Project Supervision Committee (JPSC)	• Joint Project Supervision Committee will be composed of the NPCU Project Engineer, County Civil Engineer, County safeguards officers and NPCU Safeguards team. The JPSC will ensure supervision of works in consultation with the supervising consultant for the proposed infrastructure and safeguards compliance. They will approve works certificate for contractor's payment.
6.	CPIU's safeguards expert	Assist the contractor in preparation of safeguards Contractor Environmental Social Management Plan required and reporting responsibility. Monitoring contractor implementation of sub-project safeguards requirements. Preparation of monthly and quarterly safeguards monitoring reports in liason with the supervising consultant.
7.	Contractor	• Implement the proposed sub-project according to contractual obligations and observe all safeguards requirement. • Contractor will have an EHS officer on day to day guidance on project matters on environment, social, health and safety issues • Prepare contractor specific ESMP including OHS plans, waste management plans among other plans • Obtain the required licenses and permits such as the work place registration permit • Provide information to KEMSFED NPCU related to HSE (Health, Safety and Environment) performance, and immediately report any significant environmental incident or worker accident.
8.	Contractor ESHS expert	• Ensure implementation of environmental and social safeguards and occupational health and safety requirements during project implementation • Maintain log on grievances, accidents and incidents on site. • Report on E&S issues in the project progress reports.

3.8. Construction Supervision, Monitoring and Reporting

The technical clauses attached in here under Annex VII and the C-ESMP to be prepared by the contractor shall serve to ensure that the contractor observes his obligations of implementing the requirements of the ESMoP and ESMP as per National law and World Bank requirements. Reporting on office construction implementation activities shall be done by the supervising consultant. The contractor shall be in charge of the monthly reporting on site to supervision engineer working in liaison with the County Government and National Government under Joint Works Supervision Committee.

The sub-project implementation progress reports prepared shall be on monthly and quarterly basis. The supervising consultant in liaison with the client (SDBE&F) and the County Government of Lamu shall review the reports and submit to the World Bank for comments. The supervising consultant and the Joint Project Supervision Committee (JPSC) shall meet at the site on a monthly basis. NPCU team shall also conduct quarterly monitoring visits to advice on the implementation progress status of the sub-project. The World Bank team on the other hand shall be conducting semi-annual monitoring mission to advice on the implementation progress too.

The contractor's site agent/EHS officer shall on a monthly basis supervise the implementation of the C-ESMP, ESMP and ESMoP. The NPCU safeguards team shall in addition conduct regular and impromptu monitoring to ensure that all the requirements of the World Bank and National laws are adhered to as captured in the ESMP and ESMoP and fully implemented. The safeguards team shall also through KEMFSED M&E develop GEMS tool for data collection, remote supervision and monitoring of safeguards requirement implementation activities.

3.9. Contract Management, Administration and Conflict Resolution

The supervising consultant overseeing the works shall be in charge of managing the project contract on behalf of the client (SDBE&F) and Lamu County Government. Before the commencement of the construction activities, there shall be clarification of supervision and monitoring procedures and responsibilities, once the contractor is procured. The requisite instruments including the monitoring indicator checklist as *attached* in annex VIII shall be refined in alignment to site-specific C-ESMP that shall be prepared by the contractor. The supervising consultant shall also be responsible of resolving any conflicts that arises between the client (SDBE&F) and the contractor. The consultant in liaison with JPSC shall advice the client on the necessary actions that shall be required. Disputes shall be settled amicably through a mutual engagement process that shall be specified in the contract. However, if any dispute related to the contract arises that cannot be resolved amicably among the aggrieved parties, the matter maybe referred to a competent adjudication/arbitration person or institutions in accordance to national laws related to contract management. The identification of an institution or person or procedure agreed upon by the aggrieved party shall be guided by dispute settlement clauses in the contract.

4. ENVIRONMENTAL AND SOCIAL BASELINE CONDITION

4.1. Chapter Overview

This chapter describes the existing environmental and social baseline conditions within the proposed project Area of Interest (AOI). The conditions described include physical environment, biological environment and socio-economic setting within the AOI.

4.2. Project Location and Area of Influence

The proposed project shall be on an 7.94 acre (3.212ha) piece of land registered under county government of Amu reserved for existing county headquarter offices and the office will just be part of the buildings that have been constructed at Lamu County headquarters in Mokowe. The proposed project is located in Lamu County, Lamu West Sub- County, Hindi ward, Mokowe location and in Mokowe Sub-location. The area has an elevation of 9m above sea level with GPS coordinate of the project site being Latitude 2°13'42.99"S and Longitude 40°50'53.87"E as indicated in Google image in Figure 4-1. The proposed office site falls between the boatyard at the ocean front and the store neighbouring the County Fisheries office. The proposed development is not unique in this area of Mokowe as this project is surrounded by similar other projects in the same neighborhood.

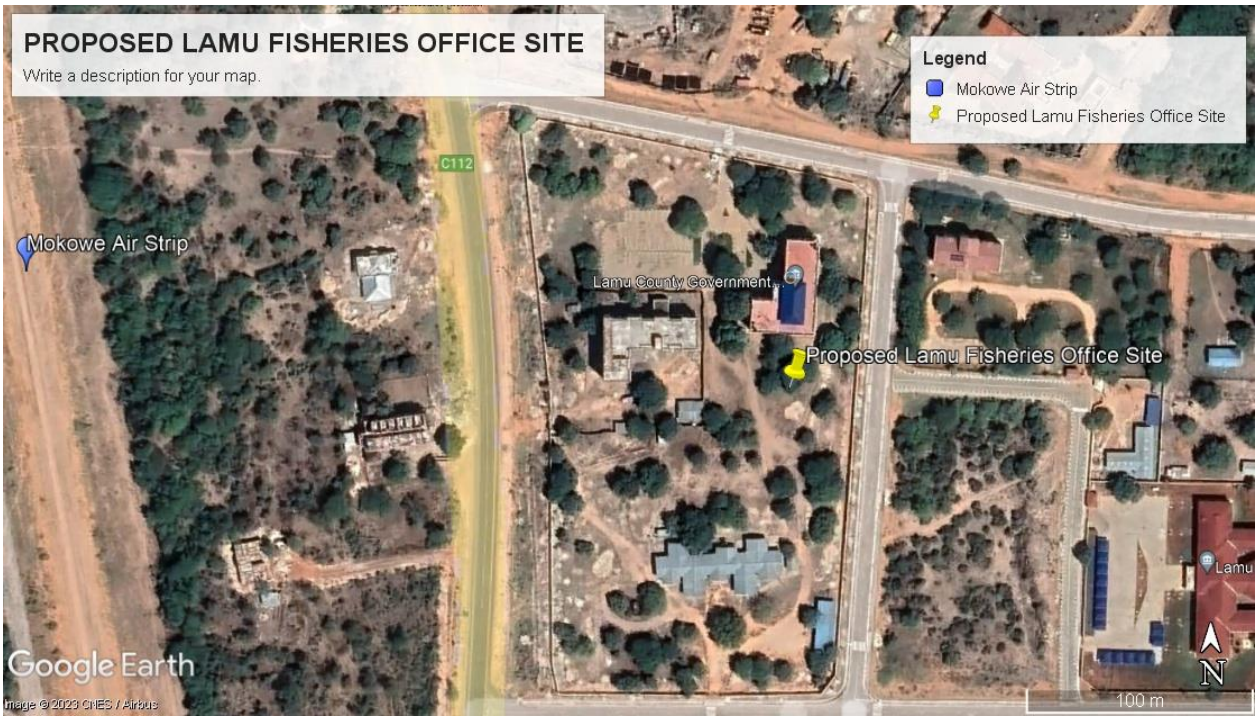

Figure 4-1: Google Image Showing the location of the Proposed Sub-project Site

4.3. Physical Environmental Conditions

4.3.1. Climate and Weather Parameters

Satellite derived spatial data for the proposed project area was used for the description of climate and weather patterns of the project area. The study team acquired weather and climatic satellite spatial data from Lamu weather station using the coordinates of the proposed project area. The station was found to be the nearest to the proposed project site. The data accessed were for rainfall, temperature, wind speed, relative humidity and radiation from FAO CLIMWAT data base accessed (March 2022).

4.3.1.1. Rainfall

Lamu County generally experiences a mix of semi-arid and coastal humid climatic conditions depending on the area of discussion. Satellite derived precipitation from Lamu weather station *(FAO CLIMWAT data base)* for the past 42 years spanning between the years 1980-2022, indicated that Lamu receive slightly higher rainfalls compared to similar semi-arid areas. The project area coordinate points were used to determine general monthly average rainfall distribution and annual rainfall amount in the proposed project area. The project area usually experiences more of a bi-modal rainfall pattern, with relatively high rainfalls under the long rains being experienced between Match and July, compared to the short rains received between September and December as indicated on Figure 4-2. The figure also shows that January and February are the driest months with less than 10mm while May seems to be the wettest month of the year, within the proposed project area. The average annual rainfall within the project area was noted to be about 956mm.

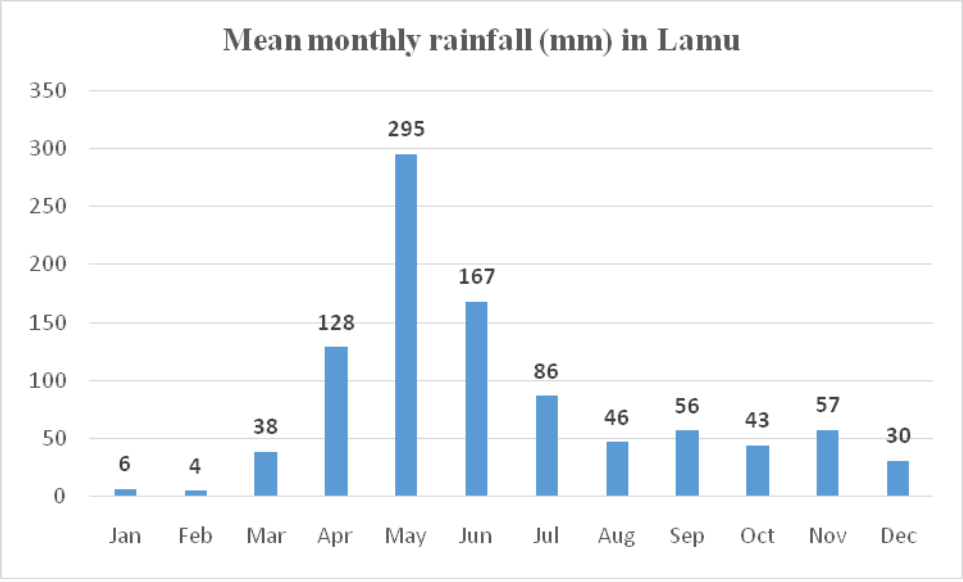

Figure 4-2: Mean Monthly Rainfall source (FAO CLIMWAT data base March 2022)

4.3.1.2. Temperature

Satellite derived temperature data for the same point and over the same period as indicated in the previous section (4.3.1.1) above, was used to compute the air temperature within the project site. The temperature data analysis in the area as depicted in Figure 4-3 shows that March is the warmest months with an average temperature of 29.2˚C while August with an average temperature of 25.5˚C was the coldest. The average annual temperature in the project area was noted to be 27.31˚C. The welfare of the workers who will be implementing the project need to be considered by the contractor to reduce the impacts of high temperature by ensuring sufficient provision of drinking water to avoid cases of dehydration.

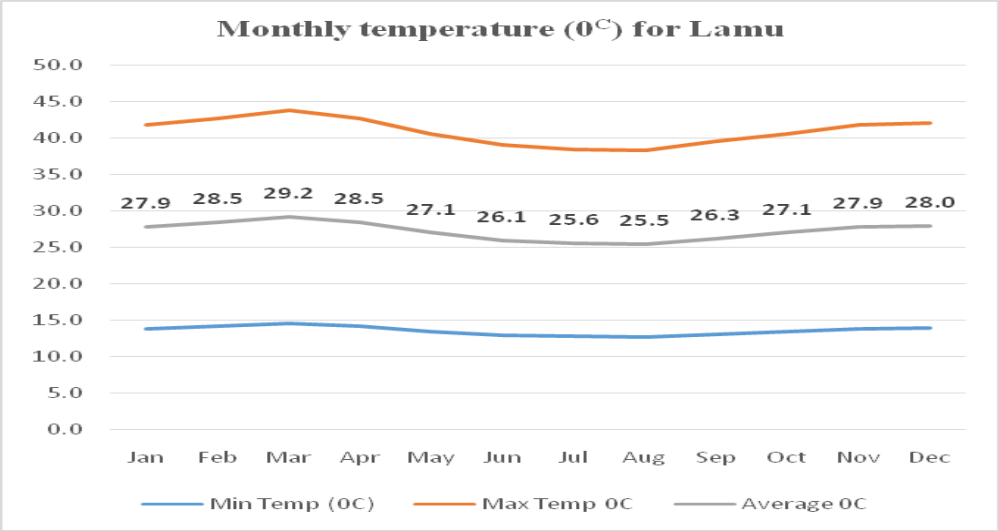

Figure 4-3: Average Monthly Temperatures source: Lamu weather station (FAO CLIMWAT database March 2022)

4.3.1.3. Relative Humidity

The average monthly relative humidity within the project Area of Interest (AOI) is about 78.75%. This is comparatively high if compared with most parts in the country. Seasonal mean monthly values fluctuate between 77% in January and February to 83% in May as shown on Figure 4-4. The highlight on relative humidity within the project area is significant given the high solar radiation within the proposed project area which will give an indication of heat loading among the workers on site. Relative humidity (RH) directly influences the amount of moisture that is evaporated from the skin of workers to the atmosphere. The proposed project area also experiences relatively high winds that shall increase the rate of moisture being carried from the skin. The high relative humidity will be a nuisance to the contractor's team, hence the need to provide enough water to compensate for the heat accumulation to the workers.

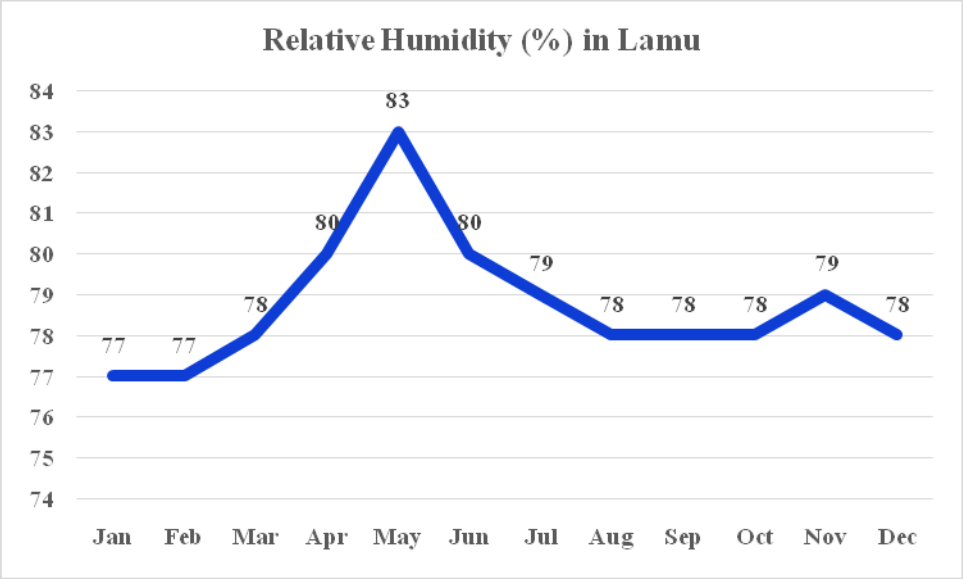

Figure 4-4: Relative Humidity source: Lamu weather station (FAO CLIMWAT database March 2022)

4.3.1.4. Wind Speed

Lamu experience two monsoon "trade-winds" seasons namely the south-easterly (**Kusi**) in June to July to mid-September and north-easterly **(Kaskazi)** monsoons in July. The satellite data for wind speed indicated that average monthly wind velocity experienced in the project area is about 1.38m/s with the lowest wind speed of about 1.00m/s being experienced in April and November while the highest is 1.70m/s occurring in January as indicated in Figure 4-5. Wind speeds influence the subsequent changes in the rate of heating, evaporation, transpiration and the microclimate within the working area. The wind speed in addition may cause air pollution by carrying cement or sand particles affecting air quality status on site for the workers and the general community health. The relatively high wind speed within the proposed project area shall be carrying the particulate matter from the construction site dispersing to the surrounding offices and residential areas. However, with the use of slit screens during construction, the impact of air pollution shall be controlled.

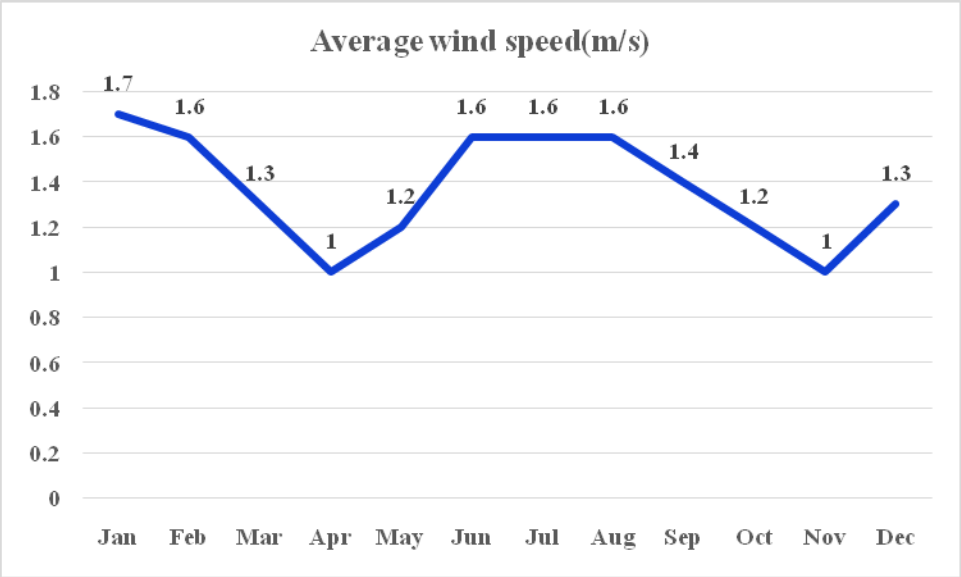

Figure 4-5: Average Daily wind speed source: Lamu weather station (FAO CLIMWAT database March 2022)

4.3.1.5. Radiation

The proposed project area experiences an average monthly radiation of about 21.47 Rad (MJ/m^2/day) with the maximum radiation of 23.1 Rad (MJ/m^2/day) occurring in the month of February, March and October, and a minimum of 18.4 Rad (MJ/m^2/day) being experienced in the month of June as indicated in Figure 4-6. The average monthly sunshine hours on the other hand was noted to be 8.28hrs. Solar radiation consists of different light frequencies that can pose a health hazard especially to workers exposed to the sun for long hours with the eyes and the skin bearing the greatest brunt. There will be need therefore for the project contractor to take this into consideration during the construction period. However, the generally high radiation is significant for the solar system that shall power the proposed renewable energy component of the project.

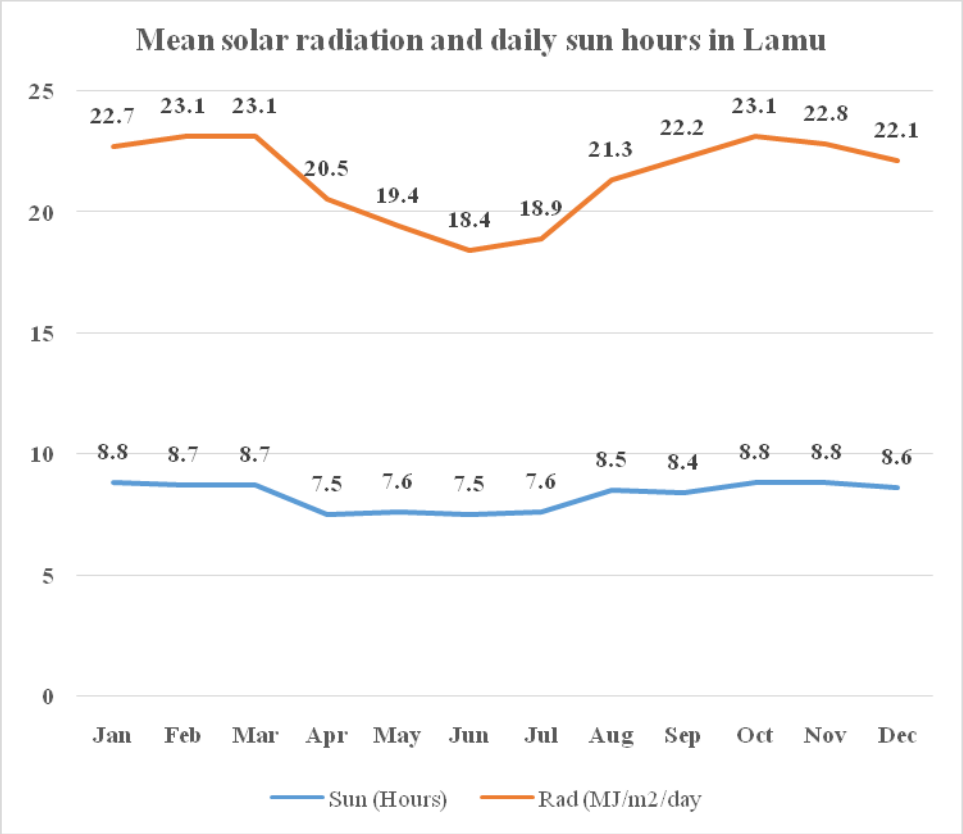

Figure 4-6: Average daily Radiation and Sunshine hours source: Lamu weather station (FAO CLIMWAT database March 2022)

4.3.2. Topography/Geology and Soils

The area is relatively flat and well-drained with the highest point at 9m above sea level on the northern side and the lowest at 7m above sea level on the south-east side of the compound.

4.3.2.1. Geology

Mokowe area is made of young sedimentary rocks and alluvial soils. The proposed project falls on an area which consists of coral limestone and rocks of Pleistocene age. The project being only two storeys may not have any geological implication as to the weight exerted to the underlying sedimentary rocks. Furthermore, there are no known valuable natural resources in the proposed project site and its environs.

4.3.2.2. Soils

The soils of Lamu County vary greatly both physically and chemically. According to Kenya soil survey (1982), soils within and around the project site consists of a well-drained, dark red to reddish brown, friable sandy clay loam to sandy clay with top soil of loam sand (rhodic ferrasols). These soils are permeable hence allow recharge and form very strong foundation for most developments.

4.3.3. Waste Generation and Management

The main source of litter noted around Lamu Fisheries headquarters office site during field survey was solid waste from office waste of paper work, plastics and construction waste from the active sites. Lamu Municipality provides municipal services within Mokowe area especially provision of waste management services collection using. Most parts of Mokowe town also lack such similar services and presently Mokowe Mainland CBO has been the main collector of wastes doing it once monthly as a social cleanup exercise together with other stakeholders namely County Department of Environment, NEMA, Kenya Forest Services and other NGO's. In spite of this waste management at household level, it remains inadequately disposed of. During field survey it was observed that there was indiscriminate and crude dumping of solid in the area as shown in Plate 4-1 and Plate 4-2. It was further noted during field survey that some of the households in the area cope with inadequate waste collection through burning at the site. However, waste burning enhances pollutant dispersal to the environment and if not well handled, can be a cause of environmental degradation to the air, biological diversity, water sources and the soils. Waste management whether liquid, solid or in gaseous form is critical in maintaining environmental integrity of an area. The main waste streams expected to arise out of the operation of the office upon completion are two namely: liquid waste from human waste generate by staff working within the office and solid waste from operation activities at the office (office waste). But despite this and given the size of the proposed works, it is not envisioned to be a menace in the project area. Due to inadequate waste disposal habit within the project site, the contractor shall be required to recycle most of the waste generated on site and where possible adopt safe disposal of any waste.

Plate 4-1: Waste Disposed at one of the compounds in the area

Plate 4-2: Haphazardly disposed waste along the ocean at Mokowe area

4.3.4. Ambient Noise and Vibrations

Mokowe market centre is predominated by residential tenements which reduce as one moves towards the proposed project area to commercial tenements. The main sources of noise within the general project area were noted to be from general conversation, motorcycles, vehicles operating in a nearby Mokowe bus station, birds, braying of donkeys and noise from public address systems in mosques Plate 4-3. However as one moves away from the market centre and the project site, the noise level reduces as the anthropogenic activities also reduces. The major

noise receptors were the office premises particularly the county headquarters. It is anticipated that the works associated with construction of the office and movement of project related vehicle will lead to increased noise levels within the proposed project area. However, given the scope of the proposed works and the duration of the activities, the noise impact is anticipated to be low and temporal.

Plate 4-3: One of the Public Address systems noted in the area

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4.3.5. Ambient Air quality

Air pollution at Mokowe area is predominantly dust and haphazard burning of waste at the site and particulates from wind action. The gaseous and particulates pollutants are anticipated to increase with the proposed construction of the infrastructure at Mokowe office site construction works particularly from construction activities and movement of construction vehicles. In as much as there shall be net positive for the development of Lamu Fisheries office at Mokowe, the movement of construction vehicle at the site shall generate dust, but there are mitigation measures that shall be put in place to regulate the same as indicated in the ESMP in chapter 7 as well as the construction of the 30m or so access road to the site.

4.4. Biological Environmental Baseline Conditions

4.4.1. Vegetations

The general terrestrial area around the proposed project site was ones a coastal rain forest as part of the larger Boni Forest which extends from around witu area to Somali border, but is a highly modified environment due to anthropogenic activities. The immediate surrounding area is built with government offices and educational institutions. The original terrestrial vegetation within the proposed project area has been interfered with and most of the existing is introduced. Most of the natural vegetation which was a tropical coastal forest has been cleared for settlement activities and government institutions. Hindi area in particular was reported to be one of the settlement schemes in the area. The proposed project shall not have any impact on the surrounding vegetation since the proposed building structures are being introduced to an already build environment with other county government infrastructure

4.4.2. Modified Habitats

The general terrestrial area around the proposed project site was ones a coastal rain forest as part of the larger Boni Forest which extends from around witu area to Somali border, but is a highly modified environment due to anthropogenic activities. The immediate surrounding area is built with hotels, commercial buildings, jetties and yards. The original terrestrial vegetation within the proposed project area has been interfered with and most of the existing is introduced. Most of the natural vegetation which was a tropical coastal forest has been cleared for settlement activities and farming. Hindi area in particular was reported to be one of the settlement schemes in the area. The proposed project shall not have any impact on the surrounding vegetation since the proposed building structures are being introduced to an already build environment.

