



# ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROJECT REPORT FOR PROPOSED CONSTRUCTION OF KWALE COUNTY FISHERIES OFFICE IN MSAMBWENI.

Coordinate: Latitude 4°27'37.74"S and Longitude 39° 29'1.20"E.



**Kenya Marine Fisheries Socioeconomic  
Development Project (KEMFSED)**  
Maktaba Kuu Building, Mezzanine floor  
Ngong, opposite NHIF building  
P.O. Box 58187-00200  
Tel: +254-20-2718870  
E-mail: [info@kemfsed.org](mailto:info@kemfsed.org)  
Website: [www.kemfsed.org](http://www.kemfsed.org)



**Kwale County, CPIU**  
P.O Box 89-80400, Ukunda  
Tel: +254-780864255  
E-mail:  
[kemfsed.kwalecpiu@gmail.com](mailto:kemfsed