4.4.3. Invasive Species Management

The main invasive plant species observed within the proposed project area of interest was *Prosopis juliflora (*Mathenge Plant*)* as shown in Plate 4-4. The observation made showed that the spread of mathenge plant within proposed project area is influenced by anthropogenic activities particularly road construction activities, livestock movement, construction activities and human settlement as indicated in Plate 4-5. Mokowe was observed to be the main business activity point within the area being influenced by Lamu port operation activities and probably this could be part explanation of the high incidence occurrence of the plant along the main highway accessing Mokowe Jetty, within the project area. There is a potential of exacerbating the spread of the plant during project construction if construction materials will be sourced from infected areas or contamination of the construction vehicles as it moves within the project area. There is need therefore to ensure that equipment to be used during construction works is free from any alien plant materials and soils which may contain seeds of alien species. The materials for construction should also be sourced from areas that are free from the plant species or any other invasive species other than the one noted in the area. Although the risks are moderate based on the observations made in the immediate surroundings of the project site, there is need for vigilance by the contractor and the local community who will work on the project.

Plate 4-4: : Prosopis Juliflora along the main Mombasa-Lamu road an indication of using contaminated materials

Plate 4-5:Livestock herd noted within Mokowe area that could contribute to Prosopis Juniflora dispersal

4.4.4. Visual Impacts

The proposed two-storied building is not unique in the project area as there are other existing buildings of a similar nature. Adjacent to the proposed site is the Lamu County Headquarter. A natural barrier of trees separates other buildings at the backyard and therefore no negative visual impact will be caused to the above mentioned occupants. The site is also not heavily settled hence will not obstruct other users.

4.5. Socio-Economic Baseline Conditions

4.5.1. Administrative units

The proposed Lamu fisheries office project is located in Lamu County, Lamu West Sub- County, Hindi ward, Mokowe location and in Mokowe Sub-location. The office site is located within Lamu County headquarter offices compound. The area has an elevation of 9m with GPS coordinate of the project site being Latitude 2°13'42.99"S and Longitude 40°50'53.87"E

4.5.2. Demographic Characteristic of the Project site

4.5.2.1. Population Levels

According to housing and population census of 2019, the population for Mokowe location indicated that the male population is slightly higher at 58.52% (4,598) than female population which was 41.48% (3,259)[6] consistent with Mokowe sub-locations with 60.02% (3,470) and 39.98% (2,311) respectively. The population and housing census further indicated that Mokowe sub-location has a total of 1,503 households with an average household size of 3.8 persons per household.

[6] *Kenya Population and Housing Census 2019: Volume II: Population by County and Sub-County*

4.5.2.2. Literacy Levels

Literacy levels within the general Lamu West Sub-County is higher compared to the rest of the County followed by Lamu East sub-county. The national average was 82.8% based on the 2019 census, Lamu County was 72.18% and Lamu West Sub-county account for at least 72.38% of the population having attained a form of formal education in the county. It was noted that males in the sub-county had a slightly higher literacy levels than females at 54.63% and 45.36% respectively. About 27.82% of the population does not have any form of formal education in Lamu West Sub-county, with majority observed to be women at 50.94% compared to men at 49.06%. The majority of those with formal education have a form of primary education at 57.82%, secondary levels at 22.85%, 4.91% for tertiary, 2.02% university and 3.44% had other form of literacy either adult basic literacy or madras. There was high gender disparity among those who have attained university level of education with males consisting 67.51% compared to 32.49% who were women. The literacy level figures at national, Lamu County and Lamu West Sub-county were as shown on Table 4-1[7].

Table 4-1: Literacy Level Attained in Lamu West Sub-County

	Level of Literacy	Male	Female
National	82.8%	50.06%	49.96%
Lamu County	72.18%	54.63%	45.63%
Lamu West Sub-County	72.38%	54.64 %	45.36%
Pre-Primary level attained in Lamu West Sub-county	10.98%	51.30%	48.7%
Primary level attained in Lamu West Sub-county	57.82%	51.34%	48.64%
Secondary level attained in Lamu West Sub-county	22.85%	62.63%	37.37%
Tertiary College level attained in Lamu West Sub-county	4.91%	59.11%	40.89%
University College level attained in Lamu West Sub-county	2.02%	67.51%	32.49%

The existence of such a relatively high literate population (including females) implies the potential availability of human capital (labour force), for effective participation in the construction activities.

4.5.3. Social Amenities and physical infrastructure

4.5.3.1. Project Area Accessibility

There are no limitations on options regarding the modes of transport to access the proposed project area. Generally Mokowe area is connected to other areas through road, water and air

[7] *The data shown on the table was extracted from 2019 Kenya population and housing census Volume IV specifically table 2.4*

transport as indicated in Figure 4-7. The main vessels for water transport are speed boats, ship accessing Lamu port and traditional dugout canoes which use wind to be propelled. The main tarmac road for road transport is from Malindi to Lamu terminating at the jetty on your way to Amu Island. The area can also be accessed through air as was evidenced by Manda airport on Manda Island which is about 7km away from Mikowe Jetty. From Manda one takes a boat to the project area. The project area at Mokowe was also noted to have an airstrip operated by KWS.

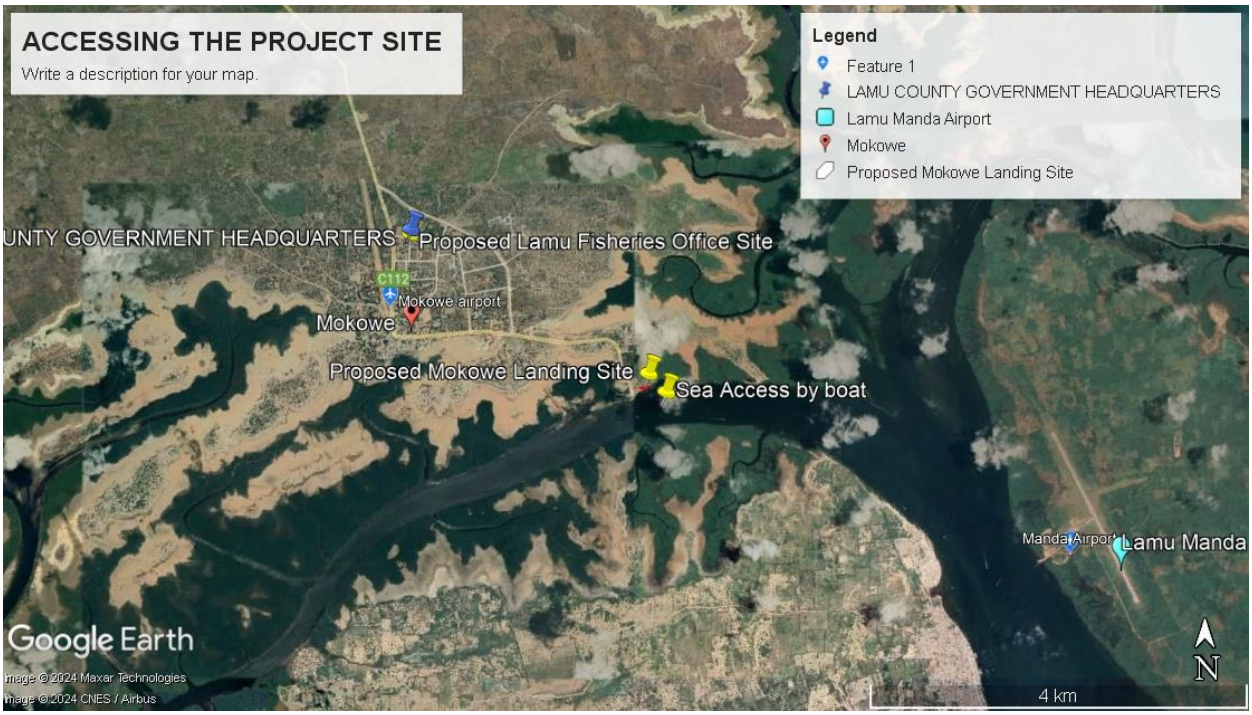

Figure 4-7: Google image showing accessibility to Project Site

4.5.3.2. Communication Network

Mokowe area and its immediate environs were generally noted to have adequate communication network. Development in communication network in an area has an influence on the level of awareness among the local population. Findings from observations, key informant interview and stakeholder consultation meeting indicated that wireless communication is the main mode of communication in the proposed project area as highlighted in Plate 4-6. The major mobile network coverage for three communication companies Safaricom, Airtel and telecom were reported to receive signals within the project area, but due to the strong Safaricom signal reception and M-Pesa services, it was reported to be the most popular among the locals. Pay television decoders for zuku, Go-TV, Azam, DSTV and startimes were noted to be the main signal receivers in the area as indicated in Plate 4-8 and Plate 4-9. The audio media reported were radio Lamu,Sifa radio, Kaya FM, baran, rahma, msenangu, salan, Bahari FM in addition to the national radio stations such as KBC, Kiss, Nation, Citizen, Radio maisha and Pwani FM among others. The 2019 population and housing census data indicate that about 46.5% of the population in Lamu West sub-county uses mobile phones, and it appears like more men own

phones compared to women at 50.1% to 42.5%. Access to communication services particularly to mobile phones is critical for communication, access to mobile internet and also money transfer during project construction. The findings further show that 20% of the population use internet men accessing at 23.9% and women 15.7% but interesting is that only 6.6% of the population own a computer or a laptop. This indicates that of the 20% who use internet majority could be accessing the internet using cyber cafes or mobile devices which further shows the significance of communication through mobile phones. Internet connectivity within the general Mokowe project area was noted to be high from the number of internet receivers observed in some of the homesteads as shown in Plate 4-7. The available communication channels can be used in the event of need for community awareness and sensitizations is required.

Plate 4-6: A communication mast noted within the project area

Plate 4-7: One of the several Internet Receivers noted in the area

Plate 4-8: A receiver dish from star times

Plate 4-9: One of the DSTV signal receivers

4.5.3.3. The Main Water Sources and Reliability

Proposed Lamu County Fisheries headquarter site is connected to piped water by LAWASCO. Ground water is the main source of water within the project area with the local community reporting drawing water from shallow wells as indicated in Plate 4-10. Mokowe area is also supplied with water by LAWASCO, whose source is from Mbele Mbele Boreholes. The locals cope with the deficiency through supplementing with shallow wells which are dug by hand and pumped in storage for supply Plate 4-11, the county offices were noted to be supplement by county water bowsers. The shallow wells around Mokowe area were reported to be salty and unfit for human consumption other than for cleaning. Other households cope with the unreliable supply by buying of water through water bowsers and store in tanks as highlighted in Plate 4-12. The proposed Lamu County fisheries office design proposes to source water from LAWASCO which supplies the area. Proposals have been put forward to consider storage facilities at the site in order to control for the unreliable water supply in the area.

Plate 4-10: Using Manpower to draw water from one of the shallow wells in the area

Plate 4-11: Water storage at one of the roof tops that was reported to be pumped from shallow wells

Plate 4-12: Storage tank at the Public Toilet supplied by a water bowser sourcing water from Hindi area

4.5.3.4. Sanitation Coverage

Human waste management is critical for the office users and the workers who shall be working on site. The Nearest County headquarters and the other offices on site are connected to 2 septic tanks and there was a proposal for the proposed office to be connected to the same. Septic tank is generally the main means of human waste management within the proposed project area as shown in Plate 4-13 and Plate 4-14. However, the proposed design for Lamu County fisheries headquarter at Mokowe shall be connected to a bio-digester whose treated water shall be used for landscaping.

Plate 4-13: Fisheries office connected to water closet toilet at Amu Island

Plate 4-14: One of the Septic Tanks serving the Fisheries office at Amu Island

4.5.4. Land Use and Ownership

Land in the project area was observed to be generally used for construction of residential houses and non-residential buildings to host government officials. In the case of the particular location where the proposed office shall be located, the land is specifically set aside for construction of

Lamu County offices. The existing structures include 2 office building including the main headquarter hosting the governor and 1 building was noted to be under construction and was yet to be completed at the time of this study. Land use information is significant in providing a view of the main activities within the proposed project area and it also provides an indication of whether the proposed project activities are in tandem with the general land use. Land is a factor in the implementation and operation of the proposed project and resolution of any emerging conflicts related to land will require consultations among various stakeholders. Land in Kenya is generally classified as public, private or community land. Consultation with Fisheries Department officers as a key informant during key stakeholder consultation revealed that land within the proposed project is registered under Lamu County government headquarters offices measuring 3.2120Ha *(7.94 acres)* and has a title (Amu/Mokowe New Township/1171.

4.5.5. Livelihood and Economic Activities

Livelihood comprises of the capabilities, assets and activities required for a means of a living[8]. Through observations, key informant interviews and community stakeholders meeting discussions, it was noted that households in the proposed project area depend on a diverse range of sources of livelihood. These were basically categorized into; employment, trade and commerce, livestock production and crop farming as discussed in this subsection.

4.5.5.1. Household Employment Levels

There are many sources of either formal or informal employment within the project area where the local people derive their livelihood. Private enterprises, tourism industry and public institutions provide employment opportunities to the local people. The construction of the proposed office is anticipated to add to temporal employment of the locals at construction and operation phase of the sub-project. The 2019 population and housing census data for Lamu West population indicated that about 49.58% of the population in Lamu West Sub-County was employed while 5.53% were unemployed and seeking for employment.

The data further shows that of the employed, 52.92% were men whereas 47.08% were women. The findings further showed that about 65.66% of the unemployed in the sub-county were men and 34.34% were women. This is the population that can potentially supply the labour market. The economically inactive population was about 44.86% which was noted to be lower than employed population and of whom men were 46.83% and women were about 53.17%. The economically inactive population indicates that most women in Lamu West sub-county were economically inactive hence dependent on someone in away compared to men. This indicates that most women could be home makers in the area. The proposed project is anticipated to provide employment to various groups of people during implementation and operation phases.

[8] UNISDR Guidance note on Recovery: Livelihood.
https://www.unisdr.org/files/16771_16771guidancenoteonrecoveryliveliho.pdf

Lamu Island is a source of both skilled and unskilled labor. Skilled labor is sometimes outsourced in cases where such skills are not inherent in the community. Many projects by government and no- state actors have been undertaken through competitive bidding at the County level or national level depending on the threshold and magnitude of work to be undertaken. In most cases locals have been given preference to provide both skilled and unskilled labor. However, it has been observed that most local Bajunis who are the majority are not keen on taking unskilled labor whose wages are too low. Only a paltry 10% of locals present themselves for recruitment as laborers in any construction works. This could be in form of transporting construction materials to the site or undertaking construction works as casual laborers.

Over 90% of casual labor is sourced from other coastal communities who are residents of Lamu in particular the Miji Kenda community from Kilifi County who have either settled permanently or working in the construction sector in Lamu. During the construction phase of this project there will be opportunities for both skilled and semi-skilled labor. The respondent felt that while skilled labor may be imported due to inadequate local capacity, all semi-skilled labor should go to locals especially unemployed youth to build the local capacity and livelihoods improvement. This should be enforced during contract-signing. Child labor is only prevalent in fishing and transport sector and is being addressed through multi-agency approach with the National government taking lead through promotion of policies that can contribute to total elimination of child labor. A case in point is the 100% transition from primary school to secondary school and the free basic education which has significantly contributed to increased school enrolment both in primary and secondary.

4.5.6. Cultural heritage and Properties.

The proposed project area is predominantly inhabited by the Bajuni people who constitute of over 90% of the local population. Other communities include government staff deployed in Lamu as civil servants who are the main tenants of government houses within and around the project site. This category is just very insignificant if compared with the larger inhabitants of the entire island. The Bajunis people are culturally governed by religious leaders (Sheiks and Kadhis) who manage and resolve conflicts among community members as well as adjudicate in marriages and access to natural resources and land. The local community is religious especially with over 90% being Muslims and less than 10% being of other faith. The proposed site does not host any cultural property or artifacts. Most of the cultural properties are 1.5 km away in Lamu Old town which was designated by UNESCO as cultural heritage site. Given the low volume of works and the anticipation of involving of local workforce, the proposed project will not influence the cultural behavior of the local people neither anticipated to make any changes to their present traditions.

4.5.7. Child Labour Prevalence in the area

Lamu is among the Counties that have a high poverty index standing at 76.9% and this has contributed to child labour in order to earn a living. Children of about 10 years of age and above

participate in fisheries and tourism activities as beach boys to supplement family income while most female adults are engaged to work as house helps including school youths drop outs. Few male adults were also noticed to work as touts at the jetties while others working as casuals at building construction among others. In spite of the observations, the cases are rarely reported and there are hardly any data on such incidences as it is considered part of family life and set up.

4.5.8. Prevalence of HIV and AIDS

Lamu County has a population of 143,000 comprising of 52% males and 48% females. HIV prevalence in Lamu (3.5%) is lower than the national prevalence of 5.9% (Kenya HIV Estimates 2015). The county contributed 0.2% and 0.1% of the total new HIV infections in Kenya among children and adults respectively. Although individuals and communities have endeavored to open up and freely speak about HIV AIDS the stigma around the virus and the disease still exists. The local health facilities have registered patients to be monitored under the ARVs program who may not regularly visit the facilities where they receive drugs due to fear and stigma. They would rather relocate to a different facility far from where they originally registered. The 2020 HIV AIDs report card for Lamu County shows significant drop which is good for the County from 3.5% in 2015 to 3.2% in 2022 (Source: County Department of Health and Environment HIV AIDs Lamu County status report 2022).

4.5.9. Gender Inequality (GBV, Sexual harassment, cases of child sexual abuse)

Through the Kenya vision of "A nationally competitive County offering good quality life for all its citizens through prudent use of resources, equitable provision of services and implementation of sustainable development", most projects undertaken in Lamu have deliberately targeted women to be part of the development agenda from project initiation to implementation and operation. The inclusion of women in aspects of the project activities that do not undermine or demean their character or self-esteem has been encouraged in most programmes and projects. In spite of these efforts, women still do not get the opportunities as contemplated either by the constitution or by the National gender and equality Act enacted by parliament in 2011. A case is fisheries staff human resource which does not meet the 1/3 gender rule. Currently there are only 2 female staff out of 24 employees. During the cabro laying of Lamu sea front cabro road only 2 females were engaged out of an estimated 50 unskilled and skilled. In this proposed project we envisage that more women will be targeted and engaged so as to engender the construction work.

4.5.10. Gender Based Violence (GBV) Prevalence

According to Media reports (The Star newspaper 21 Dec 2021- Media interview), Lamu Women Alliance Chairperson observed that at least 10 cases of GBV against women are reported to her office in Lamu island daily. She noted that the organization finds it hard to intervene and help as the majority of the victims would rather die than speak out against the abusers, who are mostly the husbands. The culture and religion of the region is largely responsible for many women choosing not to report abuse even when their lives are at risk. Islam forbids a woman from exposing her matrimonial affairs to the public, whether good or bad. The chairperson encouraged

women in the interview to learn speaking up to a trusted third party whenever they are undergoing any form of abuse so that they can obtain the necessary help.

Sexual harassment and child sexual abuse are always confidential matters reported only to the police and culprits apprehended and charged in Lamu Law courts. Some cases have also been tracked and recorded by the department of gender and social services and the Children department. Media reports in Kenya involving sexual harassment and child sexual abuse have always been tracked and reported by the various media houses operating in Lamu. Cases successfully prosecuted in the local courts have also been mentioned by the local people. The scenario indicates without doubt that sexual harassment and child sexual abuses do occur in Lamu community. The project will seek to establish clear structures that will address the issues related to harassment and abuses emanating from implementation of project activities. Any GBV arising from the implementation of project activities during all phases of project implementation will be addressed in line with the GBV framework already developed.

5. PUBLIC PARTICIPATION AND CONSULTATIONS

5.1. Overview

The chapter highlights the need for stakeholder participation and the consultative process adopted during the study and summary results of the process.

5.2. Legal Requirements for Public Consultations

It is a policy requirement by the World Bank and the Government of Kenya constitutional requirement that beneficiaries and members of the public living near any project sites who have a stake or interest in the project (both public and private) be consulted to seek their views and opinions regarding the projects before they are implemented. Public and stakeholder consultation is required under the Environmental Management and Coordination Act 1999 as amended in (2015), Environmental Impact Assessment and Audit Regulations Legal Notice, No. 101 of 2003 and the amendment in Legal Notice No. 32 of 2019, and the World Bank's operational policy OP 4.01. "The Environmental Management and Coordination Act Cap 387" sets out the minimum requirements for stakeholder consultation and engagement. The Constitution of Kenya, 2010 under Article 174 (c) give powers of self-governance to the people and enhance the participation of the people in the exercise of the powers of the State and in making decisions affecting them. Article 184 (c) provides for participation by residents in the governance of urban areas and cities. Article 10 (2) (a) under national values and principles of governance provides for patriotism, national unity, sharing and devolution of power, the rule of law, democracy and participation of the people.

5.3. The Consultative Process Adopted

The environmental survey team recognized the legal requirement and the significance of the assignment findings to intended project users and in this regard, considered active involvement of all potential project stakeholders. To attain this objective, the consultant adopted a participatory approach in the identification of environmental and social impacts that are related to the project cycle. Several methods were used to engage stakeholders during data collection in the process of capturing their views, issues and concerns on the proposed project. The levels of project stakeholder engagement during data collection approaches and procedures were through key informant interview with county officers and community meeting.

5.4. Stakeholders for Lamu County fisheries headquarter offices Construction

5.4.1. Primary Stakeholders

The primary stakeholders include the proponent and all the residents in the project area in Mokowe and business enterprises within reach that could be impacted directly by the proposed project. These informants included: CPC KEMFSED CPIU as the proponent; residents of Mokowe area; fisheries officers working at the county fisheries offices; neighbouring local residents; boat repairers in the neighbourhood; fisheries staff living within staff quarters; staff of King Fahd Referral Hospital; and businesses in the neighbourhood primarily a shopkeeper and a food kiosk operator operating outside King Fahd referral hospital.

5.4.2. Secondary Stakeholders

The main secondary stakeholders could include all of the following depending on how the Lamu County fisheries headquarter offices construction is contracted: County Government Officers working (King Fahd Referral Hospital, Veterinary Department, Livestock Department, KCSAP officers, Public Health department) within the proposed site; National Government Officers (National Drought Management Authority staff, Ministry of Public Works and Housing) in the neighbourhood.

5.4.3. Public Participation Process

The Environmental and Social Safeguards Officers organized for a filing of public questionnaires for staff from Fisheries Department in the County; other Government Departments in the neighbourhood (NDMA, Ministry of Public Works and Housing); BMU Stakeholders (boat operators, fishers, ice makers, fish mongers) and other fisheries clients including boat spares operators to seek their views as they sensitized them on the proposed project and a stakeholder meeting was held on 7th October 2023 at KEFRI Training Institute in Mokowe centre as indicated in Plate 5-1 to Plate 5-4 and Lamu Youth Polytechnic shown in Plate 5-5 and Plate 5-6.

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Plate 5-1: The county team led by the CPC presenting the proposed design for the sub-project

Plate 5-2: KEMFSED Project Engineer responding to some of the concerns of the participants on the proposed design.

Plate 5-3: One of the participants contributing during the stakeholders meeting

Plate 5-4: The participants supporting the project by show of hands

Plate 5-5: One of the Participants at Lamu Youth Polytechnic Seeking Clarification on the benefits of the BMU at the proposed office

Plate 5-6: One of the Stakeholders contributing to the discussions at Lamu Youth Polytechnic

5.4.4. Response to Public Concerns

The feedback from the stakeholders assessed was that this project was welcome as it would contribute immense benefits to the local economy in terms of short term employment and opportunities for supply of materials during construction. The local boat transporters and sellers of coral blocks and sand would also benefit. The main negative impacts were attributed to noise during construction although dust would be minimal due to the sandy nature of the land which was also said to be advantageous as there will be no issues of flooding in site. Majority of respondents were concern about liquid waste disposal and suggest use of a responsible liquid waste conservancy system such as a bio-digester. Respondents also felt that storm waste water could also be harnessed into a storage tank to reduce pressure on this scarce resource from running into the sea.

Table 5-1: Summary of Stakeholder Concerns, Anticipations and Responses

Issue/Concern	Proposed Mitigation
BMU allocated a store on the ground floor	Mokowe BMU be allocated an office with a store with an external access on the ground floor
BMU Network does not have an office	Provide an office for BMU Network on the second floor
Water Supply for the Office Infrastructure	The water will be supplied by LAWASCO whose source is from Mbele Mbele area.
CPIU to do enhanced public participation on the project	Use of local media to publicize the proposed project and get community's concurrence and reduce speculations
Engagement of labour	Local youth should be involved during construction for semi-skilled and manual labour and only import foreign labour when locals lack the specialized skills. The skilled workers should work with locals to impart the specialized skills
Members requested that the contract be awarded to local contractors.	Due to the magnitude of this project, it falls under the category of National Competitive Bidding therefore not possible and local contractors will be encouraged to compete as they already have a competitive advantage.
Possibility of conflicts between workers and contractor on delayed payments	The contractor will sign and abide by a Code of Conduct and also the Tender Document has a Technical Clauses' meant to address these issues.
BMU members should be part of the Inspection committee	*CPC was to look into this as he forms the Inspection Committee.*
Risk of migrant workers spreading HIV/AIDS	Contractor to sensitize workers on HIV/AIDS and screening
Recruitment of workers	The women and the persons with disability should be given first priority in jobs like record keeping and store keeping.
Opportunities for small business	Women and minorities should be allowed to supply food as long as they comply with the public health

	regulations
Challenges in accessing water for construction activities	Contractor to rehabilitate existing shallow well
Disposal of construction waste materials be done at the construction site after completion of construction works	The contractor will either give out such materials to interested persons, sell them or hire a licensed NEMA-license waste handler for disposal at an approved site.

6. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

6.1. Overview

This chapter covers the following highlights on the proposed development: positive and negative environmental and social impacts of the proposed project and mitigation measures (at implementation/construction, operation and decommissioning).

6.2. The Positive Impacts of the Proposed Project

The construction of the proposed Lamu County Fisheries headquarters at Mokowe Lamu County Headquarters is anticipated to have an overall positive impact as captured in Table 6-1, particularly in enhancing the county fisheries infrastructure development, socio-economic development of local communities and contribution to the blue economy in the county and improving of staff working conditions which influence service delivery.

Table 6-1: The Positive Impacts of the Project

NO.	IMPACT	DESCRIPTION
1.	Contribute to improved management of priority fisheries and mariculture	The proposed construction of Lamu County Fisheries headquarter office at Mokowe is part of the contributions towards enhancing county fisheries infrastructure development, aimed at improving fisheries management, which is significant in achieving coordinated and improved management of priority fisheries and mariculture.
2.	Enhance general economic development	The blue economy is being targeted under government policy to contribute towards the GDP of the country. The construction of the new office shall be a contributing factor towards harnessing the effort of realizing this objective through improved fisheries management for economic development not only for the county but also for the national government.
3.	Maximize employee satisfaction	The existing crowded fisheries offices under the existing fisheries laboratory, does not provide a conducive working environment. The difficulties are breeding ground for dissatisfaction among the employees. The proposed construction of the new office under the sub-project shall therefore come in hand to enhance employee satisfaction by improving the aforementioned working conditions. The fisheries officers squeezed in the laboratory shall have working space.
4.	Enhance synergy and efficiency among the CPIU team members	The CPIU members are drawn from different departments and currently some work from their respective offices. The officers are sometimes assigned duties under their departments. Having a centralized office will therefore enhance coordination, bonding and teamwork among the CPIU team. When the team members interact face-to-face, they get to know each other's perspective and style of operation, which enhances experience sharing, synergy, and efficiency on complementary services across the various project activities.

5.	Improve work productivity	Motivating the officers through improved working environment shall enhance the work productivity and the zeal to looking forward to going to the office to serve the clients.
6.	Employment opportunities	Development of the infrastructure shall motivate the national and county government to employ more fisheries personnel and associated support staff. The construction works shall also provide for temporary employment for the workers who shall provide various services at the construction site.
7.	Business opportunities	The business opportunities are anticipated during the construction phase of the sub-project. Provision of construction materials shall be a source of business opportunity to the local people. However, for the positive impact to be realized there shall be need for local sourcing of the construction materials, labour as well as having open and competitive tendering for the goods and services associated with the proposed works. Food vendor particularly by women to the construction workers shall create more business for eatery businesses.
8.	Securing and Better land utilization:	The County Department of Fisheries and Blue Economy will have positively utilized the land where the proposed project will be set up as currently it's not utilized and vulnerable to change of use or ownership.
9.	Acquiring a fisheries office	Lamu county does not have any fisheries office of its own and this will be a great opportunity to acquire one with adequate space under the proposed project activities. The development plan highlights the need for the offices by building and refurbishing 7 No fisheries offices in the county to provide conducive working environment for all categories of staff.

6.3. The Negative Environmental and Social Impacts of the Proposed Project

The proposed project will comprise of a one floor-storied building and connected facilities. Construction of such a structure is anticipated to have some negative impacts as indicated in Table 6-2 below:

Table 6-2: Negative Impacts of the sub-project

NO.	IMPACT/RISK	DESCRIPTION
1.	Occupational Health and Safety hazards (*accidents and Injuries*)	Working on a construction site comes with risks and accidents to the workers. The risk could be associated with fire, material and manual handling, dehydrations, electrical shocks, exposure to chemicals, Slip, trips and falls, noise and vibration, dust, moving objects, falling objects, working at heights and collapsing trenches among others. The occupation health and safety risks are mainly anticipated at construction and decommissioning phases. But that does not rule out the operation phase, especially the workers conducting routine maintenance, repair and cleaning on the office building, the bio-digester or the landscape of

		the compound.
2.	Public health and safety hazards (*accidents and Injuries*)	The public and any persons who visit the construction site can be at risk of injury from falling objects, accident involving construction vehicles, personal falls, or sharp objects on the ground. The risk is anticipated to be higher during the construction and decommissioning phase of the project. Though we shall have public safety issues during the operation of the building, it is anticipated to be low due to the size of the proposed building.
3.	Visual/ aesthetic Impacts	The excavation activities and stockpile shall be the main source of visual/aesthetic value impact at the project site. Landscaping of the compound after completion of the building is anticipated to enhance the aesthetic value of the areas.
4.	Leakages and spills	The main source of leakages and spills anticipated are from vehicles with mechanical issues at project construction, operation, and decommissioning phase. At construction and decommission, the leakage shall be from contractor's equipment/vehicles, and during operation, it could be from vehicles using the proposed parking on site. The design to take into consideration of such during operation through paving of parking area.
5.	Noise and vibrations	The transportation of construction materials to the site and from the site, general construction activities on-site, and noise from conversation on site are anticipated to be the main sources of noise. Noise in addition is anticipated to be generated during the project operation phase when repairing and maintaining, conversation or from activities by users or boat movement to and from the office premises site. Noise is also anticipated to be generated during decommissioning activities of the project. Measures have been proposed to mitigate against the amount of noise generated during construction.
6.	Air pollution	Air quality is anticipated to be affected by dust particles on-site during foundation excavation activities and during mixing of cement on site. Decommissioning activities, notably demolition and transportation of the waste by boat, could be sources of particulate matter on site.
7.	Solid Waste generation	The main sources of waste shall be debris from construction or decommissioning activities, and at operation phase, shall be from general consumption of materials by the occupants of the office building or the guests that shall be visiting the office block seeking services.
8.	Waste water generation	The main source of wastewater shall be during the operation phase of the project, with grey and black water being anticipated. Although the black water could be used for landscaping purposes on site, it was noted that cultural perception towards black water could be an impediment. However, with proper functioning of the proposed bio-digester through

		adequate maintenance and operation, the perceptions shall be changed over time.
9.	Fire Hazards	• Fire hazard is anticipated mainly at the operation phase of the project, with electrical faults and arson being the main anticipated sources. The design of the proposed office building has provided for fire management measures in the design. And additional measures have also been proposed in the ESMP. • This measure include provision of recessed swinging type hose reel complete with 30 meters of 20mm internal diameter rubber fire hose with nylon spray/jet shut off nozzle • Provision of a Fire assembly point in the design • Installation of fire extinguishers in the building • Provide signages of fire hose Reel, fire exits and fire instructions. • Provide for fire risk and response signage with short and clear information. • Regular fire drills for the building users • Regular awareness and sensitization on fire safety measures and response to the users of the building.
10.	Increased Water consumption	The water on the building will be used in washrooms, for landscaping, cleaning and frequent personal cleaning due to the covid-19 impacts whose future dynamism remains unknown. The design has provided for the treatment of waste water through a bio-digester system that shall be used for landscaping purpose. However, in the event that the bio-digester is not able to meet the landscaping water demand, other sources of water may be considered for watering the lawn hence increasing the demand for water. Despite this, additional measures in the project's design have been proposed to ensure efficient utilization of the resources on site such as push delay taps in washrooms, rain water harvesting and reduced indoor potable water use. This shall reduce pressures on the resources to ensure sustainability.
11.	Increased Energy consumption	Energy shall be critical for the users of the proposed office building either to run machines and equipment or for lighting purposes. Lamu county is one of the areas with high atmospheric temperatures that could make the working conditions unconducive hence requiring mechanical aeration. The demand for energy resources will increase, and several measures have been provided for in the project's design to ensure efficient utilization of the resource including having a solar system, using large windows, using energy saving bulbs LED and allowing adequate air circulation. Additional measures have also been proposed in the mitigation measures

12.	Risk of Spread of HIV/AIDS and other STI	During construction, the project will employ a lot of youth. This particular category is risk averse and as they engage in cheap liquor or drugs, there could be cases of transactional sex exposing them to the risk of HIV/AIDS as well as other sexually transmitted diseases. The contractor will be expected to sensitize the work force on HIV/AIDS and other STI and provide condom dispensers on site.
13.	Increase in Grievances	The local community members, contractor, contractor workers, client (SDBE&F) and the County government) or any other interested parties may be aggrieved due to project activities and need to be aware of the structures of expressing their grievances is critical. Grievances are anticipated to increase due to limited resources against several competing needs.
14.	Child Labour and Protection	Due to provision of cheap labour and differentiation in bargaining power, the underage workers may be employed leading to exploitation.
15.	Gender Equity, Sexual Harassment and abuse amongst workers in the workplace	Due to vulnerability of women, they could be taken advantage of in order to receive what is due to them or favor. This could occur owing to differentiation in power or economic status.
16.	Gender-based violence at community level	This may occur due to the cash flow within the community and among the locals creating differentiation in economic power. Culturally within the proposed project area women are homemakers and any who may seek manual work at the site may not be treated or perceived well by some of the community or family members creating some violence against such. Religion in the area may also be a hindrance to the local women from participating on the project activities during construction.
17.	GBV: Sexual exploitation and abuse (SEA)	Under working environment, women may be taken advantage off to offer sexual favour in order to receive or access that which is rightfully theirs. In addition, with increased influx of youthful labour, there is expected increase in the number of Sexual Exploitation and Abuse cases. Most of them will be working away from their families for longer periods

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

7.1. Chapter Overview

The chapter highlights the environmental and social management measures for the anticipated negative impacts. The ESMP captures the impacts, receptor, proposed mitigation measures, institution responsible for the mitigation, frequency, and budget.

7.2. Proposed Environment and Social Management Measures

The objectives of the proposed environmental and social management plan is to ensure smooth implementation of environmental protection measures, mitigate adverse impacts and ensure environmental protection activities are conducted efficiently at the project site.

The specific objectives include but are not limited to:

- Ensuring environmental health and safety within the living environment and *minimizing environmental risk* during the design, construction, and operation phases.
- Incorporating environmental principles into development planning, design, construction, and operation to enhance environmental management and protection as well as promote sustainable development.
- To provide mitigation measures against all identified and potential negative impacts resulting from the activities of the proposed development
- Reduce contamination
- Apply climate change adaptation measures
- Apply green building construction measures
- Apply measures required by Kenya regulations
- Apply measures required by the World Bank Safeguard Policies applied for KEMFSED and this project
- To assign duties to various actors in the management plan for purposes of enhancing accountability in this project.
- To provide a logical framework for environmental management and monitoring.
- To provide a reference base for future environmental audits of the proposed development.

Various potential adverse environmental impacts associated with the proposed sub-project have been identified, and an ESMP developed to guide in mitigating the negative impacts. The project implementing agency *(SDBE&F together with the county government through Joint Project Supervising Committee)* and the contractor are required to identify the actions and coordinate the various stakeholders appropriately. Table 7-1 to Table 7-3 below shows the anticipated impacts, proposed mitigation measures, the institutions responsible and the estimated possible cost of the action. Although the cost of ESMP implementation has been provided, future dynamics during project operation and decommissioning were a limiting factor and could not be well envisioned at this point in time. The contractor will be required to update the ESMP for operation by providing operation and maintenance guidelines through the as-built documents surrendered to the client.

Table 7-1: Environmental and Social Management Plan During Construction

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
1.	Occupational Health and Safety hazards (*accidents and Injuries*)	Injuries and accidents	Workers on site	▪ Contractor to develop a site safety action plan detailing safety equipment to be used, emergency procedures, restriction on site and personnel responsible for safety inspections and controls. This shall be ready and approved by the joint supervising committee before commencing of the proposed works ▪ Train workers on safety and first aid skills before commencing works ▪ Ensure safety of the construction workers through sensitization on the health and safety aspects. Ensure provision of a fully equipped first aid kit and encourage workers to report on any accidents and incidents on site. ▪ Provide appropriate personal protective equipment (PPE) to workers and training on appropriate use. *(Reflective jackets, helmets, face masks, ear plugs gloves, safety boots, etc.)* ▪ Adequate provision of requisite sanitation facilities for human waste disposal for workers on site ▪ Recording of all injuries that occur on site in the incident register, corrective actions for their prevention as appropriate. ▪ The contractor is required to have WIBA insurance policy to compensate	To ensure the safety of workers and persons on site	contractor and Project supervising consultant	800,000

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
				workers in the event of injuries. ▪ Provide clean drinking water for the workers to mitigate against dehydration. ▪ Have an understanding with a nearby health facility for emergency cases on-site before decisions are made. ▪ Adherence to Covid-19 rules/guidelines as provided from time to time by the ministry of health and the bank with provision of easily accessible and adequate covid-19 PPE to all persons on site. The specific action to be captured in the contractor ESMP. ▪ Training of workers on covid-19 rules and requirements. ▪ As applicable, only qualified personnel shall be allowed to operate construction equipments on site that may require specialized skills			
2.	Public health and safety hazards (*accidents and Injuries*)	injuries and accidents	officers using nearby offices and Residents of the staff quarter	▪ Ensure the safety of residents and officers with offices near the site by providing safety signs at strategic places around the access roads. ▪ Hoarding off working sites to protect the public or unauthorized persons from entry. ▪ Use of signs and warnings on sites on areas with high risks. ▪ Consider having a road marshal, particularly during delivery of construction materials to avoid any incidents when construction vehicles	To ensure public safety at site area	contractor and Project supervising consultant	100,000

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
				leave the construction site or deliver materials. ▪ Reduce unnecessary speeding by the construction vehicles to control for accidents from the movement of pedestrians in the area. ▪ Prior creation of awareness and sensitization of the public and the officers of any activities that is likely to have an impact in adequate time (*2 weeks)* before commencement.			
3.	Visual/ aesthetic Impacts	Psychological nuisance	residents, workers, national and county officers using the nearby offices and the general public	• Cleaning of the site and organized locating of different construction materials. • Backfilling of soil cuttings • Landscaping of the project site • hoarding of the construction site using appropriate screening materials	To reduce psychological impacts to public, residents, and workers on site	contractor and Project supervising consultant	part of construction cost
4.	Leakages and spills	contamination and pollution	soil, water, plants, and air	▪ In the event of hazardous waste leakage or spills, engage authorized waste handlers to dispose of contaminated soils. ▪ Disposing of contaminated soils in cutting pit if volumes are low. ▪ Use of NEMA licensed hazardous waste handlers to dispose off in licensed disposal areas. ▪ Development of site-specific incident management or response plan. ▪ Use of an authorized garage or fuel station in the project area by the	to avoid any contamination and pollution on-site or at the contactor's camp	contractor and Project supervising consultant	part of construction cost

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
				contractor.			
5.	Excessive Noise	auditory injuries	workers, officer sharing site and the public	• The contractor to use equipment with low noise levels or fitted with silencers where appropriate. • Regular servicing of the equipment to reduce the possibility of noise from worn-out parts. • Informing the public about the possibility of unusual noise levels, particularly to residents and nearby offices, whenever working on such activities. • Ensure adherence to PPE by workers[9] working on excessive noise and vibration activities • Restricting noisy activities to be during the day and no noisy activities should be conducted on site at night. • Regular measurement of noise levels and devising control measures.	to ensure Workers and public safety	contractor and Project supervising consultant	350,000
6.	Air pollution	air pollution	workers, area residents, and the general public	• Use of non-lead paints during construction. • Adherence to proper uses of PPE by the workers, especially those working on activities requiring mixing of cement. • Inform the public and residents about	to ensure workers and public safety	contractor and Project supervising consultant	350,000

[9] The measure should be according to the law (Occupation safety and health Act 2007, National Construction Act

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
				activities with possibility of unusual air pollutants • Use of silt screens to reduce dust from site. • Consider wetting all the sand or soil materials being transported to or from the construction site. Where appropriate, cover the materials being transported to avoid being blown by the wind during transportation.			
7.	increased Solid Waste generation	increased waste generation at project site and contractors camp if any	The environment in general (public nuisance, soil, water and air)	• Promotion and adoption of the principles of waste avoidance, reduction, reuse and recycle. Through avoiding unnecessary generation of waste, use of debris for backfilling where possible, use of waste materials on-site for other purposes where appropriate, or selling to recycling merchants. • Designate proper waste transfer stations onsite with controlled access. • Seek appropriate approvals from NEMA and County Government on management and Disposal of the waste[10].*(this may include using authorized disposal sites, use of NEMA authorized waste*	to ensure waste is managed properly	contractor and Project supervising consultant	150,000

[10] Waste management and disposal procedures need to be in accordance to waste management standards proposed under NEMA waste management regulations of 2006 (legal notice 121).

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
				pickers/transporters, acquiring dumping certificates, and keeping proper records or use of authorized means to ferry waste from site) • Consider formulating a site-specific waste management plan informed by waste characterization[11]. • Observing waste management standards proposed under NEMA waste management regulations 2006. *(with a particular focus on waste separation and management before disposal)*			
8.	Increased Water consumption for construction	pressure on existing water resources	Lamu water and sewerage company and other water users	• Sensitization and awareness creation among construction workers on significance of water conservation measures. • Curing the concrete structures during evening and early morning to reduce evaporation. • Covering the concrete structures to be cured with sand or any water retaining material to shield from direct sunlight • Regular maintenance and prompt response to leakage in the water system during construction phase. • Use of alternative water sources if	to ensure efficient and sustainable consumption of water resources	LAWASCO, contractor and Project supervising consultant	part of construction and cost

[11] Waste characterization should consider waste from construction site and the contractors' camp if any.

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
				available, particularly rain water if any during construction phase			
9.	Risk of Spread of HIV/AIDS	Increased cases of STI and HIV/AIDS in view of worker on site	Surrounding community	• Promote HIV/AIDS Prevention messaging • Access to safe sex (condoms-Male and female) • Install HIV testing services at the construction site or an MoU with an existing government health facility in the area. • Support infected workers with access to ARVs from local public health facilities. • Peer counseling services at the site	HIV free site	contractor and Project supervising consultant	150,000
10.	Grievances	conflict between affected parties	All project stakeholders	• Establish grievance redress committees at the site • Ensure contractor staff grievance structures exist • Sensitization and awareness creation among workers and the public on grievance redress mechanisms in place	Prompt addressing of grievances and issues of concern	contractor and Project supervising consultant	250,000
11.	Effects of Immigrant workers	increase in grievance	workers and the local communities	▪ Contractor should use the local workforce as much as possible (preference to local community members on skills locally available). ▪ Effective community engagement and strong grievance redress mechanisms on matters related to labour ▪ All workers to sign an employment contract including a Code of Conduct	Maximize benefit to local people and conflict with immigrant	contractor and Project supervising consultant	Part of construction cost

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
				governing appropriate behaviour ▪ The workforce should be sensitized to local social and cultural practices and be educated on the expected behaviour and conduct ▪ Contractor should prepare and enforce a No Sexual Harassment and Non-Discrimination Policy ▪ Contractor should prepare and implement a gender action plan ▪ The contractor as part of the C-ESMP will Prepare labor Management Plan (LMP) that included mandatory requirement to procure all unskilled (and as much as possible, semi-skilled) labour as well as locally available materials from the local community while ensuring equal pay for equal work for men, women and people with disability			
12.	Child Labour and Protection	Abuse and exploitation of children	children	▪ Ensure no children are employed on site in accordance with national labour laws. This can be done through incorporating prohibitive provisions in the code of conduct and also having the recruitment policies that prohibits child labour. ▪ Ensure that any child sexual relations offenses among contractors' workers are promptly reported to the police.	zero tolerance to child labour	contractor and Project supervising consultant	Part of construction cost
13.	Gender Equity, Sexual	Injury and Psychological	Vulnerable persons at the work place.	▪ The contractor should prepare and enforce a No Sexual Harassment and Non-Discrimination Policy ▪ The contractor will strive to ensure	Gender equity at work place and free of	contractor and Project supervising	150,000

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
	Harassment and abuse amongst workers in the workplace			equitable distribution of employment opportunities between men and women. ▪ Provision of gender disaggregated bathing, changing, sanitation facilities ▪ Whenever harassment are recorded on site, the contractor should ensure prompt and effective remedial action ▪ The employees should be trained and sensitized on appropriate behavior ▪ All workers signing a code of conduct ▪ Sensitization and awareness creation	SEA	consultant	
14.	Gender-based violence at community level	Injury	Vulnerable persons in the community.	▪ The contractor will implement provisions that ensure that gender-based violence at the community level is not triggered by the Project, including: ▪ Effective and on-going community engagement and consultation, particularly with women and girls; ▪ Review of specific project components that are known to heighten GBV risk at the community level, ▪ Specific plan for mitigating these known risks, e.g. sensitization around gender-equitable approaches to employment, representation, management, school pupils etc ▪ The contractor will ensure adequate referral mechanisms are in place if a case of GBV at the community level is reported related to project implementation.	prevent cases of GBV in the community due to project activities	contractor and Project supervising consultant	150,000

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
15.	Sexual exploitation and abuse (SEA)	Injury	Vulnerable persons in the community.	▪ Develop and implement a SEA management action plan with an Accountability and Response Framework as part of the ESMP. The SEA action plan will follow guidance on the World Bank's Good Practice Note for Addressing Gender-based Violence in Investment Project Financing. ▪ The SEA action plan will include how the project will ensure necessary steps are in place for: ▪ Prevention of SEA: including CoCs and ongoing sensitization of staff on responsibilities related to the CoC and consequences of non-compliance; project-level IEC materials; ▪ Response to SEA: including survivor-centred coordinated multi-sectoral referral and assistance to complainants according to standard operating procedures; staff reporting mechanisms; written procedures related to case oversight, investigation and disciplinary procedures at the project level, including confidential data management; ▪ Engagement with the community: including development of confidential community-based complaints mechanisms discrete from the standard GRM; mainstreaming of PSEA awareness-raising in all community engagement activities; community-	zero tolerance to SEA	contractor and Project supervising consultant	150,000

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	Goal	Responsibility	Cost (KES)
				level IEC materials; regular community outreach to women and girls about social risks and their PSEA-related rights; ▪ Management and Coordination: including integration of SEA in job descriptions, employments contracts, performance appraisal systems, etc.; development of contract policies related to SEA, including whistle-blower protection and investigation and disciplinary procedures; training for all project management; management of coordination mechanism for case oversight, investigations and disciplinary procedures; supervision of dedicated PSEA focal points in the project and trained community liaison officers.			

The estimated total cost for the implementation of the construction phase ESMP is Kenya Shillings 3.52 Million. However, the actual cost shall be prepared by the contractor and captured in the C-ESMP. The project's Bid Documents will incorporate the Environment, Social Health and Safety Provisions discussed under this ESMP.

Table 7-2: Environmental and Social Management Plan (ESMP) during Sub-project Operation Phase

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	GOAL	RESPONSIBILITY	COST (KES)
1.	Occupational Health and Safety (*accidents and Injuries*)	Injuries and accidents	office staff, maintenance and repair workers	• Ensure compliance to Occupational Safety and Health Act Cap. 514 and its Subsidiary Legislations standards including: registering the office as a work place, constituting a safety committee, providing first aid facilities, conducting emergency drills and annual office safety audits. • Provide personal protective equipment to maintenance workers • Recording all injuries that occur on-site to workers while doing their daily duties in the incident register, corrective actions for their prevention should be initiated as appropriate. • Cordoning off working sites to protect the public or unauthorized persons during repair and maintenance of the different utility systems on site • Creation of awareness and training of workers on site on safety and first aid skills.	Ensure the safety of workers at the office and those who will be conducting routine repair and maintenances activities.	contractor and county government fisheries department	To be determined under operation and maintenance costs

				• Hiring employees with proper qualifications for specialized and risky tasks during operation and maintenance of the various utility systems. • Adherence to Covid-19 rules as provided by the ministry of health and the bank while conducting daily duties. • Providing requisite PPE and training of workers on covid-19 rules and requirements. • Undertake annual statutory occupational safety and health audit of the building			
2.	Public health and safety (*accidents and Injuries*)	Injury and accidents	clients of the county fisheries department	• using signage during cleaning, maintenance, or repair to warn the public • Easily accessible fire risk information to the public visiting the premise	ensure protection and safety of the public who visit the office building	contractor and county government fisheries department	To be determined under operation and maintenance costs
3.	Solid Waste generation	contamination and littering	public nuisance, soil, water and air	• Sensitization and awareness creation among the office building users on the significance of waste separation and in addition provide for waste sorting bins at the premise with clear labeling. • Provide for a waste transfer station at the premise for	to ensure waste is managed properly	county government environment and natural resources and fisheries departments	To be determined under operation and maintenance costs

				temporal holding of waste before final disposal. • Sensitization and awareness creation among the office building users on the significance of waste recycling. • To engage the county government environment and natural resources department mandated with waste management to collect and properly dispose of the waste.			
4.	Increased Waste water generation	increased waste water generation during operation	public nuisance, soil and water	• Regular sensitization and awareness to building users as well as discouragement on releasing detergents or other chemical solutions in black water system. • Regular cleaning of the wastewater drainage system • Regular and proper maintenance of the drainage system • Prompt response to any reported blockage and leakages • Sensitization and awareness of building users from discharging or emptying any chemical solutions or oils to the sewer system. • Treating the waste water through a biodigester and using the water	to ensure adequate treatment and management of waste water	LAWASCO and county government fisheries department	To be determined under operation and maintenance costs

				for landscaping.			
5.	Fire Hazards	destruction of property in the building and injury to users	office building users and County government assets	• Provide recessed swinging type hose reel complete with 30 meters of 20mm internal diameter rubber fire hose with nylon spray/jet shut off nozzle • Provision of a Fire assembly point in the design • Installation of fire extinguishers in the building • Provide signages of fire hose Reel, fire exits and fire instructions. • Provide for fire risk and appropriate response equipment as well as signages with short and clear information. • Train selected staff as fire marshals who can take lead in case of fire emergency in the building • Regular fire drills for the building users • Regular awareness and sensitization on fire safety measures and response to the users of the building. • Clear fire incidents reporting procedures and response. Ensure regular provision of operational	to ensure the building is protected from fire hazards	county government Fire and fisheries departments	To be determined under operation and maintenance costs

				emergency reporting contacts. • Regular servicing and maintenance of the fire extinguishers. • Ensuring availability of adequate water resources at the premise at all times for the hydrants as per the OSHA requirements. • Undertake annual statutory occupational safety audit of the building.			
6.	Increased Water consumption	pressure on existing water resources	Lamu water and sewerage company (LAWASCO) and other water users	• Sensitization and awareness creation among users of the building on significance of water conservation measures. • Use of water efficient appliance such as delay taps • Regular maintenance and prompt response to leakage in the water system. • Use of alternative water sources eg rain harvesting • Monitor monthly water consumption trends to inform any further management interventions • Prompting reporting of leakages through sensitization of the public members	to ensure efficient and sustainable consumption of water resources	LAWASCO and county government fisheries department	To be determined under operation and maintenance costs
7.	Increased Energy	contribution to carbon	energy resources and	• Sensitization and awareness creation among office users on	to ensure efficient and	county government fisheries department	To be determined

	consumption	generation and pressure on energy resources	climate change	the significance of energy conservation measures • Sensitization and awareness creation among the maintenance team to continue observing the use of energy-saving electrical appliances on the building. • Proper and regular maintenance of the green energy appliances and equipment provided for in the design of the building.	sustainable consumption of energy resources		under operation and maintenance costs

Table 7-3: Environmental and Social Management Plan (ESMP) during Decommissioning.

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	GOAL	RESPONSIBILITY	COST (KES)
1.	Occupational Health and Safety (*accidents and Injuries*)	Injury and accidents	Workers	• Preparation of project decommissioning plan. • Ensure the safety of the decommissioning workers by putting first aid area and injury reporting mechanism • The contractor should consider having a WIBA insurance policy to compensate workers in an event of an accident on site. • Provide personal protective equipment to workers. • Recording all injuries that occur on site in the incident register, corrective actions for their prevention. • Cordoning off demolition sites to protect the public or unauthorized persons • use of signs and warnings on sites with high risks • Creation of awareness and training of workers on-site on safety and first aid skills. • Hiring employees with proper qualifications for specialized and risky tasks. • Ensure compliance to Occupational Safety and Health Act Cap. 514 and it's Subsidiary Legislations.	to ensure workers safety	County Department of fisheries and decommissioning contractor	To be determined under the decommissioning plan
2.	Leakages and spills	contamination and	soil, water,	• In the event of hazardous waste leakage or spills, engage authorized waste handlers to	to reduce contaminati	contractor	To be determined

		pollution	plants, and air	dispose of contaminated soils. • Disposing of contaminated soils in cutting pit if volumes are low. • Use of NEMA licensed waste handlers to dispose of in licensed disposal sites. • Development of site-specific incident management or response plan.	on on site		under the decommissioning plan
3.	Excessive Noise	Auditory injuries and psychological nuisance	workers, residents and neighboring offices	• Adequate use of PPE by the workers e.g. earplugs • Working on and restricting noisy activities during the day • Reducing the duration of exposure of workers to high occupational noise levels during demolition. • Acquisition of permits/Licenses for any activity with high noise levels eg drilling of walls or slabs for demolition. • Using models of machines and equipment with low noise levels. • workers using drilling or handheld pneumatic equipment to be provided with specialized anti-vibrating gloves, • Warnings to be issued to the locals in case of any unusual noise levels, • Ensure that NEMA noise and Vibration standards are observed in all project activities.	to ensure workers and public safety	County department of fisheries and decommissioning contractor	To be determined under the decommissioning plan
4.	Air pollution	contamination of air	air, local communities, and workers	• Workers to use masks when working in dusty conditions during the decommissioning process. • Use all means possible to suppress dust if	to ensure workers and public safety	County department of fisheries and contractor	To be determined under the decommissionin

				considered to be a menace during demolishing of obsolete walls or structures on-site			g plan
5.	Solid Waste generation	littering environment and contamination	water, air, soils, environment, and local residents	• Proper disposal of any hazards waste from the decommissioned site. • Preparation of waste management plan to guide waste management and disposal activities of all debris from demolition activities. • Disposal of debris to NEMA authorized damping sites • Use of certified vehicles or NEMA licensed waste disposal firms for waste management and disposal	to ensure waste is managed properly	county department of environment and natural resources, department of fisheries and decommissioning contractor	To be determined under the decommissioning plan

8. Environmental and Social Monitoring Plan (ESMoP)

8.1. Chapter Overview

The chapter highlights the environmental and social monitoring indicators for the anticipated negative and positive impacts as captured in Table 8-1 and Table 8-2 respectively. The institutional responsibilities for implementation and supervision are presented in Section 3.7 of this report. The progress monitoring reports prepared, shall be on a monthly and quarterly basis. The client (SDBE&F) through the joint Project Supervising Committee and the safeguards consultants shall review the reports and submit to the World Bank.

In addition to regular reporting, all serious[12] ESHS incidents, accidents, dangerous occurrences including occupational diseases shall be promptly reported to the respective regulatory institution in the prescribed manner and template outlined in DOSH ML/DOSH/FORM 1 and further to the World Bank in line with the requirement of the World Bank EHS guidelines, Occupational Health and Safety Act (OSHA) 2007 and EMCA CAP 387. Investigation shall be conducted, and a corrective action plan developed for every reportable incident to prevent recurrence.

[12] This is an incident which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.

Table 8-1: Environmental and Social Monitoring Plan (ESMoP) for Negative impacts

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
Occupational Health and Safety	construction site	Visual inspection of first aid area, injury reporting mechanism, WIBA insurance policy, appropriate use and wearing of PPE, training programs for workers, health and safety plan prepared for site, clean drinking watering points, housekeeping on site and at the contractor's camp. safety training certificates, gloves, earplugs, safety boots, reflector jackets, drinking water, nose mask, helmet, overall, sanitation facilities, anti-vibrating gloves	▪ availability of approved site safety action plan ▪ No. of trained workers on safety and first aid skills ▪ First aid facility and injury reporting mechanism ▪ Availability and appropriate use of personal protective equipment (PPE) *(Reflective jackets, helmets, face masks, ear plugs gloves, safety boots, etc.)* ▪ No. of trained workers on appropriate use of PPE. ▪ adequacy of sanitation facilities on site ▪ Incident register ▪ Availability of valid contractor WIBA insurance policy ▪ Availability of adequate watering points for worker on site with clean water ▪ MoU with health centre. ▪ Covid-19 management rules/guidelines on site ▪ Covid-19 PPE and use on site. ▪ No of trained workers on covid-19 rules	Daily	Contractor	Project supervising consultant
COVID-19 spread	Construction site and	Approved SOPs in line with World Bank and	• Approved SOPs in line with World Bank and ministry of health guidelines	weekly	Contractor	Project supervising

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
among workers	operating office	ministry of health guidelines in place, routine fumigation of shared area and shared tools, sanitizing and hand washing area and facilities, isolation area, proper use of covid-19 PPE, visual inspection of social distance and rapid covid-19 screening measures	in place, • No of routine fumigation of shared area and shared tools, • Sanitizing and hand washing area and facilities put in place • Isolation area, • proper use of covid-19 PPE, • visual inspection of social distance and rapid covid-19 screening measures put in place			consultant and County department of public health.
Public health and safety	Areas surrounding the construction site.	visual inspection of site for; safety signs at strategic places, cordoned off working sites to protect the public or unauthorized persons, usage of signs and warnings on sites with high risks, low speeding of construction vehicle and consideration of wind action. No. of reported injuries and accidents and No. of grievances reported.	▪ Safety signs at high risk place. ▪ Hording off working site ▪ Speed limit imposed with signages ▪ No of awareness and sensitization activities	weekly	Contractor	Project supervising consultant

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
Leakages and spills of greases, oil or fuel	contractor yard and construction site	Visual inspection of hazardous waste leakage or spills to soils on site, records of cutting pits for disposed off contaminated soils, Developed site-specific incident management or response plan.	▪ No of incidents of hazardous waste leakage or spills. ▪ Availability of site-specific incident management and response plan. ▪ Oil trap measures at contractors yard	weekly	Contractor	Project supervising consultant
Noise and vibrations	construction site	Use equipment with low noise levels or fitted with mufflers. Visual inspection of site for use of PPE, use of sound proof materials, notices to public on noisy construction activities, restricting noisy activities to day time and regular measurement of noise levels through mobile phone gadgets.	• Noise regulation measures on construction equipments. • Availability of Equipment and Machine servicing records • No of public notices on high noise level activities • use of noise PPE • Guideline on hooting and speed limits. • Records of noise monitoring	weekly	Contractor	Project supervising consultant
Air quality	Construction site and along construction vehicle	Physical inspection of vehicles records to ensure meets emission requirements, Use of masks while working in dusty conditions,	• No of sources of air pollution on site • Certificates of inspection on emission for vehicles • No of Workers using air pollution PPEs	daily	Contractor	Project supervising consultant

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
	movement routes	shielding wind impacts during construction, low speed of construction vehicle, catalytic devices on vehicle and suppress dust	• Speed limits • No of times sand and soil material are covered in transit. • Complaints registered on dust nuisance			
Waste generation	Construction site	Visual inspection of; sanitation facilities for human waste management, amount of waste correctly disposed, Visual inspection of haphazard littering, practicing of waste avoidance, reduction, reuse and recycle, designated waste transfer station onsite, documented approved waste dumping site, presence and compliance to implementations of site-specific waste management plan.	• adequacy of sanitation facilities on site for workers • Site-specific waste management plan • Measures of waste avoidance, reduction, reuse and recycle put in place. • Designated waste transfer station on site. • Records of approvals from NEMA and County Government on waste management and disposal.	Monthly	Contractor	Project supervising consultant
Grievances among project	construction site	grievance redress committee formed, existence of grievance	• Grievance redress committees put in place	Monthly	contractor and safeguards	Project supervising consultant

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
stakeholders		redress structures put in place, sensitization and awareness creation among workers and other stakeholders on grievance redress structures in place, grievance log forms and	• Contractor staff grievance structures put in place • No. of sensitization and awareness events • No. of grievances registered, log register on site, no of grievances resolved against total grievances,		officer	
HIV/AIDS prevalence	Construction site	HIV/AIDS prevention and awareness campaign; as well as HIV/AIDS testing services at the construction site or an MoU with an existing government health facility in the area, type of support for infected workers for ARVs and peer counseling services at the site.	• No. of HIV/AIDS prevention messaging • No. of workers having access to safe sex (condoms-Male and female) • HIV testing services or a MoU with an existing government health facility. • No. of supported infected workers with ARVs • Peer counseling services put in place	Monthly	contractor	Project supervising consultant
Gender Equity, Sexual Harassment and abuse amongst workers in	construction site	Training of workers on sexual harassment, signing of code of conduct prohibiting GBV/SEA, equitable distribution of employment	• Sexual Harassment and Non-Discrimination Policy • No of women employed against total employed • Adequate No of sanitation facilities per sex • No of reported SH harassment cases	Monthly	contractor	Project supervising consultant

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
the workplace		opportunities, disaggregated bathing and sanitation facilities on site and records of sexual harassment.	• No of trained and sensitized employees on appropriate behavior • No of employees signed code of conduct against SH • Gender action plan			
GBV at community	construction site	Community? Referral mechanism put in place for GBV cases, Mitigation plan put in place for project activities with high risk GBV incidences, Mechanisms put in place to deter GBV cases and an engagement mechanism put places for GBV victims.	▪ No. of community engagement and consultation with women and girls; ▪ No. of sub-project activities identified to be of high GBV risk at community level. ▪ Referral mechanisms put in place in the event of GBV at Community level	Quarterly	safeguards officer	Project supervising consultant
GBV: Sexual exploitation and abuse (SEA)	Construction site	SEA management plan in place, sensitization and awareness creation among workers and the community, SEA response mechanism put in place, Special GRM for SEA cases put in place, SEA awareness in community engagement	▪ SEA management action plan ▪ Signed code of conduct (CoC) by all workers and sub-contractors ▪ No. of workers trained on CoCs and responsibilities ▪ Project-level IEC materials put in place ▪ Survivor-centred mechanisms put in place ▪ Multi-sectoral referral and assistance plan put in place	Quarterly	safeguards officer	Project supervising consultant

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
		activities, Integration of SEA management principles in project engagement documents, training of all workers at the construction site and signing of code of conduct prohibiting GBV/SEA	▪ Disciplinary procedures at the project put in place ▪ Confidential community-based complaints mechanisms in place ▪ PSEA awareness-raising done ▪ community-level IEC materials put in place ▪ No of community outreach to women and girls about social risks and their PSEA-related rights; ▪ Integration of SEA in job descriptions, employments contracts, performance appraisal systems, ▪ Whistle-blower protection and investigation and disciplinary procedures put in place ▪ No. of training of project staff on SEA conducted			
Child Labour and Protection	construction site	Workers to have national identification card, recruitment policy prohibiting child labour put in place and review of employee records	▪ Records of employees including copies of identification cards ▪ Records of child sexual relations offenses reported to the police. ▪ Recruitment policy prohibiting child labour put in place ▪ No of employee records reviewed (for?)	Monthly	safeguards officer	Project supervising consultant
Labour and employment-related issues	Construction site and contractors office	Physical counts and inspection of records on; No. of locals employed on the project from the	▪ No of local workforce (against total workforce…the baseline for this is also determined beforehand) ▪ Community engagement plan ▪ Signed Code of Conduct by all	Monthly	safeguards officer	Project supervising consultant

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
		employment records. No. of Grievance recorded from employees and how they were addressed	workers ▪ No of sensitization meeting on local social and cultural practices on acceptable behavior ▪ Labour Management Plan (LMP)			

Table 8-2: Environmental and Social Monitoring Plan (EMoP) for Positive Impacts

PARAMETER / ACTIVITY	LOCATION	MEANS OF MONITORING	INDICATORS	FREQUENCY	RESPONSIBLE AGENCY	
					IMPLEMENTED BY	SUPERVISED BY
Employment opportunities	Construction site	temporal Job opportunities for construction workers and service providers at construction site eg (electrical, security)	▪ No of local workers employed at construction site ▪ No of local service providers employed on site to provide security or electrical conduits or cables.	Monthly	Contractor	Project supervising consultant
Business opportunities	Construction site	Materials available within the local, Identify local suppliers and identified women food vendor	▪ Amount of materials Sourced locally ▪ No of local suppliers ▪ No of local women food	Monthly	Contractor	Project supervising consultant

			vendors supplying the site.			
Acquiring a fisheries office	operation	Constructed office	Operational offices	Monthly	Contractor	Project supervising consultant

9. GRIEVANCES MANAGEMENT SYSTEM AND PROCEDURE

9.1. Chapter Overview

The chapter describes the procedure and mechanism through which community members and any other project aggrieved parties will be able to report, make, place/lodge or express a grievance against impacts of Lamu fisheries office sub-project construction activities or the contractor activities as part of the ESIA ESMP implementation. This chapter generally outlines the need for a grievance redress mechanism, grievance redress structure, grievance redress procedure, institutional arrangement and awareness and sensitization on grievance redress mechanism.

9.2. Need for Grievance Mechanism

The construction of Lamu county fisheries headquarter at Mokowe is anticipated to generate perceived or actual grievances from project interested parties who could be community members, workers, individuals, groups or county officers from other departments affected or likely to be affected by environmental and social impacts of the construction activities. In light of this, there was need to anticipate and put in place a grievance redress mechanism to outline KEMFSED project approach to accepting, assessing, resolving and monitoring of grievances from aggrieved parties on the construction of Lamu Fisheries Headquarter sub-project. A grievance is any dissatisfaction or sense of injustice or unfairness felt by a person – in this respect a project affected person or his/her representative in connection matters related to labour, project impacts, GBV, SEA, the work implementation process, the project developer, the contractor and other scenarios related to project implementation. The grievance is usually brought to the attention of the person(s) in charge, referred to in this ESIA report as the Grievance Officer (GO) designated by the project implementation team, in this case, we have assigned the contractor safeguards Officer as the grievance officer for this sub-project.

9.2.1. Objectives of the GRM

The aim and purpose of this mechanism is to ensure the grievance handling procedures are accessible, prompt and affordable to the nearby community during construction works, and will provide an alternative to the costly and time-consuming formal court procedures for handling grievances and disputes. The grievance redress system will be operated at the site sub-project mainly during the construction period.

9.2.2. Scope of the GRM

The scope of GRM system will be to deal with grievances related to construction works – particularly issues related to recruitment of unskilled labour; ensuring fairness of job opportunities to different segments of construction site community; following up on waste management; dealing with Environment Health & Safety (EHS) aspects to unskilled workers; addressing complaints related to Gender Based Violence (GBV) committed by site workers;

Sexual Exploitation and Abuse (SEA) particularly referrals to criminal justice system; addressing aspects of child labour and following on safe waste disposal or destruction of critical biodiversity in the project site.

9.2.3. Grievance Redress Continuous Improvement

The Grievance Redress Mechanism (GRM) is designed not only to address immediate concerns but also to evolve and adapt through a structured system of continuous improvement and monitoring. This comprehensive approach includes several key components: Firstly, regular training and awareness sessions will be held for all construction site employees. These sessions are essential for reinforcing the importance of ethical behavior, understanding the GRM procedures thoroughly, and ensuring contractor's employees are fully aware of their rights and responsibilities, particularly in relation to Environment, Health, and Safety (EHS) standards, Gender-Based Violence/Sexual Exploitation and Abuse (GBV/SEA), and waste management practices. Additionally, the GRM establishes robust feedback and reporting systems to empower workers and community members to report grievances safely and without fear of retaliation. The mechanism includes provisions for anonymous submissions, allowing a secure way for issues to be voiced, and implements regular feedback loops to gauge the effectiveness of the GRM in real-time. Periodic reviews and adjustments form another pillar of this system. The GRM undergoes regular evaluations to assess its effectiveness and is adjusted as needed to meet the changing demands and challenges of the construction project and its impacts on the community. This dynamic approach ensures the GRM remains responsive and effective over the life of the project

9.3. Grievance Redress Structure

The grievance redress structure for KEMFSED sub-projects shall be of a six tier of amicable review and settlement of disputes. The tiers shall consist of; Site –Level Grievance Redress Committee (SL-GRC), Joint Project Supervising Committee, Sub-County - Grievance Redress Committee (SC-GRC), NPCU, World Bank grievance redress service and the environment court. In spite of having the different tiers, an aggrieved party is free to lodge a complaint at any level. Though it's encouraged that the complaint should be made at the lowest level possible for quick and prompt response and only escalated if the issue is complex and cannot be handled at such level.

9.3.1. First level: Site –Level Grievance Redress Committee (SL-GRC)

The first level: Site Level (Project site level) Grievance Redress Committees (SL-GRC), this will be formed at sub-project site. This ESIA prefers the first level of grievance or conflict redress on project related issues as a result of this sub-project to be handled by the contractor and SL-GRC. The committee will be drawn from the contractor, the community and from the county government. The community representative will be elected by community members. The committee will handle all forms of grievances in an amicable manner and as an alternative dispute resolution to formal process, which is normally lengthy and costly. Grievances not resolved by the site level committees (SL-GRC) will be taken to the second level.

In the affected sites as described above there will be a **Site –Level Grievance Redress Committee (SL-GRC)** and the membership will include:

- CPIU Safeguards specialist who will be the chairperson of the committee,
- County Monitoring and Evaluation officer,
- Contractor safeguards specialist who will be the secretary of the committee and
- Male Community Representatives
- Female community representative
- Representative of Persons with disabilities

9.3.2. Second level: Joint Project Supervising Committee

The committee will include NPCU Engineer and CPIU representative engineering team supervising the construction and NPCU Safeguards team and county safeguards officers. It is envisaged that the committee will be meeting on a monthly basis. Part of their role will be to review grievances emanating from Site-Level Grievance Redress committee and address them as urgently as possible. Where the grievance is not addressed at this level, then it shall be referred to KEMFSED project GRM structure.

9.4. Grievance Redress Procedure

9.4.1. Step 1: Receipt of Complaint/Grievance

Any aggrieved party shall present a grievance or feedback to the GRM desk at the contractors' office on site. The contractor shall ensure avenues for lodging grievances are accessible to the public for any aggrieved parties. The contractor's safeguards officer shall be designated Grievance officer (GO) to receive and appropriately record in a grievance log form attached in annex VIII. The grievance log form will indicate grievances, date opened/lodged, actions taken to address or reasons why the grievance was not acted upon (e.g. the grievance was not related to the project), information provided to complainant and date on which the grievance was closed. The complaints can be lodged by telephone, email, physically/verbally, suggestion box, through representatives/third party, letters, face book, what's up, twitter or any other digital platform. The grievance officer shall in consultation with the contractor team resolve all the complaints and refers those which cannot be resolved to **Site –Level Grievance Redress Committee (SL-GRC)**. All cases related to GBV/SEA shall be handled by the County safeguards officers through appropriate GBV/SEA service provision channels and the details shall not be recorded in the public logbook.

The GO within an appropriate time period as shall be agreed by the **Site –Level Grievance Redress Committee (SL-GRC)**, shall acknowledge receipt of complain and assure the complaint of the necessary action being taken. The grievances can also be made to the County headquarter office at Mokowe either by the complainant, community leaders, community representative or by any other third party of choice. The complaints shall be referred to the contractor safeguards officer for appropriate action. Complains will be acknowledged in a day or within any other project agreed time frame to the complainant confirming that the grievance is

received and under investigation for appropriate action. The fisheries office shall be an alternative for the complainants who shall not be comfortable to report to the contractor's office directly. However regardless of the source of grievance or complain, the contractor reporting desk will record all grievances on the grievance reporting form or logbook. The complaint could be from members of the public, workers or any other aggrieved party.

9.4.2. Enquire or Investigating the Complain

The complaints received shall be screened to determine whether the matter bares any relationship with the sub-project activities, and whether the contractor team can handle the grievance or refer to a more competent or relevant agency. Any grievance matter not related to the sub-project shall be recorded together with the action taken and be referred as appropriate. The complainant shall be appropriately informed and guided on the next steps. The complaints to be referred shall be those whose issues are not related to the sub-project and the issues raised does not fall within the scope of issues to be addressed by the GRM for example cases of GBV/SEA or any other related criminal offences. The verification and screening process may consist of community site visits and meeting to determine the scale, scope and magnitude of the grievance and available options to address the matter appropriately.

9.4.3. Responding and Resolving the Conflict

All grievances will be responded to through the chairperson of the SLGRC after completing the investigation or enquiry into the matter. The communication should be done within an agreed timeframe after the completion of the investigations, discussions and identification of potential means of resolving the matter. Where the investigations and resolution of the issue is delayed, the complainant must be informed appropriately together with the cause of the delay and the new timelines provided in advance. The contractor shall endeavor to solve issues directly and promptly on site but if the matter is more complex or beyond the contractor, it should be handled by the SLGRC or JPSC. If the complainant is not satisfied with the decision made at any stage of the GR structure, the aggrieved party will be made aware of their rights to pursue the matter to the next level. The complainant however should be informed of the process and directed to a person that will offer the assistance. A copy of written documentation of the decision should be given to the complainant and another copy shared with the next level of the GR structure to bring to their attention of the complaint. The records of any grievance redress process with all the activities that were involved and decisions should be kept well and will be monitored by the county M&E officer and included in regular KEMFSED project reporting. If an aggrieved party is not satisfied with the decision of **Site –Level Grievance Redress Committee (SL-GRC),** the grievance will be escalated to JPSC for review and final decision making. The JPSC should resolve all grievances during the monthly site meetings. If the complainant is still dissatisfied, further action will be referred to the Sub-County - Grievance Redress Committee (SC-GRC)

If the grievance is solved at any stage, the designated GO and a representative of a GRC will determine a corrective action in consultation with the aggrieved person. A description of the

action, the time frame within which the action is to take place, and the party charged with implementing the action will be recorded in the grievance database. Grievances will be resolved and the status reported back to complainants within 7 days. If more time is required, this will be clearly communicated in advance to the aggrieved person. Cases that are not resolved within the stipulated time, detailed investigations will be undertaken by Joint Project Supervision Committee (JPSC) and results discussed in the monthly meetings with the affected persons. In some instances, it may be appropriate to appoint an independent third party to undertake the investigations.

9.4.4. Follow up and Closure

9.4.4.1. Meeting with the Complainant

The proposed corrective action and the time frame in which it is to be implemented will be discussed with the complainant within **7 days** of receipt of the grievance. Written agreement to proceed with the corrective action will be sought from the complainant (e.g. by use of an appropriate consent form).

9.4.4.2. Implementation of Corrective Action

Agreed corrective actions will be undertaken by **Site –Level Grievance Redress Committee (SL-GRC)** or the contractor within the agreed time frame. The date of the completed action will be recorded in the grievance database.

9.4.4.3. Verification of Corrective Action

To verify satisfaction, the aggrieved person will be approached by the GO to verify that the corrective action has been implemented. A signature of the complainant will be obtained and recorded in the log and/or on the consent form. If the complainant is not satisfied with the outcome of the corrective action, additional steps will be undertaken to reach agreement between the parties. If additional corrective action is not possible alternative avenues may be pursued.

9.4.4.6 GBV Cases

For serious gender-based violence cases, the following procedures will be followed

- Refer to Lamu CPIU and NPCU for appropriate Redress mechanism
- Ensure access to service – health, psychosocial, legal/security, safe house/shelter, livelihood for the victim
- Ensure a survivor centred approach – give the power back to the survivor – listen, present options of support, ensure informed decision making
- Ensure safety – facilitate the survivor feeling safe at all times
- Ensure confidentiality – (for the survivor and her family) Not disclosing any information at any time to any party without the informed consent of the person concerned.
- Actions are to be guided by respect

Non-discrimination - Survivors of violence should receive equal and fair treatment regardless of their age, race, religion, nationality, ethnicity, sexual orientation or any other characteristics

9.5. Institutional Arrangement at SL-GR

The committee shall consist of 5 members drawn from the community, county government and the contractor, who will be;

- Area Chief;
- County Safeguards specialist who will be the chairperson of the committee,
- County M and E,
- Contractor safeguards specialist who will be the secretary of the committee and
- Male and Female Community Representatives

9.5.1. The role and functions of the committee

The process of lodging a complaint is outlined below:

a) The designated GO will receive a complaint from the complainant.

b) The designated GO will ask the claimant questions in swahili language, write the answers in English and enter them in English onto the grievance form (refer to grievance log form in Annex VIII).

c) The local leader (representative of GRC) and the complainant both sign the grievance form after they have both confirmed the accuracy of the grievance.

d) The designated GO lodges the complaint in the grievance log.

9.5.2. The Role and Functions of the Committee members

9.5.2.1. County safeguards specialist

- Coordination of the office construction GRM
- Documentation of proceedings, recommendations and decisions
- Facilitation and provision of information and services to resource persons required to deal with grievances
- Maintenance of grievance-related documents, reports and attendance
- Coordination of grievance uptake channels and ensuring they are operational
- Liason with JPSC, contractor to ensure the publicizing the GRM channels, structure and other essential GRM related awareness and sensitization
- Providing feedback to affected persons and agencies or institutions that are involved grievances
- Reporting progress to JPMC and NPCU in the required format
- Planning and effecting GRM trainings in consultation with NPC safeguards team. Planning and executing grievance redress evaluation and refining the GRM process for continuous improvements.

9.5.2.2. Contractor safeguards specialist

- Operate and manage uptake point for complains and resolving complaints in consultation with the contractor project manager
- Receive and registration of grievance using appropriate forms provided
- Promptly refer grievances to JPSC that cannot be resolved at project level
- Monitor and provide feedback on environmental and social impacts and effectiveness of mitigation measures at project level.
- Provide monthly and quarterly reports on grievances to JPSC through the county safeguards specialist
- Participate in development and implementation of grievance prevention sub-plans.

9.5.2.3. Community Representatives

The community representatives will be elected to represent the interests of the community and participation in decision making process during resolving of grievances. The role of the representative shall include;

- Liaison between the community and the contractor
- Receive and communicate complaints to the contractor from the community members who for some reason cannot register their complains with the contractor
- Participate in training programs
- Be involved in participatory planning with contractor to prevent grievances
- Assist in disseminating project information
- Coordinate community meetings or any other engagement
- Participate in Grievance Resolution meetings

9.5.2.4. County Monitoring &Evaluation Officer

- Generate performance indicators for the GRM
- Develop reporting and management formats to support the PGRM
- Conduct independent monitoring of GRM operations and provide any corrective measures for the project grievance redress committee PGRC.
- Conduct community and stakeholder satisfaction surveys
- Work with the contractor in developing grievance prevention plans.

9.6. Awareness Creation and Disclosure of Grievance

The Grievance Committee members and stakeholders will receive comprehensive training on the grievance management system outlined in the Environmental and Social Impact Assessment (ESIA). This training is designed to equip them with the necessary skills to address complaints effectively, justly, and impartially. Additionally, the training program will enhance the capabilities of the Grievance Redress Committee members in several critical areas. These include project mobilization, implementation strategies, and the handling of sensitive issues such as Gender-Based Violence (GBV), Sexual Harassment, labor disputes, child labor, and conflict

management. This initiative aims to ensure that all committee members are well-prepared to manage and resolve grievances throughout the lifecycle of the project, thereby fostering a fair and respectful working environment.

10. CONCLUSION AND RECOMMENDATIONS

10.1. Conclusion

The fisheries sub-sector in Lamu County contributes to over 70% of households' income with an estimated annual turnover of about 1.5billion. Infrastructure development remains one of the key areas of focus if the fisheries sub-sector is to be transformed for socio-economic development in the County. The CPIU is currently hosted at the County Fisheries Office space which was previously used as a laboratory, sharing space with fisheries staff but it is inadequate. The office is highly congested and hence not conducive considering the current Covid 19 pandemic. However, through KEMFSED funding there is an opportunity to transform and strengthen sectors related to the blue economy, focusing on strengthening County infrastructure. The proposed construction works will improve fisheries management in the county in order to provide fisheries-related functions and services closer to the clients. The sub-project generally has positive impacts, and for the negative impacts, mitigation measures have been proposed. The proposed project area was noted to be a highly modified habitat through anthropogenic activities, mainly from the government institutions and settlement. The environmental and social assessment findings indicated that the project is of low impacts. The implementation of the project therefore is not anticipated to significantly influence the physical, biological and social environment. It was further noted that the anticipated impacts shall be of low magnitude due to the size of the project and with mitigation measures having been proposed in this report.

10.2. Mandatory Requirements

The development of the proposed Lamu County Fisheries Headquarter in Mokowe is anticipated to have negative impacts socially and to the physical environment. In spite of the anticipated environmental and social impacts, with proper mitigation measures, the project is environmentally viable. The environmental assessment team proposes the implementations of the sub-project with the following recommendations which are a requirement for the implementation of the sub-project;

- The contract shall be between the National Project Coordination Unit of the State Department Blue Economy and Fisheries (SDFA&BE) and the contractors
- The subcontracts of the contractor will be accepted and cleared by the supervising consultant in consultation with JPSC in charge of the supervision of the works. The sub-project supervising consultant will be responsible of ensuring subcontractors enforce and apply all measures included in this ESIA including the Environmental Technical clauses included in the bidding document and contracts.
- The CPIU and NPCU is responsible of ensuring the Bill of Quantities captures the costing of the Environmental, health and safety measures as described in this ESIA or any additional included after and the contractor shall include in the bid offer the budget to implement these measures.

- The supervising consultant in liaison with the Joint Project Supervision Committee to ensure full implementation by contractors and subcontractors of the ESMPs during construction/implementation stage
- The supervising consultant in consultations with the contractor's project Engineer and the Environmental, Health and Safety Manager, Labor and Social safeguards officer to prepare an Operation ESMP (EMoP) to guide the operation and maintenance of the building by Lamu County Government to do so during operation and decommissioning stages of the project as required.
- The Joint Project Supervision Committee, the sub-project supervising consultant and the contractor to ensure that the Ministry of Health and World Bank covid-19 guidelines are implemented to the latter at the project site during the construction period and that all the workers commit to observing the rules. The Department of Fisheries and the CPIU to ensure the covid-19 rules are adhered to during operation of the building.
- The sub-project supervising consultant, contractor and Joint Project Supervision Committee to ensure that compliance with GRM and sensitization and awareness is created among construction workers, contractor, sub-contractors and the general public, on project Grievance Redress Mechanism (GRM) structures in place in the event of a need to address or report any emerging issues, Gender based violence and Sexual Exploitation Abuse on site or any complains by any aggrieved party in the area.

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11. Lamu County Integrated Development Plan 2018-2022
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ANNEXES

I. Project Design and Drawings

Annex I - Mokowe Office Technical Designs

ANNEX 1 – PROJECT DESIGNS AND DRAWINGS

TABLE OF CONTENTS

PROJECT 04

PROPOSED DEVELOPMENT OF FISHERIES OFFICES IN LAMU.

No.		DRAWING NUMBER.	DRAWING SHEET.	DRAWING FORMAT.	DOCUMENT STATUS.
0 1	SITE PLAN	04 - 001 - 001	A 3	P D F	PROVIDED
0 2	GROUND FLOOR	04 - 001 - 002	A 3	P D F	PROVIDED
0 3	1ST FLOOR	04 - 001 - 003	A 3	P D F	PROVIDED
0 4	2ND FLOOR	04 - 001 - 004	A 3	P D F	PROVIDED
0 5	ROOF 01	04 - 001 - 005	A 3	P D F	PROVIDED
0 6	ROOF 02	04 - 001 - 006	A 3	P D F	PROVIDED
0 7	01 ELEVATION	04 - 001 - 007	A 3	P D F	PROVIDED
0 8	02 ELEVATION	04 - 001 - 008	A 3	P D F	PROVIDED
0 9	03 ELEVATION	04 - 001 - 009	A 3	P D F	PROVIDED
1 0	04 ELEVATION	04 - 001 - 010	A 3	P D F	PROVIDED
1 1	X-X SECTION	04 - 001 - 011	A 3	P D F	PROVIDED
1 2	DOOR SCHEDULE	04 - 001 - 012	A 3	P D F	PROVIDED
1 3	WINDOW SCHEDULE	04 - 001 - 013	A 3	P D F	PROVIDED

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CIVIL
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REVISIONS

Project :
PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.

Signature .....

Subject :
WORKING DRAWINGS.

Consultancy :
ARPRIM CONSULTANTS
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Date:NOV 2023	Job No . 2023/Nov/KIDONGO	
Scale 1:100		

SITE PLAN

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REVISIONS

Project :

PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :

LAMU FISHERIES OFFICE, LAMU COUNTY

Client :

STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.

04 - 001 - 001

Signature .....

Subject :

WORKING DRAWINGS.

Consultancy :

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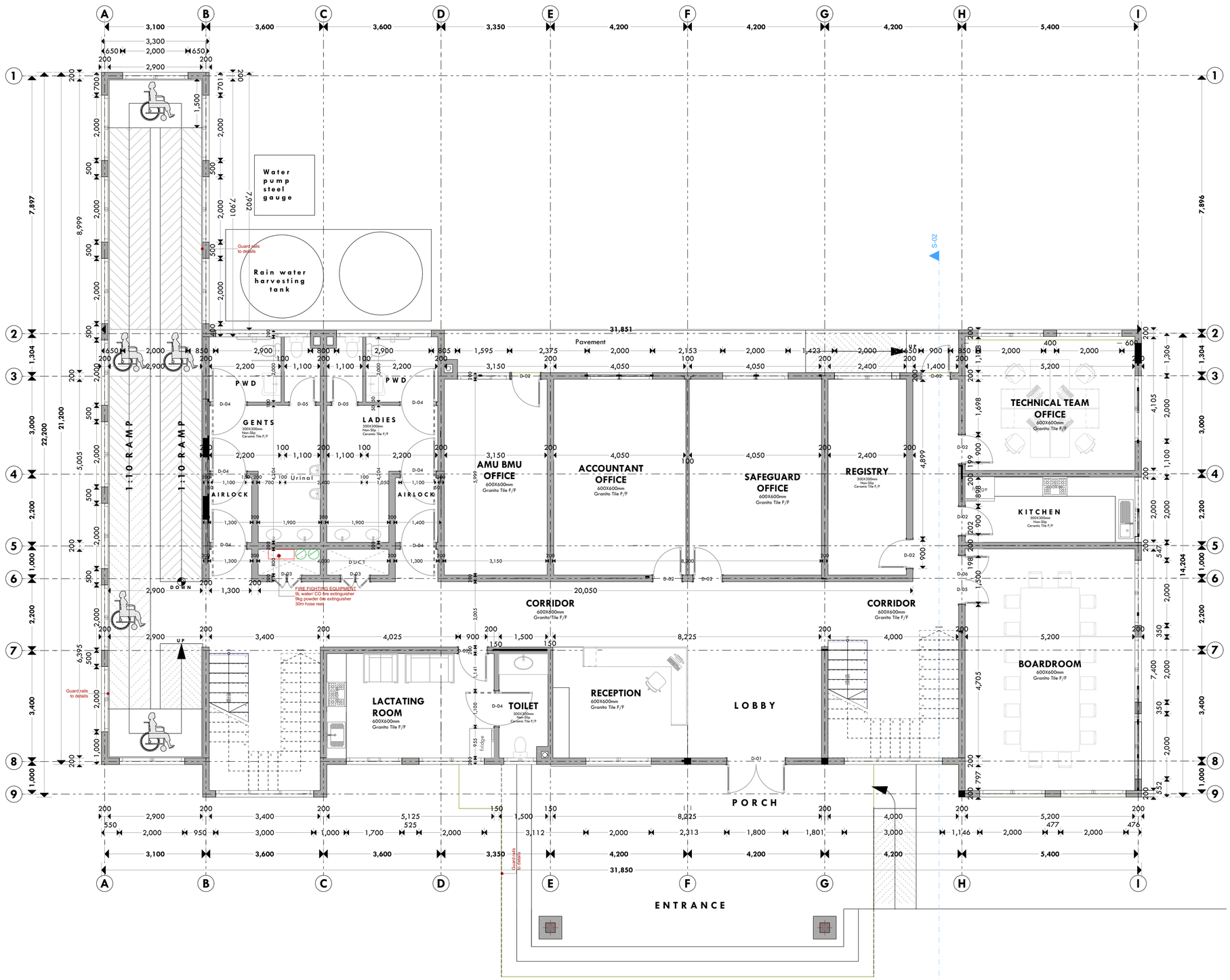
Scale 1:100	

GROUND FLOOR



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REVISIONS

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Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

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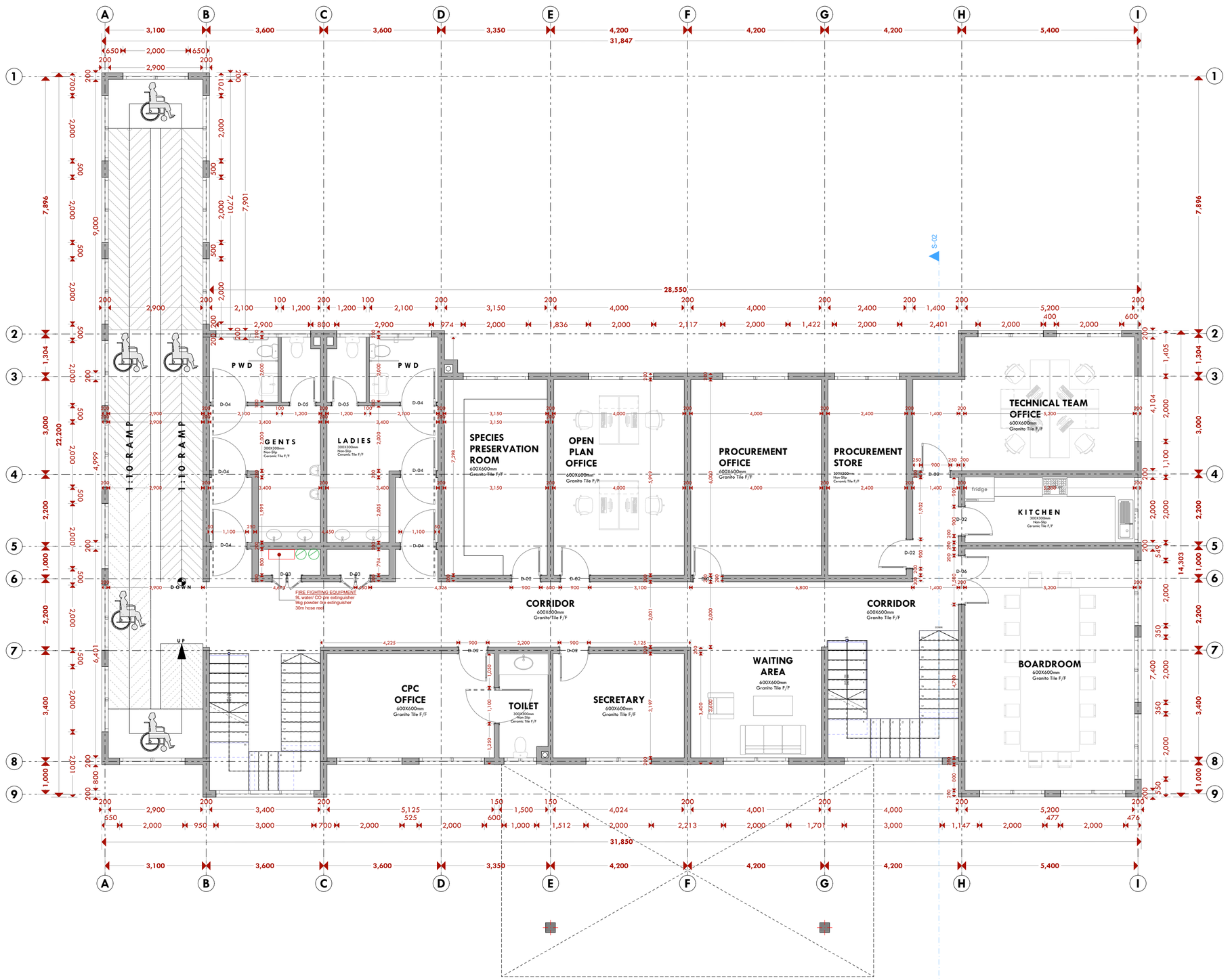
1ST FLOOR

03 ELEVATION



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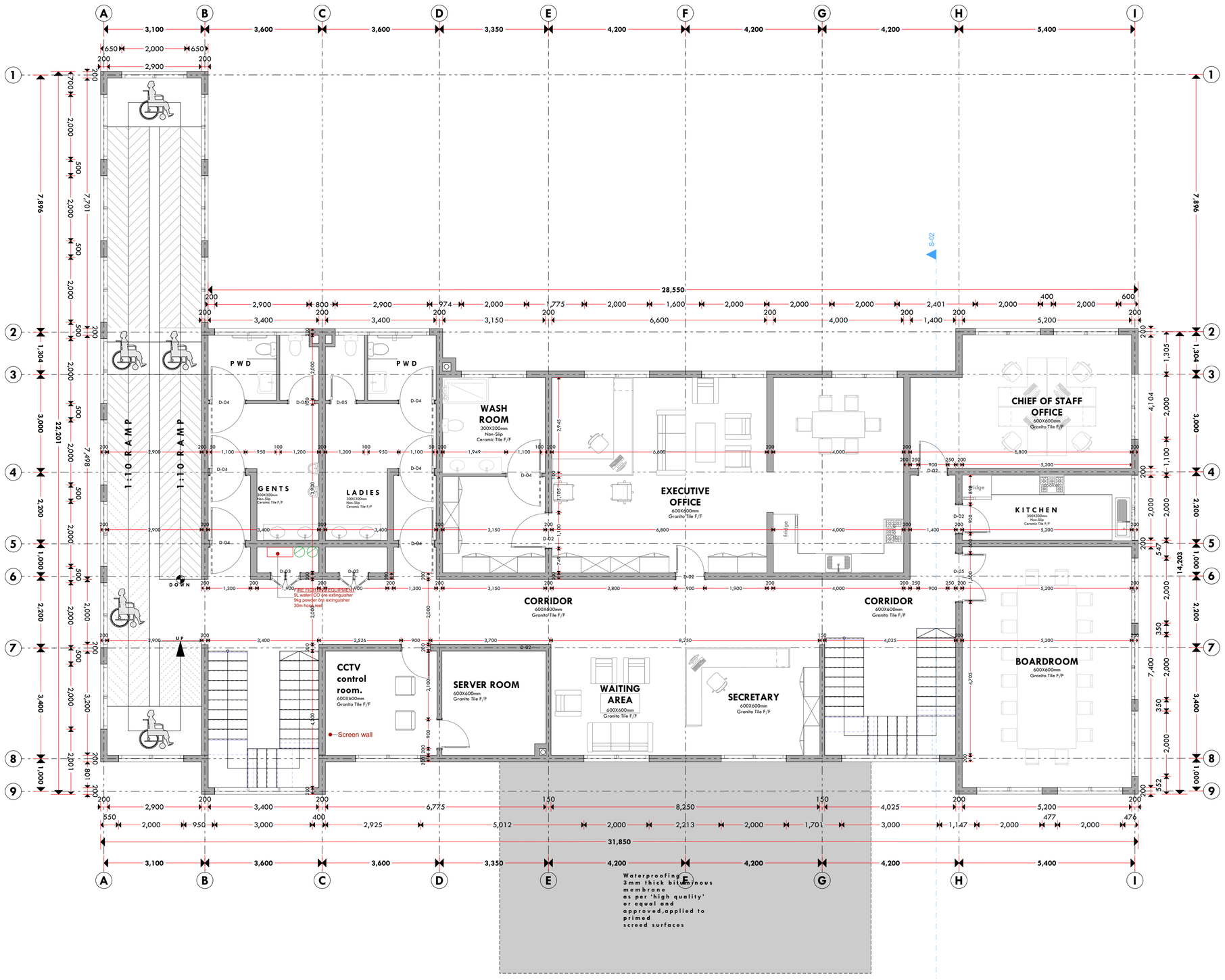
2ND FLOOR

03 ELEVATION



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REVISIONS

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PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.
04 - 001 - 004

Signature .....

Subject :
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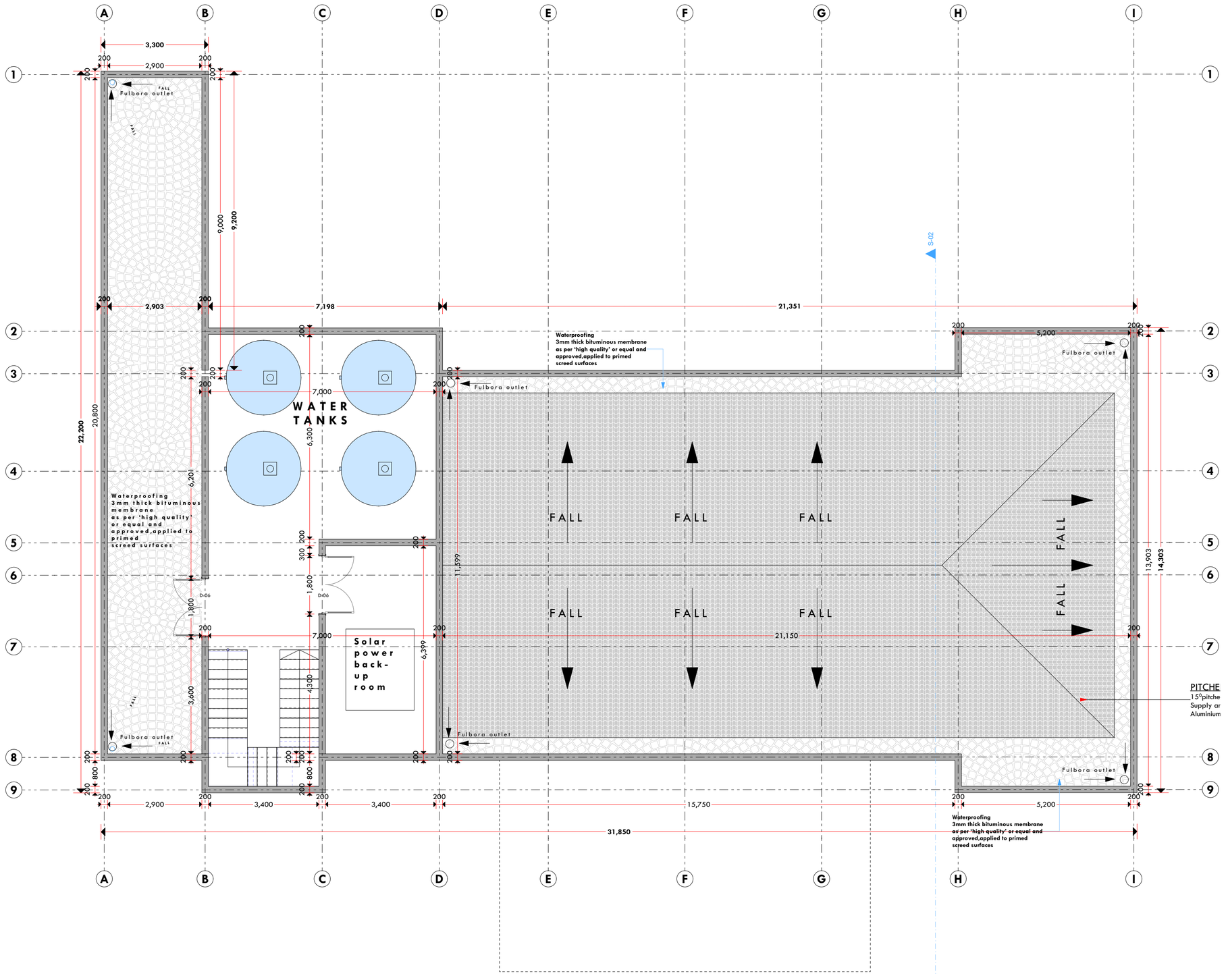
ROOF PLAN

03 ELEVATION



04 ELEVATION

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FIRE
26. Instal water ring main with fire hydrant with 2.5" instantaneous coupling adaptors
27. Provide underground water tank with automatic electric booster pump for ring main
28. provide automatic push button fire alarm system
29. provide heat and smoke detectors in each room provide 9kg. dry powder fire extinguishers to ME specifications

REVISIONS

Project :
PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.
04 - 001 - 005

Signature .....

Subject :
WORKING DRAWINGS.

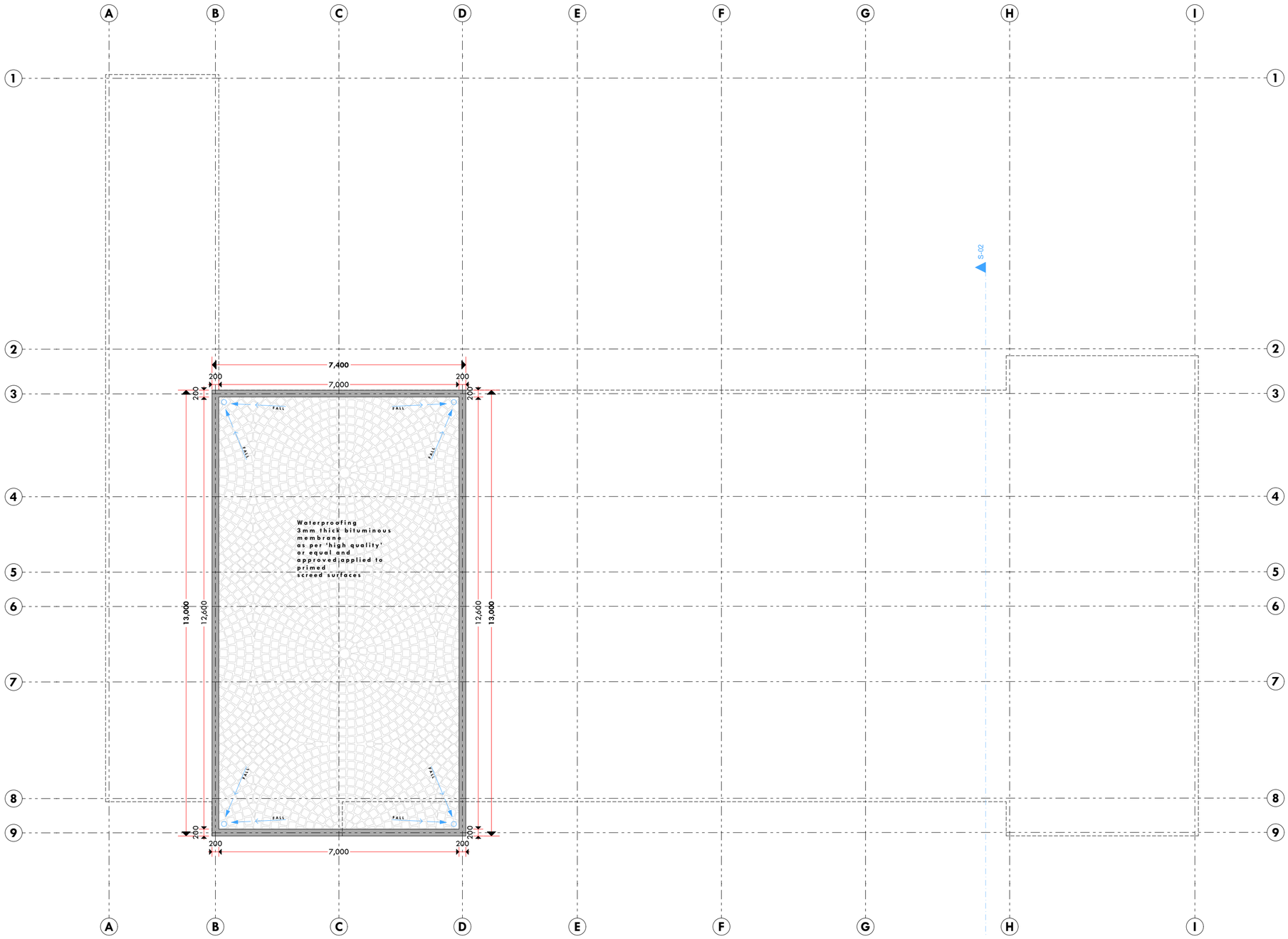
Consultancy :

ARPRIM CONSULTANTS
P.O BOX 12969-0040 NAIROBI
TEL: 020-884312/8
Website :www.arprimconsultants.com

Drawn by:	Checked by : -	Checked by : -
PETER MOMANYI B. Arch. (Hons),	**F. TUNDULI** B. Arch. (Hons) , M. Arch, (reg. No.A1552)	**J. MOMANYI** B. Arch. (Hons) , M. Arch, (reg. No.A1122)
Date:NOV 2023	Job No . 2023/Nov/KIDONGO	
Scale 1:100		

ROOF PLAN

03ELEVATION



04ELEVATION

02ELEVATION

01 ELEVATION

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REVISIONS

Project :

PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :

LAMU FISHERIES OFFICE, LAMU COUNTY

Client :

STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.

04 - 001 - 006

Signature .....

Subject :

WORKING DRAWINGS.

Consultancy :

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Website :www.arprimconsultants.com

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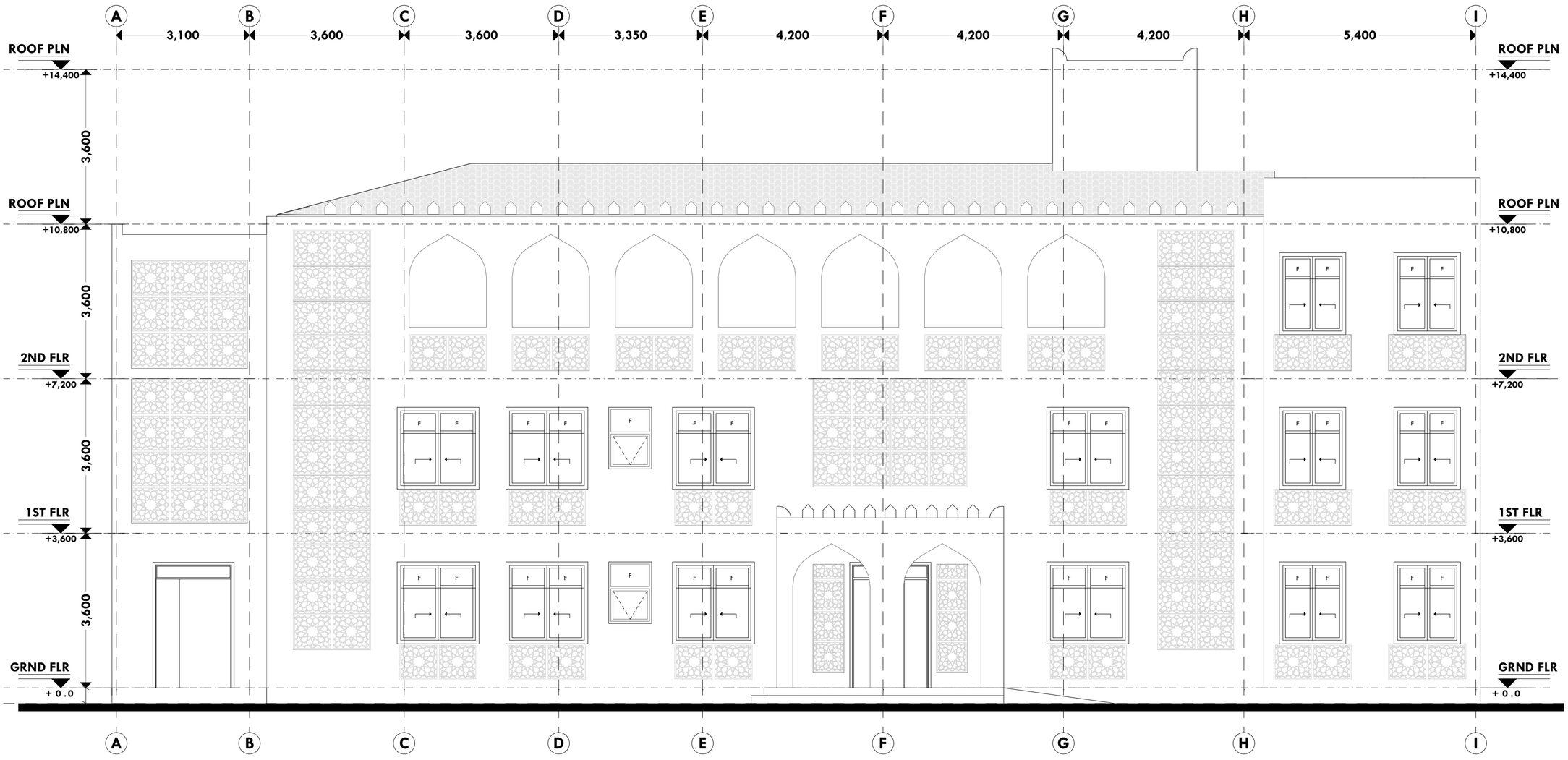
Date:NOV 2023	Job No . 2023/Nov/KIDONGO
Scale 1:100	

0 1 ELEVATION



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REVISIONS

Project :
PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.
04 - 001 - 007

Signature .....

Subject :
WORKING DRAWINGS.

Consultancy :
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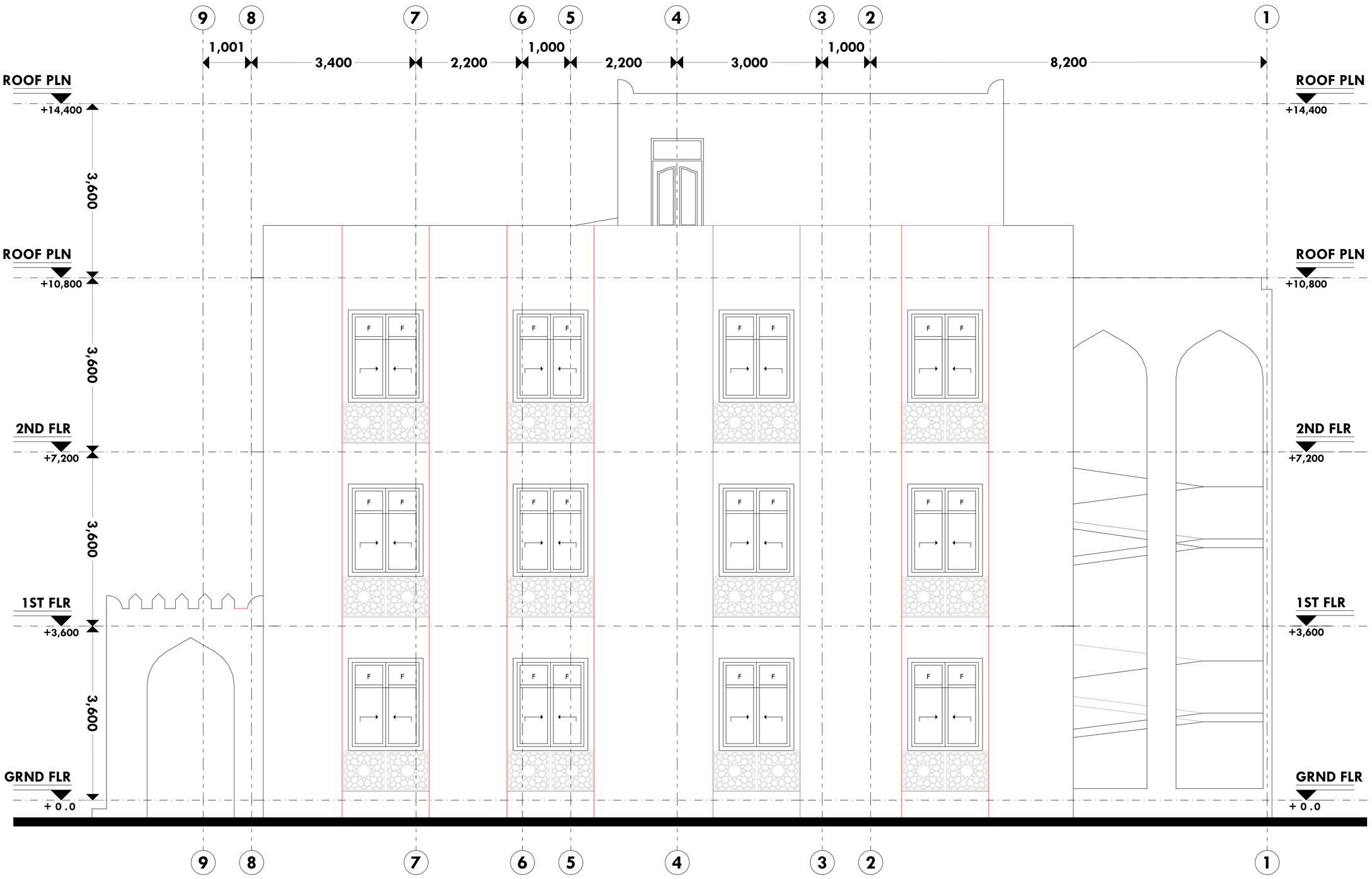
Date:NOV 2023	Job No . 2023/Nov/KIDONGO	
Scale 1:100		

0 2 ELEVATION



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REVISIONS

Project :
PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.
04 - 001 - 008

Signature .....

Subject :
WORKING DRAWINGS.

Consultancy :
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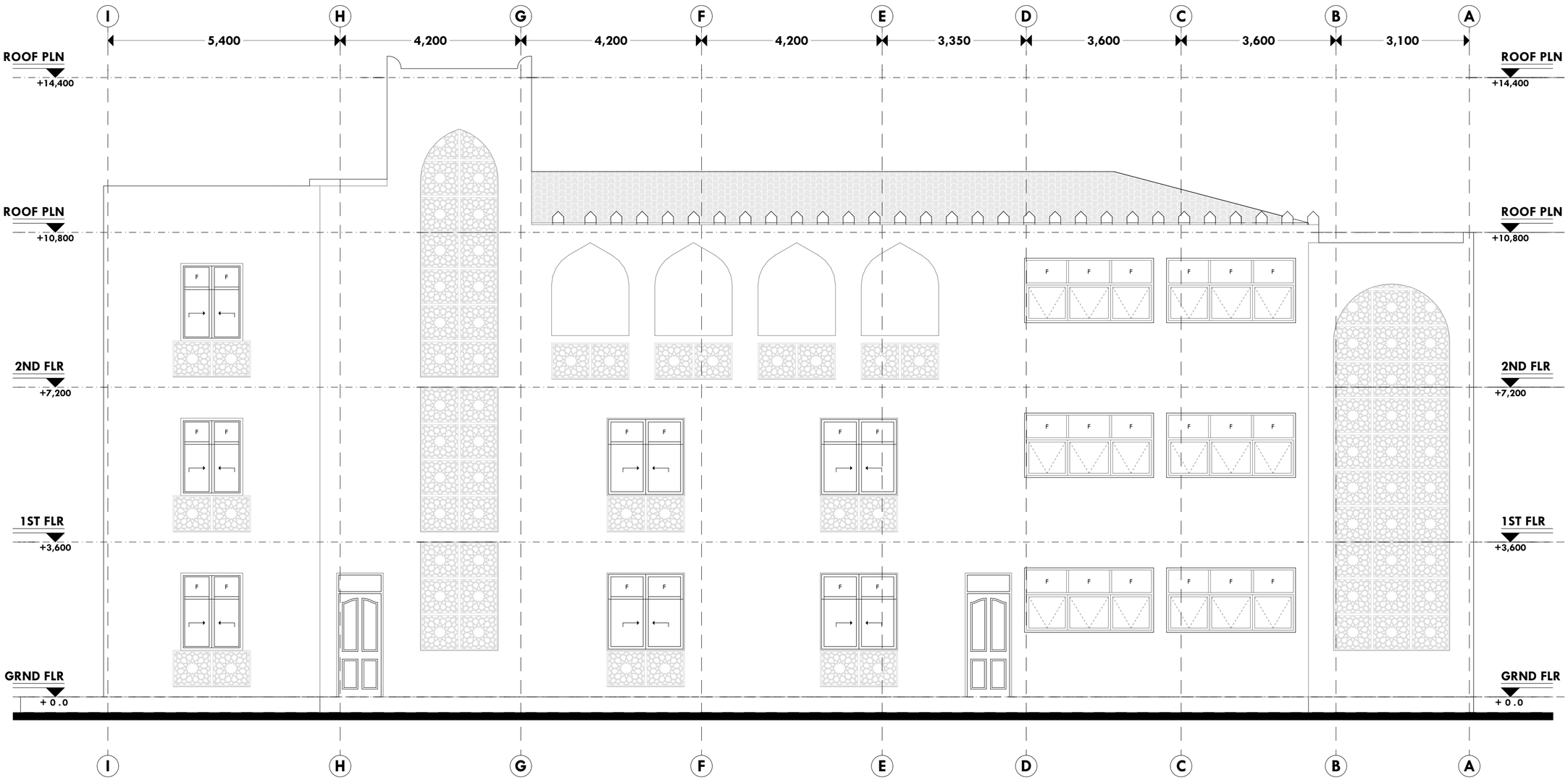
Date:NOV 2023	Job No . 2023/Nov/KIDONGO	
Scale 1:100		

0 3 ELEVATION



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REVISIONS

Project :

PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :

LAMU FISHERIES OFFICE, LAMU COUNTY

Client :

STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.

04 - 001 - 009

Signature .....

Subject :

WORKING DRAWINGS.

Consultancy :

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Website :www.arprimconsultants.com

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Date:NOV 2023	Job No . 2023/Nov/KIDONGO
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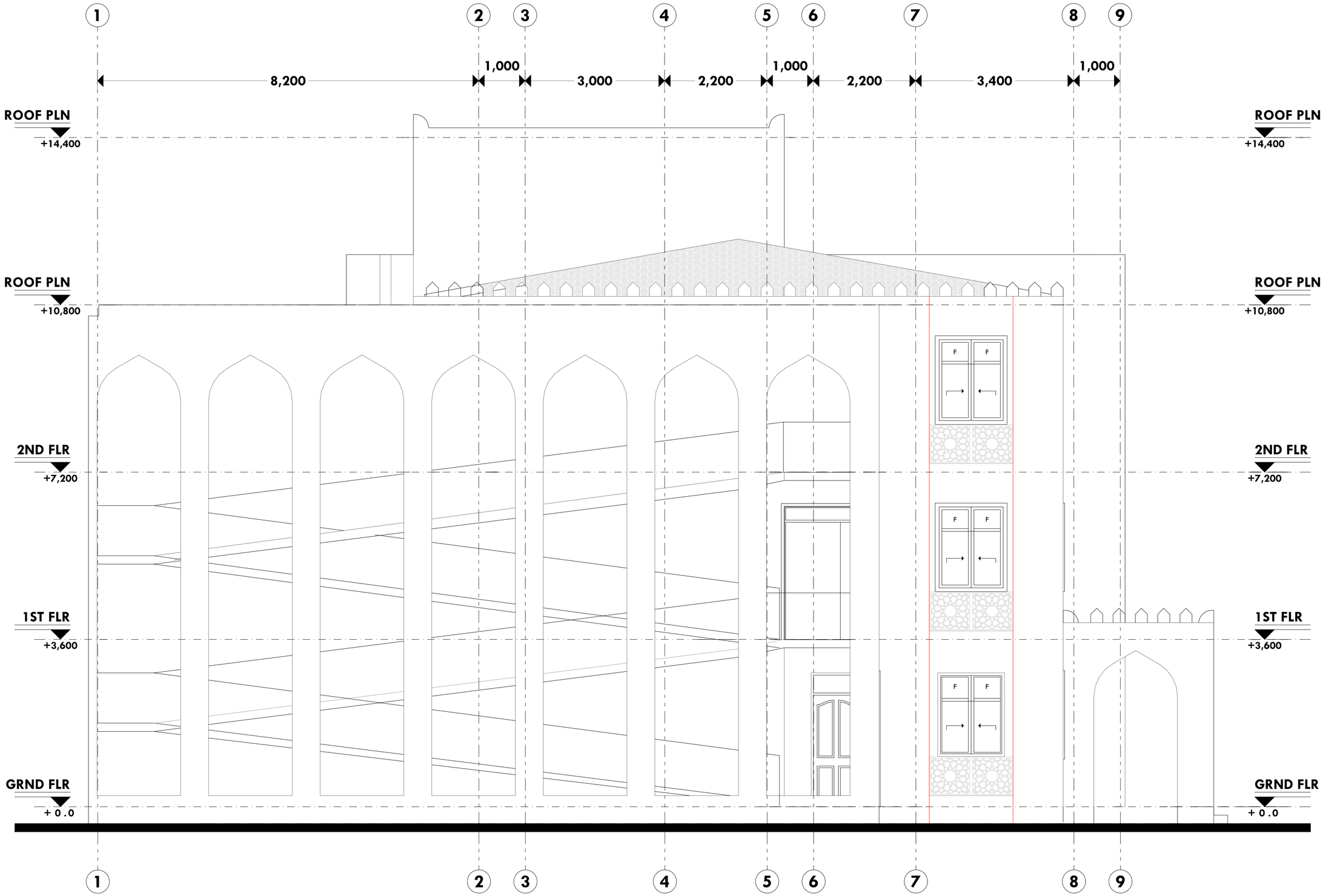
0 4 ELEVATION



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REVISIONS

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PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :

LAMU FISHERIES OFFICE, LAMU COUNTY

Client :

STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.

04 - 001 - 010

Signature .....

Subject :

WORKING DRAWINGS.

Consultancy :

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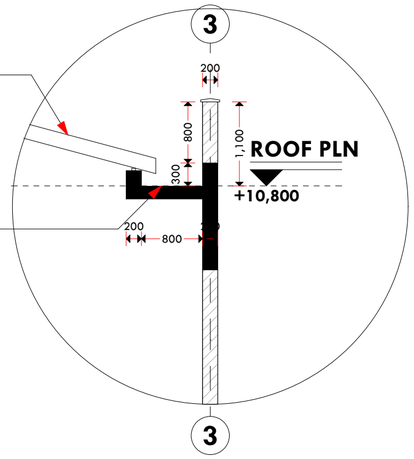
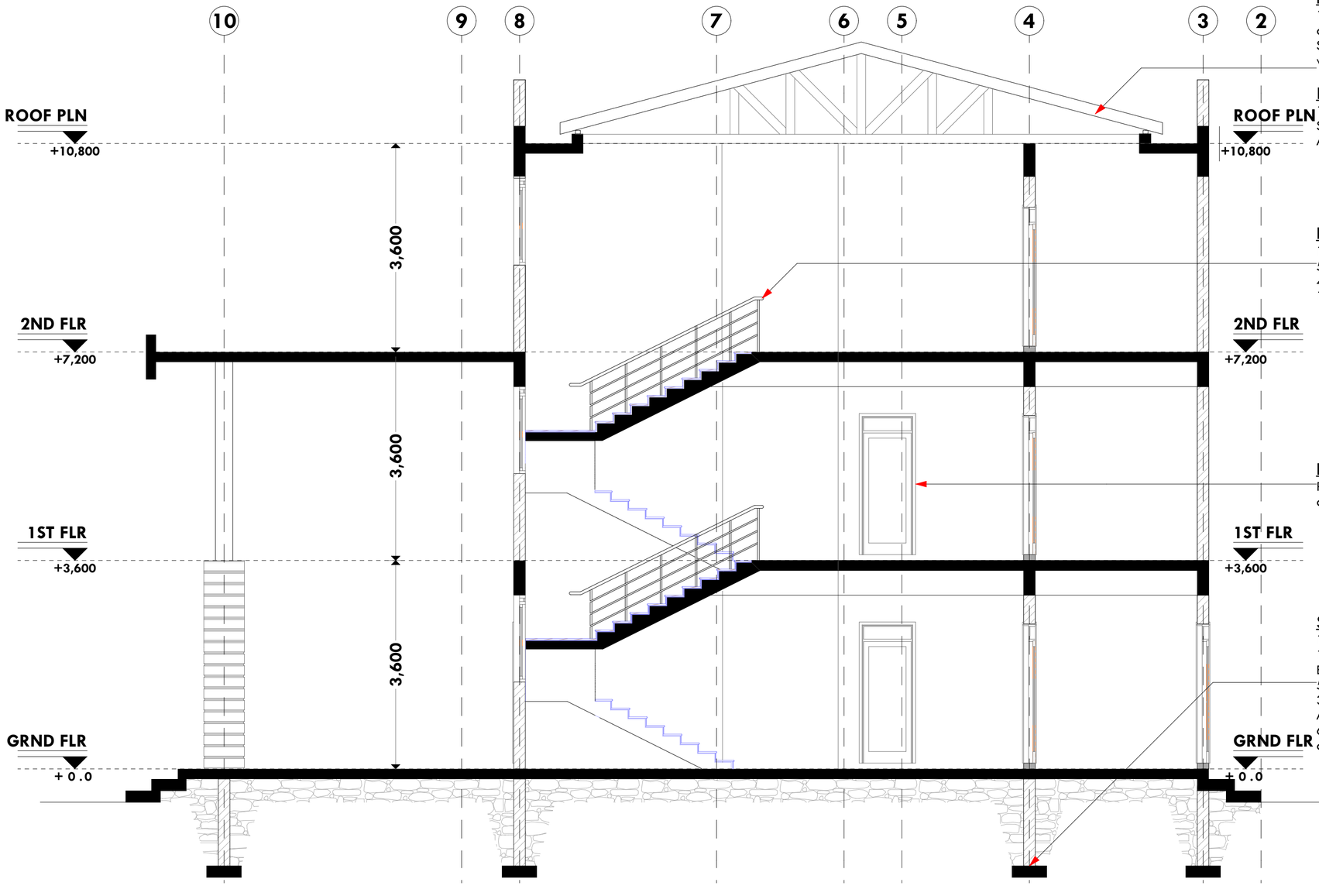
Date:NOV 2023	Job No . 2023/Nov/KIDONGO
Scale 1:100	

X-X
SECTION

PITCHED ROOF SPECIFICATIONS
15^{0}pitched roof.
Supply and fix 26 gauge approved Prepainted IT5
Aluminium roofing sheeTS on steel purlins

FLAT ROOF SPECIFICATIONS
150mm thick Roof Slab with waterproofing
admixtures, covered with Interlocking Tiles.
Slab sloping to drainage fulboras waterproofed
with Bituminous Membrane.





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PITCHED ROOF SPECIFICATIONS
15^{0}pitched roof.
Supply and fix 26 gauge approved Prepainted I
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HANDRAIL
1000mm high S/S handrail
50mm dia.
40mm dia Balustrades @
1000mm C/C.

DOOR
Polished Varnished Mvule
door to schedule.

SUB-STRUCTURE
150mm thick R.C Slab (1:1.5:3) with
1000gauge Polythene.
BRC mesh A142 sheeting as DPM.
50mm thick Murram Blinding.
300mm thick Compacted Hardcore.
Anti-Termite Treatment.
600 X 200mm Strip Foundation to S.E
approval.

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REVISIONS

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PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.
04 - 001 - 011

Signature .....

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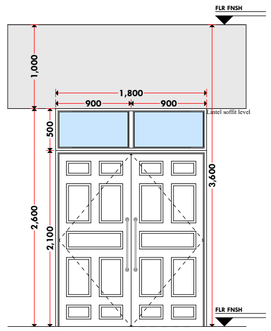
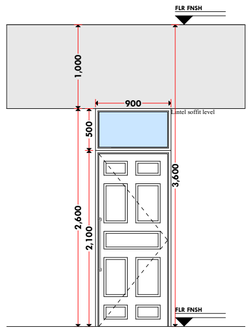
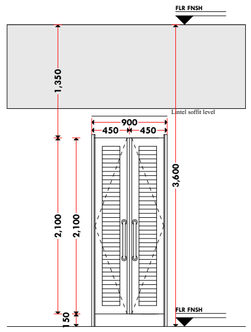
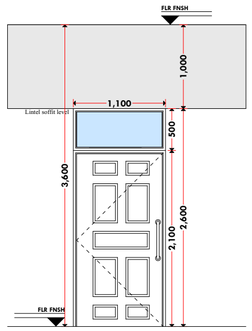
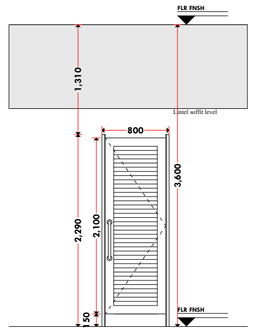
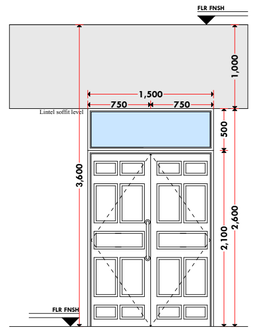
Date:NOV 2023 | Job No . 2023/Nov/KIDONGO

Scale 1:100

DOOR
SCHEDULE

NO.	D - 0 1	D - 0 2	D - 0 3	D - 0 4	D - 0 5	D - 0 6
DESIGN						
LOCATION	MAIN ENTRANCE EXIT	OFFICES	DUCTS	P W D	WASHROOM CUBICLES	BOARDROOM
DESCRIPTION	2,100 X 1,800mm 50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail ; complete with moulded grooves to door leaf on both sides ;solid blocking to iron mongery (m/s) to door	2,100 X 900mm 50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail ; complete with moulded grooves to door leaf on both sides ;solid blocking to iron mongery (m/s) to door	2,100 X 800mm50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail ; complete with moulded grooves to door leaf on both sides ;solid blocking to iron mongery (m/s) to door	2,100 X 1,100mm 50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail ; complete with moulded grooves to door leaf on both sides ;solid blocking to iron mongery (m/s) to door	2,100 X 800mm Mvule Louvred Door Panel. 150 X 100mm Polished Mvule Door Frame.	2,100 X 1,500mm 50mm thick mvule panelled door: comprised of 200 x 50mm thick stiles, top and middle rail: 200 x 50mm thick bottom rail ; complete with moulded grooves to door leaf on both sides ;solid blocking to iron mongery (m/s) to door
QUANTITIES	1	2 2	6	2 0	6	5

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3. All sections should be read as per the floor plan and all discrepancies must be notified immediately to the designer and clarified by consulting the respective consultants' drawings.

CONSTRUCTION
4. Damp proof course must be provided under all external walls at grade. DPC to be minimum 150mm above ground level.
5. All slab at grade to be poured on 1000gauge polytheneon 50mm stone dust blinding on compacted hardcore.
6. All soils under slab and around external foundation to be treated for termite control.
7. Window cills must be finished before internal plastering

CIVIL
8. All soils on cut embankment to be stabilized. The slope is not to exceed the natural angle of repose of the soil.

STRUCTURAL
9. All RC works to Structural Engineer's details.
10. Depth of foundation to be determined on site to SE approval.
11. All walls less than 200mm thick to be reinforced with hoop iron at every alternate course.

MECHANICAL
12. All plumbing and drainage to comply with the relevant approving local authority's specifications.
13. All service ducts to be accessible from all floors.
14. Deep seal or anti-vac to all fittings connected to the SVP's or waste pipes. All bends and junctions to have inspection plates.
15. SVP to be provided at the head of the drainage.
16. Drain pipes passing beneath buildings and driveways to be encased in 150mm concrete surround.
17. All underground foul and waste drain pipes shall be UPVC and comply to BSS 4514 and 5255. cast iron to comply to BSS 497 table 6 grade C except ones in the driveway which shall comply to BSS 556.
18. All inspection chamber covers and frames shall be cast iron to comply to BSS 497 table 6 grade C except
19. Storm water drain shall comply to BSS 556.
20. Minimum slopes to drains shall be 1%
21. No chasing will be allowed in the slabs for pipes. Sleeves will be allowed in the slabs with the written approval of the Structural Engineer.
22. All testing of pipes must be completed before plastering.
23. All mechanical works must be co-ordinated with electrical works. Any conflicts must be clarified before wok begins.

ELECTRICAL
24. All conduits must be laid before plastering.
25. All electrical work must be co-ordinated with mechanical works. Any conflicts must be clarified before work begins.

FIRE
26. Instal water ring main with fire hydrant with 2.5" instantaneous coupling adaptors
27. Provide underground water tank with automatic electric booster pump for ring main
28. provide automatic push button fire alarm system
29. provide heat and smoke detectors in each room provide 9kg. dry powder fire extinguishers to ME specifications

REVISIONS

Project :
PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.
04 - 001 - 012

Signature .....

Subject :
WORKING DRAWINGS.

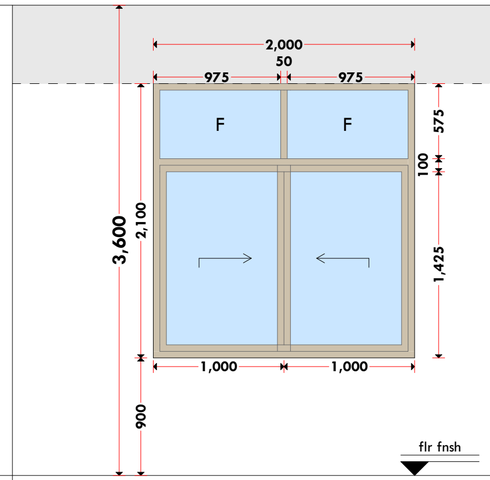
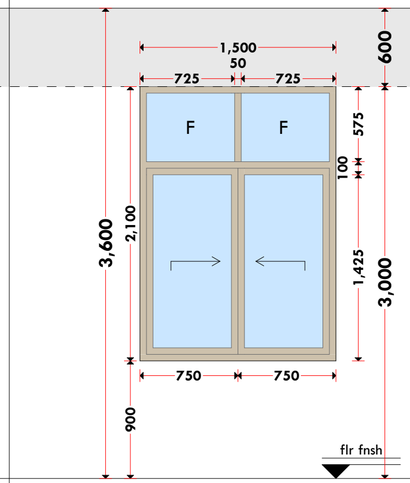
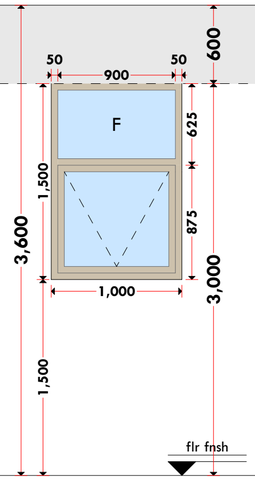
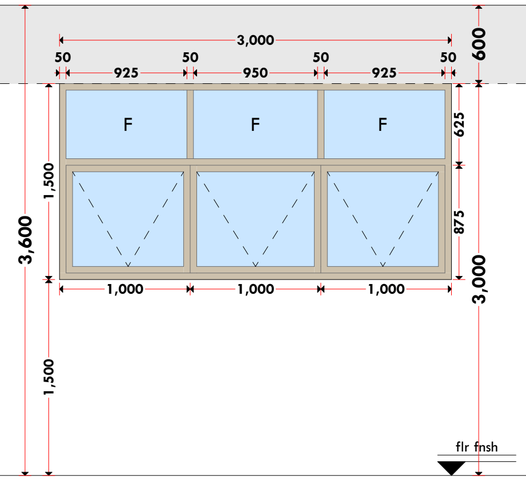
Consultancy :
ARPRIM CONSULTANTS
P.O BOX 12969-0040 NAIROBI
TEL: 020-884312/8
Website :www.arprimconsultants.com

Drawn by:	Checked by : -	Checked by : -
PETER MOMANYI B. Arch. (Hons),	**F. TUNDULI** B. Arch. (Hons) , M. Arch. (reg. No.A1552)	**J. MOMANYI** B. Arch. (Hons) , M. Arch. (reg. No.A1122)

Date:NOV 2023 | Job No . 2023/Nov/KIDONGO

Scale 1:100

WINDOW
SCHEDULE

WINDOW DESIGN				
NAME	W - 0 1	W - 0 2	W - 0 3	W - 0 4
QUANTITY	1 3	2 5	0 2	0 6
LOCATION				
SPECIFICATIONS	Powder coated aluminium framed sliding windows complete with ironmongery, mullions, transomes, railing and necessary intermediate reinforcement elements including all weather strips, rubber glazing strips,couplings, sliding rails bars, window cills and window boards, quadrant & painted externally and internally; panes fixed with 6mm thick one way glass fixed with beadings.			

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REVISIONS

Project :
PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :
LAMU FISHERIES OFFICE, LAMU COUNTY

Client :
STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.
04 - 001 - 013

Signature .....

Subject :
WORKING DRAWINGS.

Consultancy :
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Date:NOV 2023	Job No . 2023/Nov/KIDONGO
Scale 1:100	

3D
VIEWS

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REVISIONS

Project :

PROPOSED KENYA MARINE & SOCIO-ECONOMIC DEVELOPMENT

Plot L . R. No.:

Location :

LAMU FISHERIES OFFICE, LAMU COUNTY

Client :

STATE DEPARTMENT FOR FISHERIES AQUACULTURE & THE BLUE ECONOMY

DRAWING NO.

Signature .....

Subject :

WORKING DRAWINGS.

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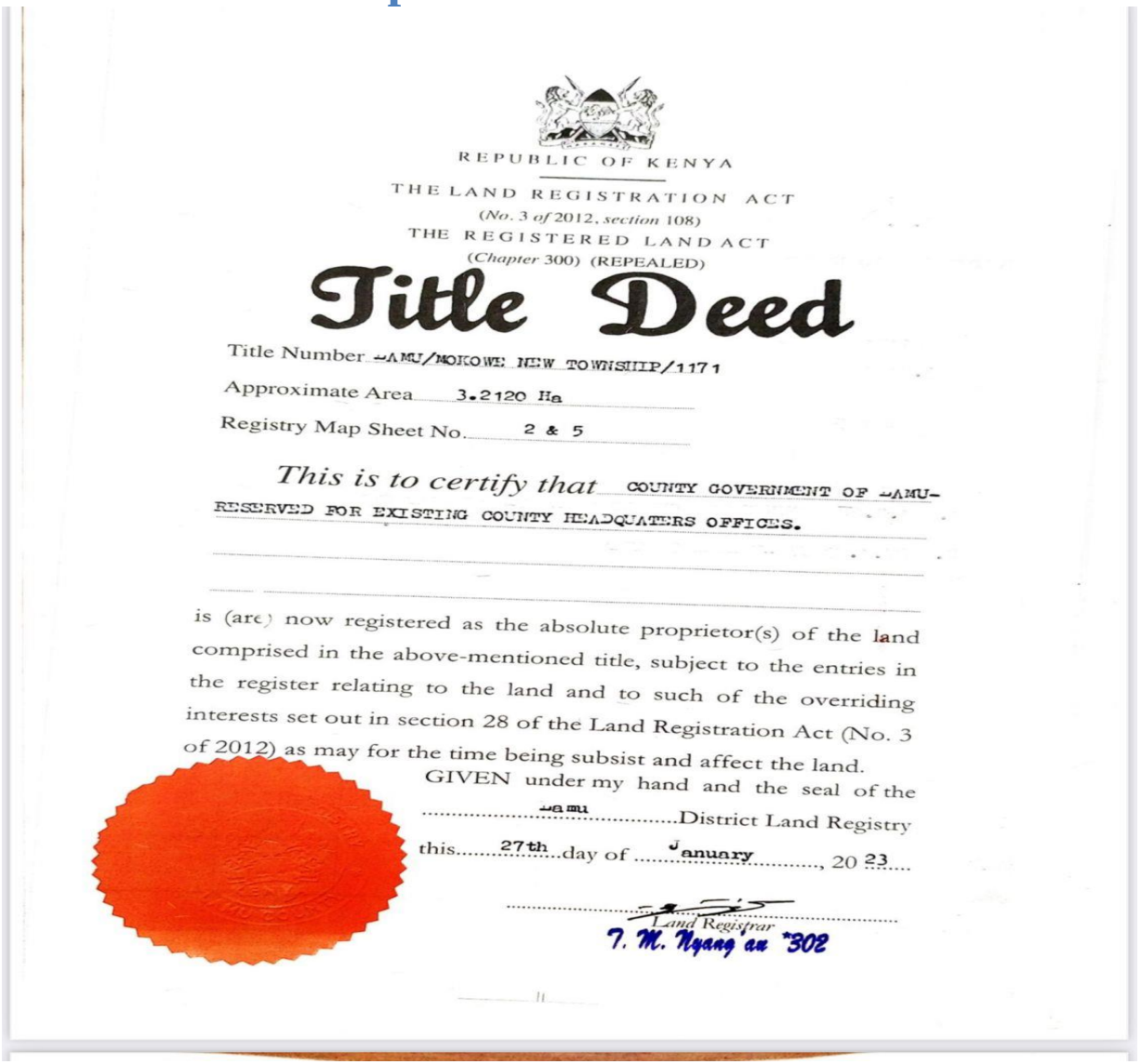
Date:NOV 2023	Job No . 2023/Nov/KIDONGO	
Scale 1:100		

II. Land Ownership Documentations



REPUBLIC OF KENYA

THE LAND REGISTRATION ACT

(*No. 3 of 2012, section 108*)

THE REGISTERED LAND ACT

(*Chapter 300*) (REPEALED)

Title Deed

Title Number LAMU/MOKOWE NEW TOWNSHIP/1171

Approximate Area 3.2120 Ha

Registry Map Sheet No. 2 & 5

This is to certify that COUNTY GOVERNMENT OF LAMU-RESERVED FOR EXISTING COUNTY HEADQUATERS OFFICES.

is (are) now registered as the absolute proprietor(s) of the land comprised in the above-mentioned title, subject to the entries in the register relating to the land and to such of the overriding interests set out in section 28 of the Land Registration Act (No. 3 of 2012) as may for the time being subsist and affect the land.

GIVEN under my hand and the seal of the

.....Lamu.....District Land Registry

this.....27th.....day of .....January....., 20 23.....

.....

Land Registrar

T. M. Nyang'au *302

III. Minutes for public Consultation and Participation Meeting

KENYA MARINE FISHERIES SOCIAL ECONOMIC DEVELOPMENT PROJECT

(KEMFSED)

COUNTY PROJECT IMPLEMENTATION UNIT

LAMU COUNTY

MEETING MINUTES

Meeting Title	Lamu Fisheries Office public participation and Consultations
Meeting Date	7th October 2023
Meeting Time	At 10.00 am to 11.30 am
Venue	Kenya Forest Research Institute (Mokowe)
Reference	

1. LIST OF PARTICIPANTS

Members Present: **Designation**

2. AGENDA

1. Preliminaries
   i. Opening and Introduction
2. Objective for public participation and consultations
3. Presentation of the Project designs and plans and plenary discussions

Session	Activity	Responsible
Preliminaries/opening remarks	The facilitator called the meeting to order at 10.00 a.m. The meeting began with a word of prayer by the area Chief followed by introduction of all participants guided by Mr. Joseph Onyango -Chairman of the session. After the introduction, the chief was invited to officially open the session. In his remarks the chief reminded participants of world bank funded projects that the County is implementing including KEMFSED domiciled in the department of Fisheries and \blue economy. A part from Kemfsed the chief also mentioned the ongoing world bank project that is supporting urban areas in Lamu Mokowe town being one of the beneficiary urban areas. The support project he said entails construction of efficient storm water drainage systems. He called upon all participants to make positive contribution on the days' agenda tabled before them. He thereafter declared the meeting officially opened. The chairperson (CSSO) welcomed all the participants to the meeting and thanked them for availing themselves. He then briefed the members on the day's agenda and immediately called the meeting to begin with the first agenda.	**Joseph Onyango**

Objective of the meeting	The CSSO gave a brief background of the proposed fisheries management support infrastructure which includes construction of fisheries office to host county fisheries staff, Kenya fisheries service staff, County Project Implementation Unit (CPIU) and the local BMU office. He told participants that the consultations were necessitated by the fact that the original site changed from Lamu Island fisheries headquarters to County Headquarters at Mokowe. This shift meant that a new EIA study was to be undertaken and the original Comprehensive |project report be edited to match with site change. He then invited Mr. Mbuthia the ESO for the project to make his remarks and then invite the consultants to make their remarks before inviting the experts to make the presentations and lead the discussions. The ESO in his opening remarks reminded participants that the proposed fisheries office block involves construction works whose impact on the social and environment should be investigated and any adverse impact socially or environmentally be mitigated. In his opening remarks Mr. Kubasu the Social Safeguards Consultant also emphasized on the basis for the consultation stating that the proposed fisheries office block was to be constructed on the Island and that any such construction requires environmental and social assessment to be conducted and this includes having the public give their opinion and advice before the start of project construction activities. It is also mandatory for all world bank funded projects under the world bank policies. Mr. Kubasu also highlighted the key components of the works including: -	**Joeph Onyango & Lazarus Kubasu**

	1. Structural Designs 2. Electrical designs 3. Mechanical designs Key issues that require the input of the public according to the consultant included provisions of toilets, water, access to the building and offices and of interest provide easy access for people living with disabilities. Other issues that require the input of the public were impact of weather and climatically change especially considering high temperature prevalent in coastal areas of Kenya. Provision for sustainable source of energy, dealing with surface water runoff especially generated from the building when it rains should also be considered during the discussions. This is because the area is prone to flooding and the rooftop catchment should not contribute to increased flooding and stagnant water. The Project Coordinator then addressed the gathering and stated that the proposed project was for the public good as its construction and completion with help the fisheries staff provide efficient services to the people of Lamu. It will have space for both staff and the local BMU. From that office block basic services being offered by KEMFSED CPIU will greatly improve and of particular interest is the processing of grants to Community interest groups. Currently CPIU are accommodated in small general office with little working space forcing other officers to work from their mother departmental offices, the CPC stated. He was optimistic that by December 2023 Lamu CPIU will be able to provide grants to all grant applicants whose	

	proposals were successful. He estimated the numbers to be close to 400 proposals. You realize this is substantial number of proposals that require all officers to work closely and hence the urgent need for this office which will accommodate all CPIU members and other technical staff needed to support the project activities. He further commended the consultants and the general public in attendance for finding time to lead the discussion and contribute respectively. Mr. Wabomba the environment consultant was even more optimistic stating that the day was a special one particularly for Lamu People and they should contribute towards making the project better. He said the discussions should focus on social and environmental impacts and the benefits that will be derived by undertaking the project activities and the operation of the office. He concluded by reminding the congregation of their resolve at the end of the discussion of stating clearly whether they want the project and not. Mr. Mwangi the sub-component 1.3 team leader commended the community and government agency representatives for finding time to be part of the discussion. He reminded the attendees that this is a KEMFSED sponsored construction works to put up an office block under sub-component 1.3 support fisheries infrastructure for improved fisheries management. He further stated that Lamu County has additional infrastructure project which is a fish depot to be constructed at Mokowe jetty. He asked the congregants to give their ideas so that the County infrastructure team can prepare a better office plan and CPR. He	

	reminded them that the time to have changes done on the designs was now and therefore they should be focused and critic the designs as they make recommendations.	
Presentation of the office block designs and follow-up plenary discussion ns	Eng. Angwenyi, the consulting KEMFSED NPCU engineer assisted with MR Maulana the county Project Quantity surveyor presented the 3D image of the proposed office blocks and the structural designs using power point. Before making the presentation, he asked the participants if they understand any of the two official languages -English or Kiswahili. All participants confirmed by show of hands that they understand Kiswahili as opposed to English. However, Eng. Angwenyi reminded them that some terminologies used in the designs and drawings are in English. However, he stated that he will try as much as he can to speak English and incase of terminologies that require interpretation, he will seek for help from any participant who can help with getting the right Swahili word. Mr Angwenyi singled out and commended Mrs Masuo for being consistent in public participation meetings Mr Maulana using google map showed the participants the site where the building will be put up. From the google he said that the building will be situated at the back yard of the County governor's office. The architect then explained the 3D depiction of the building with 3 floors-ground floor and two additional floors. He stated that the design is such that it can accommodated extra floors if there will be need for more floors. Mr Angwenyi said that the space arrangement for offices and facilities was purely based on the County teams and project	**Engineer Ang'wenyi**

	beneficiary-fisheries department and CPIU Lamu. However, the consultant had the opportunity to identify critical issues, highlight them and request the county team to make adjustments. He explained that the building will host the following officers **Ground floor**- 1. County Fisheries staff including Kenya fisheries service 2. Entrance-Main door 3. Ramp and staircase for public use 4. Staircase on the left of the building- for officers' access to their offices 5. Provision for lactating mothers-single room 6. BMU office 7. Toilets for both gents and ladies 8. Standard toilet for PLWD 9. Board room 10. Provision of KEMFSED Safeguards office to be relocated to first floor	

	First floor 1. KEMFSED CPIU officers 2. Toilets for both gents and ladies 3. Standard toilet for PLWD 4. Board room 5. Kitchen **Second floor** 1. Executive offices for Chief officer and CECM and their staff 2. Toilets for both gents and ladies 3. Standard toilet for PLWD 4. Board room 5. Kitchen Eng. Angwenyi further stated that the building is structurally designed to accommodate two other floors on top of the second floor. Question by Mr. Kubasu-whether the designs provided for emergencies particularly fire outbreaks, surface water runoffs	

	and stagnant water? Eng. Angwenyi- responded by stating that they have provided for fire exit and assembly points and for flooding the building foundation will be raised above the ground by 1 foot as compared with the already existing buildings at the site. We have also provided for drainage for storm water by channeling to and also construct elevated packing spaces. Mokowe Police station Commander- sought to know if the designers provided for parking bays, and if there was provision for kid's toilets and urinals. He also sought to know the size of office spaces. Engineer Angwenyi said that for meeting and conferences, the designers have provided for spacious board rooms in each floor that can accommodate many people and act as waiting bays to accommodate up to 50 people. For parking areas, the designers used staff establishment and future staffing plan to design the parking bay. For children toilets there is provision for small toilets and low-level raised urinals for universal use by both children and adults. The facility managers will ensure maximum hygiene and sanitation of the toilets. Also considered in toiletries is the culture of the local people particularly water requirement at all times.	

	For office space staff establishment and staffing plans was used to allocate the offices. The office space and size of building was designed taking cognizance of the budgetary ceilings provided by world bank. The building is 30M by 13M in size, each floor roof is raised 3.1M high from the floor. This provision of not less than 3M height will ensure free and unhindered penetration of natural light and air circulation. The office spaces are 12feet by 12 feet in size spacious enough to accommodate the office furniture and other equipment. Wide windows have been provided both in the board rooms and the office spaces. Mr. Kahindi County Director of NEMA sought to know if they designs is green and the building will use natural light as opposed to electricity during the day. Eng. Angwenyi responded by stating that the building will be powered on one hand through provision of solar energy with solar panels batteries and inverters being installed. On the other hand, connectivity to the national electricity grid is planned. The walls have will be separated by cladding with aluminum panels to provide for uneven natural light distribution in the offices. One of the participants wanted to understand the where the entrance was situated relative to the already existing structures and overall plan of the entire compound. Mr Maulana stated that the host compound has two entrances; one is the main gate used by the office staff working in the governor's office building and the annex. The other entrance is directly opposite to the main gate just next to blue house.	

	A participant sought to know what informed the decision to have the office constructed next to the governor's office and not at Mokowe new town where the department of fisheries has land, and how will the proponent deal with the public who fear accessing the office through the main gate. He also sought to understand if an officer could be asigned to handle PLWD and women affairs in the building? Can you provide for eateries like hotel in the building? Mr Kubasu explained that Fisheries department has land at Mokowe but no title deed. No world bank project can be undertaken on land with no clear ownership. The governor's compound has a title and space so KEMFSED took advantage of the existing land with clear ownership. The governor's offices and other offices usually provide services to the Lamu community. So, there should not be anything to fear while trying to access the proposed fisheries building in the compound. On the question of offices to serve PLWD and women, the infrastructure is to help in proper management of fisheries resources. These other groups can access the offices to seek for such fisheries and livelihood-based services as opposed to providing for office space for their organizations. The fisheries department and blue economy has no mandate over PLWD and women affairs. Millicent Atieno- She explained the problem of water logging in Mokowe attributed to surface runoff. She gave an example of the recent rains that lasted over 12 hours and contributed to massive stagnant water in some areas of Mokowe township.	

	She therefor sought to know how the constructor will deal with the situation . Mr Wabomba explain that there should be provision for an out fall for all storm water generated through surface water runoff. He also made the plea to the designers to consider the issue raised so that the building surface water run off does not contribute the already dire situation of stagnant water in Mokowe township. Nevertheless, the local chief indicated that Lamu Municipality in collaboration with world bank funded urban improvement support project is already working on the drainage system for Mokowe township and other towns within the municipality. Mr Wabomba pleaded with the multi-sectoral agency to consider dealing with any storm water being generated or that will be generated by the existing buildings or the fisheries building respectively. Mr Angwenyi advised that our concern in the discussion should be strictly based on how we will deal with the surface run off from the fisheries building and not outside as that is beyond our scope. He reminded the congregants that the building is just a small project as compared to other projects outside the governor's compound. The County team however, should network and link with the implementors of the Kenya urban improvement project for better engagement and redress of the issues raised herein. Mr wabomba further explained that the Mokowe area is made of sedimentary rocks which allows for seepage of rain water and stagnant waters thus allowing for recharge of underground water table. This, he emphasized will contribute to availability of	

	underground water for to serve the water needs of the occupants of the building and the general populace of the Hindi ward. He therefore advised that such areas where storm water gather should not be entirely drained. A participant sought to know whether the building will use the existing septic tank (2,200 Liter) already installed nearby or it will it is provided for in the plan and designs. Eng. Angwenyi responded by stating that SRB reactor is provide for which used biological treatment for waste water to be generated from the building. The final treated water he said will be clean and will be available for use for other purposes. He also stated that Mokowe currently has no sewer system. A participant sough to know whether the office can be rented by other non-government agencies. He gave an example of Kenya Forest research institute at mokowe that provide conferencing and hotel and accommodation facilities. The boardrooms can be rented. However, the facility will only provide for kitchen to provide for teas and snacks for staff occupying the offices. Mr Masuo the BMU chairman- He said that he is happy because an office space has been provided for the BMU officials. Final comments by the consulting Engineer- Eng Angwenyi were	

	that his counterpart engineer at the County and team Redesign the PLWD toilets to provide for swing doors and help rail. Provide for we call standard PLWD toilets. Train the PLWD who may visit the toilet on how to use the toilets For other toilets-we should have standard toilets described normal and small same to urinals to cater for all categories of people old young or small across both gender.	
Meeting closure and agreeing in principle for the project offtake as designed with minor amendments	Response from participant was by -chorus- and raising of hands- all congregants raised their hands and said all of us agree. Having no other business, the meeting was adjourned at 11.30 am. with a word of prayer from Mr. Mwadime.	

IV. Public Consultations Attendance List

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST ACTIVITY: _____ **Location:** _____

S.No.	Name	ID No.	Sex	Age a) 18-35 b) >35	PWD (Tick)	Widows/ Orphans W/O	Community	Organization	Phone	Sign
1.	~~AMINA BAKARI J.~~	3919174								
21.	AMINA BAKARI J.	3919174	F	B	N/A	—	MOKOWE	BANDARI SALAMA BMU	0725373959	
22.	MOHAMED BWANAMKUU	10390535	M	B	—	—	MOKOWE	CIPK	0725585477	
23	SALIM ALI ABAM	2233865	M	B	—	—	"	BMU	0713001817	
24	OMAR MOHD BAHEDA	8525888	M		—	—	"	BMU	0115326743	
25	AIHMAN. BWANAHERI AIHMAN.	9353960	M.	B.	—	—	MOKOWE	B.M.U.	07148455 17	
26	BAKARI. BIN TAUSI	0650 189	M.	B.	—	—	MOKOWE	B.M.U.	0703299046	
27	AHMED MOH'D	22396772	M	B	✓	—	~~BI~~ MOKOWE	DILLER	0798-303230	
28	SUALEH YUSUF	23804470		B	✓	—	MOKOWE	FISHMONGER	0719766850	
29	ALI-OMAR ALI	22769 7756		B	✓	✓	MOKOWE	B.M.U.	✓	
30	HASHIM. MOHAMED MASUD.	11146689		B.	✓	✓	MOKOWE	BMU.		

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST ACTIVITY: _____ **Location:** _____

	S.No.	Name	ID No.	Sex	Age a) 18-35 b) >35	PWD (Tick)	Widows/ Orphans W/O	Community	Organization	Phone	Sign
11		Juliet kanisa	21857912	F	B				KMFRI	0772977652	
12		Jantt Mambua	23882504	F	B				KEMFSED	0723837107	
13		Mohamed Athuman	23668854	M	B				KEMFSED	0721500621	
14		Adan Musa	10341073	M	B				KEMFSED	0721662872	
15		Japheth Kupkales	28397466	M	A				Fisheries	07907437 27	
16		HAZARUS KUBABU	21908GQ		B	N/A	N/A		KEMFSED	0704881350	
17		HON. FAIZ FANKEMPI	25232560		B	N/A	N/A		LCG.	0719519022	
18		JAMES KARIUKI	9253519	M	B				MCA HINDI	0729310480	
19		ABDULMANAN ALI	30351276		A				COUNTY	0716 080883	
20		George Obonga	2011124		B				MCG	0716130413	

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST ACTIVITY: ______________________ **Location:** __________

S.No.	Name	ID No.	Sex	Age a) 18-35 b) >35	PWD (Tick)	Widows/ Orphans W/O	Community	Organization	Phone	Sign
1	JOSEPH ONYANGO	11215137	m	b				KEMFSED	0713758107	[signature]
2	Sidi B.K. Rufah	28149433	M	[illegible]				SDDW-HQ	0726744809	[signature]
3	Abubakar Maulana	28881114	M	a				KEMFSED	0719315180	[signature]
4.	Lali Fuad	28881177	M	a				LCG	0720110931	[signature]
5	Eng. George Otula	25820534	M	a				LCG	0729779349	[signature]
6	JAFFAR ALI YUSUF	30200786	M	a				LCG	0743667472	J.A
7	Simon M. Komu	3930043	m	b				LCG	0706590614	[signature]
8	NAOMI M KARANJA	33648161	F	a				LCG	0705746739	[signature]
9	John Mugo	13211070	M	B				KEMFSED	0722398631	[signature]
10	Gideon NDORO	10830882	M	B				KEMFSED	0722403292	[signature]

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST ACTIVITY: ______ **Location:** ______

S.No.	Name	ID No.	Sex	Age a) 18-35 b) >35	PWD (Tick)	Widows/ Orphans W/O	Community	Organization	Phone	Sign
31	Ali MoHD SALA	20316946	M	B	B	—	Mokowe	BMU	0704526 76	[signature]
32	Hussein Mohsin	34495688	M	b			mokowe	Loater	0113812486	[signature]
33	MUSA BAROFA	34043057	M	a			mokowe	BMU	0113094720	[signature]
34	EVALINE RIZIKI	32234611	F	a			Mokowe	Trade fish	0757795822	[signature]
35	MOHAMED BAKU	0158182	M	b			Mokowe	BMU	~~0721…17~~ 0713217417	[signature]
36	MASUD AHMED	22409620	M	B.			MOKOWE	BMU	0705911713	[signature]
37	Millicent Muigai	35817422	F	A			Mokowe	B.M.U	0790720873	[signature]
38	GUBE ABDI SALAT	32234583	M	B			mokowe	B.MU	0793985858	[signature]
39	Yusuf OTHMAN	29676516		A			mokowe	B.M.U	079268174[illegible]	[signature]
40	FRANCES mugethe	36293973		A			mokowe	B.mu	0723479325	[signature]

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST ACTIVITY: ______________________ Location: ____________

S.No.	Name	ID No.	Sex	Age a) 18-35 b) >35	PWD (Tick)	Widows/ Orphans W/O	Community	Organization	Phone	Sign
21	ARAFAT SAID ABDI	23449256	M	38				COUNTY PUBLIC WORKS	0712-526131	[signature]
22	Abdulfatah Kassim	27223073	M	a				LCG	0742476462	[signature]
23	Eng. S. ANGWENYI	2519470	M	B				PE/KEMFSED	0722858269	[signature]
24	KAHINDI YERI	7657816	M	B				NEMA	0722329452	[signature]
25	Anthony Mbithi	9090058	M	B				Kemfsed	0721460196	[signature]

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST ACTIVITY: _____ **Location:** _____

S.No.	Name	ID No.	Sex	Age a) 18-35 b) >35	PWD (Tick)	Widows/ Orphans W/O	Community	Organization	Phone	Sign
11	HONESTO FKALE	26169 90	m	35			MOKOWE	B.M.U	0740976241	
12	HASSAN Suleiman	24501733	M				MOKOWE	B.M.U	0724795913	
13	KUSO HASSAN	22212493	m	48			MOKOWE	B.M.U	0705617967	
14	BUYANAMKUU GUALE	29652443	m	28			MOKOWE	B.M.U	0704658158	
15	ABDULRAHMAN TILO	11103387	m	49			MOKOWE	B.M.U	0712469298	
16	Collins Kipto	35139281	m	28			Mokowe	B.M.U	0725530085	
17	HASSAN LOHOS	11893493	m	45			MOKOWE	B.M.U	0724699246	
18	ATHMAN HAMDI	10390384	m	47			MOKOWE	B.M.U	0799843578	
19	AMANI SILAS	27746287	m	35			MOKOWE	B.M.U	0797269417	
20	SAID JARO	12709044	m				MOKOWE		0700701490	

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST ACTIVITY: _____ **Location:** _____

S.No.	Name	ID No.	Sex	Age a) 18-35 b) >35	PWD (Tick)	Widows/ Orphans W/O	Community	Organization	Phone	Sign
1	ABDALLA - MOHD SHALLY	01589 2-C	F	B	✓	✓	MOKOWE	B.M.U.	0708076 791	
2.	AFHMAN BAKARI MASUD	-	F	B	✓	-	MOKOWE	B.M.U.	07[illegible]80 352	
3.	AFOHWAL MOHAMED FAMILY	21901547	M	B	✓	-	L. EAST KIZ.	B.M.U	07149084 22	
4	SALIM M. ARAFA	25627537	M	B	-	-	MOKOWE	B.M.U	0729 901974	
5.	BARRE ADAM GULE	30240895	M	B	-	-	MOKOWE	B.M.U	0743 719672	
6	AMINA BAKARI BINTAUSI	29251087	F	A			MOKOWE	B.M.U	0713003374	
7	RUKIYA ABDALLA	26707976	F	A			MOKOWE	B.M.U	0700382917	
8	YUSUF ISMAIL	40601553	M	A			MOKOWE	B.M.U	0759399028 5	
9	MUHAMAD SHEE	22220656	M	B			MOKOWE	B.M.U	0725990602	
10	HAMISI ATHMAN	27919735	M	B			MOKOWE	B.M.U	0714315410	

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT (KEMFSED)

County Project Implementation Unit, Lamu County

ATTENDANCE LIST ACTIVITY: ______________________ **Location:** __________

S.No.	Name	ID No.	Sex	Age a) 18-35 b) >35	PWD (Tick)	Widows/ Orphans W/O	Community	Organization	Phone	Sign
	JOHN H. KUMALA	12737469	M	35	✓		Comman	Religion	072941868	
	ABDALLA HASSAN	32492017	M	35	✓		Mokowe		0758580331	
	OMAR Abdalla	40059098	M	21	✓		Mokowe		0759618660	
	BAKAR AHMED MOHD	[illegible]		23	✓		Mokowe	BMU	0114503910	

Kenya Marine Fisheries Socioeconomic Development Project (KEMFSED)
P.O. Box 58187-00200
NAIROBI
Office of the National Project Coordination Unit

NO	NAME	DESIGNATION	GENDER	STATION	TEL: NUMBER	SIGN
1	KHALIFA S ALWY	CHIEF	M	Mokowe	0729971927	
2	Sammy Karisa Emanuel	Asst. chief	M	Mokowe.	0720997938	
3	DANIEL OCHWANGI	NPS / KPS/OCS INKAM		MOKOWE	0724803603	
4	[illegible]	I/P KCGS	M.	[illegible]	0729538657[illegible]	
5	MOHAMED A. SHURIE	NPS/APS/CIPU	M	MOKOWE	0710158513	
6	Bii K. LINUS	ACC	M	HINDI	0724275742	
7	BASHIR AHMED ALI	D/OCS MPEKETONI	M	MPEKETONI	0720241663	
8	FRED SIMIYU	OC CRIME	M	Mpeketoni.	0707487717	
9	HUSSEIN ABDI	OC KWS I	M	Mokowe	0726655446	
10	RONALD MWAMBATI	KEMFSED LAMU CPIU	M	MOKOWE	0710519669	
11	LAZARUS KUBASU	Social Safeguards	M	NAIROBI	0724881380	
12	Godfrey Wabomba	ESS	M	NAIROBI	0721712640	

Kenya Marine Fisheries Socioeconomic Development Project (KEMFSED), P.O. Box 58187-00200 Nairobi, Kenya
Maji House, Ngong Road
Tel: +254-020-[illegible] +254 725096401

OPPO Reno7

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST. ACTIVITY: PUBLIC CONSULTATIONS – ESIA FOR COUNTY FISHERIES HQ Location: Date: [illegible]

S/No.	Name	ID No.	Sex	Age a)18-35 b)>35	PED (Tick)	Widow/Orphan W/O	Community	Organization	Phone	Sign
	Adam Musa	10391083	M	B	N/A	N/A	Bajun	KEMFSED	0721662822	[signature]
	NIZAR M SHEE	20167171	M	B	✓	N/A	Bajun	P.W.D	0722475546	[signature]
	Anthony Mbithi	9590058	M	B				KEMFSED	0721460196	[signature]
	AISHA SHALI	26721816	F	A			BAJUN	KEMFSED	0717670404	[signature]
	Umulkher B. Athman	31978764	F	A	N/A	N/A	Bajun	KEMFSED	0714259952	[signature]
	HALIMA RIZAK	31855309	F	A	N/A	N/A	BAJUN	RADIO LAMU	0758212238	[signature]
	MARGARET KARANI	24448637	F	A	N/A	N/A	Kikuyu	KEMFSED	0705887896	[signature]
	OMAR MADI SHEE	1114015	M	B	N/A	N/A	Bajun	Fisher man	0793645133	[signature]
	Doris T Mwanonje	35502323	M	A	N/A	N/A	Mtaita	Polytechnic	0769194991	[signature]

KENYA MARINE FISHERIES SOCIO-ECONOMIC DEVELOPMENT PROJECT
(KEMFSED)
County Project Implementation Unit, Lamu County

ATTENDANCE LIST. ACTIVITY: STAKEHOLDER PUBLIC CONSULTATIONS FOR LAMU COUNTY FISHERIES OFFICE CONSTRUCTION Location: LAMU YOUTH POLYTECHNIC Date: [illegible]

S.No.	Name	ID No.	Sex	Age a)18-35 b)>35	PED (Tick)	Widow/Orphan W/O	Community	Organization	Phone	Sign
1.	MULHAT YUSUF	38732744	F	a			BAJUN	MAMA KARANGA	0775972599	
2.	FEISWAL YUSUF	27193536	M	a			BAJUN	Fisherman	0720679889	
3.	MOHAMED OTHMAN	23668514	M	b			Swahili	KEMFSED	0721550621	
4	JOSEPH OMYANGO	11215737	m	b			BAKUBA	KEMFSED	0717465971	
5	FAITH SALIM	30352218	m	a			swahili	fisherman	0717088334	

V. Code of Conduct

IMPLEMENTATION OF ESHS AND OHS STANDARDS, PREVENTING GENDER BASED VIOLENCE AND VIOLENCE AGAINST CHILDREN

I …… acknowledge that I will adhere to the Environmental Social Health and Safety (ESHS) requirements; Occupational Health and Safety (OHS) requirements and statutes preventing Gender-Based Violence (GBV) and Violence Against Children (VAC).

I agree that while working on the project I will: -

a) Attend and actively partake in training courses related to **ESHS, OHS, HIV/AIDS GBV, and VAC** as requested by the employer
b) I will wear **Personal Protective Equipment (PPE)**at all times when at work site or engaged in project related activities
c) Implement Occupational Health Safety management plan
d) Take all practical steps to implement the contractors Environmental and Social Management Plan (C-ESMP)
e) Adhere to zero alcohol policy during work activities and refrain from the use of narcotics or other substances which impair faculties at all times
f) Consent to police background checks.
g) Treat women, children (persons under the age of 18yrs) and men with respect regardless of race, colour, language, religion, political or other opinion, Nation, ethnic or social origin property, disability birth or other status
h) Not use language or behaviour towards women, children, or men that is inappropriate, harassing, abusive, sexually provocative demeaning or culturally inappropriate;
i) Not engage in sexual harassment for instance making unwelcome sexual advances, requests, for sexual favours and other verbal or physical conduct of sexual nature, including subtle acts of such behaviour e.g. *(Looking at somebody up and down, kissing, howling or smacking sounds, hanging around somebody, whistling and catcalls, giving personal gifts, making comments about somebody's sexual life);*
j) Not engage in sexual favours for instance making promises or favourable treatments depending on sexual acts or other forms of humiliating, degrading or exploitive behaviour;
k) Not participate in sexual conduct or activities with children including grooming or contact through digital media. Mistaken belief regarding the age of the child or consent from a child is not a defense or an excuse.
l) Unless there is full consent by all parties involved, I will not have interactions with members of the surrounding communities, this includes relationships involving the withholding or promises of actual provision of benefits (e.g., monetary or non-monetary) to community members in exchange for sex. Such sexual activity is considered "non-consensual" within the scope of this code of conduct

m) Consider reporting through the Project Site Agent, ESH officer or to my supervisors any suspected or actual GBV, and VAC by a fellow worker, whether employed this company or not, or any breaches of this code of conduct

With regard to children under 18 years

i. Whenever possible ensure that another adult is present when working in the proximity of children
ii. I will not invite unaccompanied children not related to my family into my house unless they are at immediate risk of danger or physical danger
iii. I will not use any computers, mobiles phone, videos or digital cameras or any other medium to exploit or harass children or to access children phonography or use of children images for work related purposes
iv. Refrain from physical punishment or discipline of children
v. Refrain from hiring children for domestic or other labour related work
vi. Comply with all relevant local legislations including labour laws in relation to child labour and world Bank Safeguards Policies on child labour

Use of children images for work related purposes

a) When photographing or filming a child, assess and endeavour to comply with local tradition or restriction for reproducing personal images
b) Before photographing or filming a child, must obtain informed consent from the child, parent or guardian of the child. As part of this, I must explain the use of the photograph or the film.
c) Ensure photographs films videos and DVDs present children in a dignified and respectful manner and not in the vulnerable and submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
d) Ensure file labels do not reveal identifying information about a child when sending images electronically

NON-RETALIATION ON REPORTING CODE VIOLATIONS

- No one will be victimized for reporting the violation of this code of conduct.
- A reward will be offered for genuine reporting of this code violations as deemed fit by the Management.

Sanctions

I understand that if I breach this individual code of conduct, my employer will take disciplinary action which could include: -

- Informal warning
- Formal warning
- Additional training
- Loss of one week's salary

- Suspension from employment (without payment of salary) for a period of one month
- Termination of employment (without benefits)
- Report to the police if warranted

I……ID No …….. do hereby acknowledge that I have read the forgoing individual code of conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS OHS GBV and VAC issues, I understand that any action inconsistent with this individual code of conduct or failure to act as mandated by this individual code of conduct may result in disciplinary action and my on-going emolument

Signature……

Name……..

VI. Technical Clauses for Contractor Implementation

CLAUSES TO BE IMPLEMENTED BY THE CONTRACTOR AND ALL SUB-CONTRACTORS AS A REQUIREMENT UNDER THE CONTRACT.

1. The Contractor shall not commence any works or mobilization unless a notice of no-objection by the Joint Project Supervision Committee (JPSC) as guided by the World Bank to the Contractor, on measures the Contractor proposes to manage environmental and social risks and impacts and Code of Conduct for Contractor's Personnel is submitted and approved as part of the Contract.
2. The ESHS code of conduct shall be adopted and embodies the commitment of the Contractor (including sub-contractors and day workers) to conduct construction related activities in accordance with all applicable laws, rules and regulations with high ethical standards. The Contractor and its subsidiaries shall comply with the Code of Conduct and in a manner consistent with high ethical standards. Failure to observe the Code of Conduct may subject a worker to disciplinary action by the contractor, up to and including termination. Furthermore, violation of the Code may also be in violation of the law and due result in civil and /or criminal penalties for the worker, supervisors and/or the firm. The Contractor employees, Managers and Directors shall take all responsible steps to prevent a violation of the Code, to identify and raise potential issues, and to seek additional guidance when necessary, if any questions regarding the best course of action in a particular situation on the Code one should therefore promptly contact the project proponent for assistance
3. The Contractor shall also ensure that the Code of Conduct is visibly displayed in multiple locations on the site and any other place where the works will be carried out, as well as in areas outside the site accessible to the local community and project affected people. The posted Code of Conduct shall be provided in languages comprehensible to Contractor's Personnel, Employer's Personnel and the local community.
4. The County safeguards officer (ESSO) will be responsible for organizing environmental training of all the Engineer's and Contractor's staff. It is required that this training is coupled with the safety training that the Contractor should include in his own site management plan. The Contractor shall ensure that the KEMFSED Project Engineer is informed of all staff that will work on the site and their general responsibilities and shall make sure that they are available to attend briefing sessions arranged by the ESSO on the environmental mitigation measures that are to be in place on the site. The Contractor shall facilitate the ESSO as shall be requested.
5. The wages paid to staff employed by the contractor shall be fair and reasonable having regard to those commonly paid in the trade or industry in which such staff are employed and undertake to comply with such requirements relating to hours of work and conditions of labour as are or may from time to time be laid down in the legislation of Kenya.
6. Without prejudice to their obligations under Kenyan Employment Act, the Contractor shall keep proper wages books and time sheets showing the wages paid and the time worked by the staff under their employment in and about the carrying out of this Contract and such wages books and time sheets shall be produced whenever required for inspection by any officer authorized by the Contracting authority.

7. The Contractor shall recognize the freedom of his employees to associate. The Contractor shall at all times during the continuance of the contract display a copy of this Article in full on his site office notice boards for the information of his employees.
8. Due precautions shall be taken by the contractor, and at his own cost, to ensure the safety of his staff and labor and in collaboration with and to the requirements of the local health authorities, to ensure that medical staff, first aid equipment and stores, sick bay and suitable ambulance service are available when required throughout the period of the contract and that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements.
9. Burning of waste materials will not be permitted on site but instead the waste disposed of in authorized dumpimg sites as per the requirements of NEMA within the county. Hazardous materials such as tires, plastic rubber products, used oil products, or other hazardous materials shall be disposed of by contractors' licensed to handle such waste.
10. The Contractor shall comply with applicable National laws, orders and regulations concerning the prevention, control and abatement of excessive noise. Any activity producing high-intensity impact noise will not be performed during the night
11. The Contractor's construction activities shall be performed by methods that will prevent entrance or accidental spillage, of solid matter, contaminants, debris, and other pollutants and wastes into streams, flowing or dry watercourses, sea, and underground water sources. Other pollutants may include: concrete, oil and other petroleum products. Excavated materials or other construction materials shall not be stockpiled or deposited near or on stream banks, sea shorelines or other watercourse perimeters where they can be washed away by high water tide or storm runoff or can in any way encroach upon watercourse itself.
12. The Contractor shall comply with applicable laws and regulations concerning the prevention and control of air pollution. Notwithstanding the above in conduct of construction activities and operation of equipment, the contractor shall utilize such practicable methods and devices as are reasonably available to control prevent and otherwise minimize atmospheric emissions or discharges of air contaminants. The emission of dust into the atmosphere shall be strictly controlled during the preparation, handling and storage of concrete and aggregates, and the contractor shall use such methods and equipment as are necessary for the collection and disposal or prevention of dust during these operations.
13. The Contractor's methods of storing and handling cement and lime shall also include means of eliminating atmospheric discharges of dust. Equipment and vehicles that show excessive emissions of exhaust gases due to poor engine adjustments or other inefficient operating conditions shall not be operated until corrective repairs or adjustments are made.
14. The contractor to take all measures necessary including sensitization and awareness among workers and the public to avoid or minimize the spread of communicable diseases such HIV/AIDS, TB, STIs and non-communicable diseases associated with the execution of the works, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups. This includes taking measures to avoid or minimize their transmission. The Contractor shall ensure that condoms are provided as part of the HIV/AIDS control program to all staff.

15. The contractor shall prepare procedures for prevention, preparedness and response activities to be implemented in the case of an emergency. The procedures to establish and maintain a safe working environment without risk to health at all workplaces, machinery, equipment and processes under the control of the Contractor.
16. The contractor to conduct training for workers on first aid, safety and health, appropriate use of PPE and on grievance redress mechanism with details of the training to be provided, records to be kept.
17. The Contractor shall require that its sub-contractors execute the Works in accordance with the Contract, including complying with the relevant environmental and social safeguards requirements as captured in the ESIA report, ESMP and the SEA/SH Prevention and Response Obligations or as shall be guided from time to time depending in changes in circumstances or updating C-ESMP.
18. The contractor and all subcontracts relating to the works shall be bound by appropriate national and World Bank policies' consequences of failing to comply with SEA/SH prevention and response obligations.
19. The contractor shall be required to give fair and reasonable opportunity to sub-contractors from the county where such opportunities arise.
20. The Contractor where applicable to source staff and labor with appropriate qualifications and experience from within the county or sub-county. Where applicable from the general project implementation area (from Coastal Counties)
21. The Contractor shall have an insurance cover against liability for claims, damages, losses and expenses arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel working on the project.
22. The contractor and all the associated sub-contractors to put in place a policy prohibiting any form of child labor and where such cases arise the contractor to meet appropriate sanctions or legal action as per the national laws and World Bank policies prohibiting such cases.
23. The contractor to provide appropriately or reasonably long-term contracts to workers and avoid as much as possible using casual laborers.
24. The contractors to put in place measures to avoid, prevent, control and manage covid-19 infection among workers and the community during engagement. The contractor to prepare the guidelines cognizance of Ministry of health and World Bank Covid-19 guidelines as well as appropriate PPE use on site.
25. The contractor to take all necessary measures to ensure that in the process of sourcing of material or executing the works does not perpetuate the spread of invasive plant or animal species. And that all measures shall be taken including measures to avoid, prevent, minimize or manage such incidences.
26. The contractor shall commit to adhere to implementation of all safeguards requirements as per KEMFSED project documents, ESIA report, C-ESMP or as shall be reviewed and issued from time to time in the cause of implementing the proposed sub-project activities and should anticipate for the associated cost.

vii. List of Indicators for Monitoring

NO.	ASPECT	LIST OF POTENTIAL INDICATORS TO BE MONITORED
1.	Occupational Health and Safety (*accidents and Injuries*)	▪ Site safety action plan ▪ Trained workers on safety and first aid skills ▪ First aid facility and injury reporting mechanism put in place ▪ Appropriate use of personal protective equipment (PPE) *(Reflective jackets, helmets, face masks, ear plugs gloves, safety boots, etc.)* ▪ Trained workers on appropriate use of PPE. ▪ Sanitation facilities provided on site for human waste disposal ▪ Incident register and training of how to use it ▪ Updated contractor WIBA insurance policy ▪ Watering points for worker on site with clean water ▪ Memorandum of Understanding with nearby health centre. ▪ Covid-19 management rules/guidelines on site ▪ Adequate covid-19 PPE and use by all persons on site. ▪ Trained workers on covid-19 rules and requirements.
2.	Public health and safety (*accidents and Injuries*)	▪ Use of safety signs at strategic places with high risks to public. ▪ Hording off working sites ▪ Speed limit measures in place ▪ Awareness creation and sensitization activities for the public
3.	Visual/ aesthetic Impacts	• Backfilling of soil cuttings • Landscaping of the project site
4.	Leakages and spills	▪ Recorded incidents of hazardous waste leakage or spills. ▪ Site-specific incident management or response plan. ▪ Oil trap measures at contractors yard
5.	Excessive Noise	• Noise regulation measures on construction equipments. • Construction equipment and Machine servicing records • Records of public notices for high noise level activities • Appropriate use of noise PPE by workers • Measures in place to reduce unnecessary hooting and speeding. • Records of regular measurement of noise levels
6.	Air pollution	• Identified potential sources of air pollution on site • Measures put in place to control effect of wind on material being transported
7.	Solid Waste generation	• Site-specific waste management plan • Measures of waste avoidance, reduction, reuse and recycle put in place. • Designated waste transfer station on site. • Records of approvals from NEMA and County Government on waste management and disposal
8.	Increased Water consumption for	• No. of sensitization and awareness creation among construction workers

NO.	ASPECT	LIST OF POTENTIAL INDICATORS TO BE MONITORED
	construction	• Measures to conserve water during structure curing. • Records of response to leakage in the water system. • Alternative water sources
9.	Risk of Spread of HIV/AIDS	• No. of HIV/AIDS prevention messaging • No. of workers having access to safe sex (condoms-Male and female) • Installed HIV testing services or an MoU with an existing government health facility in the area. • No. of supported infected workers with ARVs • Peer counseling services put in place
10.	Grievances	• Grievance redress committees put in place • Contractor staff grievance structures put in place • Sensitization and awareness creation • No. of grievanceGrievance log
11.	Effects of Immigrant workers	▪ No of local workforce ▪ Community engagement plan in place ▪ Signed Code of Conduct by all workers ▪ Sensitization meeting on local social and cultural practices on acceptable behavior ▪ Sexual Harassment and Non-Discrimination Policy ▪ Labour Management Plan (LMP)
12.	Child Labour and Protection	▪ Records of employees including copies identification cards ▪ Records of child sexual relations offenses reported to the police. ▪ Recruitment policy prohibiting child labour put in place ▪ Review of employee records
13.	Gender Equity, Sexual Harassment and abuse amongst workers in the workplace	▪ Sexual Harassment and Non-Discrimination Policy ▪ No of women and men employed ▪ No of sanitation facilities per sex ▪ Records of reported harassment cases ▪ Trained and sensitized employees on appropriate behavior ▪ Signed code of conduct against SH ▪ Gender action plan
14.	Gender-based violence at community level	▪ Implemented measures to prevent GBV at community level ▪ No. of community engagement and consultation with women and girls; ▪ No. of sub-project activities identified to be of high GBV risk at community level. ▪ Referral mechanisms are in place in the event of GBV at Community level
15.	Sexual exploitation and abuse (SEA)	▪ SEA management action plan ▪ Signed code of conduct (CoC) by all workers and sub-contractors ▪ Workers trained on CoCs and responsibilities ▪ Project-level IEC materials put in place ▪ Survivor-centred mechanisms put in place

NO.	ASPECT	LIST OF POTENTIAL INDICATORS TO BE MONITORED
		▪ Multi-sectoral referral and assistance plan put in place ▪ Disciplinary procedures at the project put in place ▪ Confidential community-based complaints mechanisms in place ▪ PSEA awareness-raising done ▪ community-level IEC materials put in place ▪ No of community outreach to women and girls about social risks and their PSEA-related rights; ▪ Integration of SEA in job descriptions, employments contracts, performance appraisal systems, ▪ Whistle-blower protection and investigation and disciplinary procedures put in place ▪ No. of training of project staff on SEA conducted
16.	Spread of COVID-19 amongst community members during consultation processes	• electronic channels adopted for engagement of stakeholders • Measures to observe social distance put in place • Covid-19 PPE use on site • Use of Covid-19 PPE during community engagement • Traditional Communication channels adopted • No. of stakeholders per meeting, • No of digital platform adopted • Online services of community engagement put in place • feedback and suggestion platforms for participants, • size of groups attending meetings
17.	Spread of COVID-19. During construction at work sites	• Approved SOPs in line with World Bank and ministry of health guidelines in place, • No of routine fumigation of shared area and shared tools, • Sanitizing and hand washing area and facilities put in place • Isolation area, • proper use of covid-19 PPE, • visual inspection of social distance and • rapid covid-19 screening measures put in place
18.	Spread of invasive species	• Ensuring cleanliness of the project construction vehicles accessing or leaving the site to reduce spread of *Prosopis Juliflora* currently on site. • Create awareness among the workers

viii. GRIEVANCE Log Forms

GRIEVANCE LOG FORM: **GRIEVANCE NO:**.....

Name of Complainant	**Gender:**		**Age:**	
	Male		**18 – 35** **36 – 65** **65 - Above**	
	Female		**18-35** **36 -65** **65 - Above**	
Contact Information	**Phone No:**		**E-mail:**	
Location of the Complainant County	County	Sub-County	Ward	Village
Signature of the Complainant	Or if he chooses to be anonymous		Reason for staying anonymous	
Description of the Complaint (s)				
Resolution of the Complaint	**Yes**		**No:**	
Referral	**Yes**		**No:**	
If referred: **Who was it referred and what is position or title of the referral**	**Contact of the referrals**		**E-mail of the referral**	
Resolution Communicated to the Complainant	**Yes**		**No**	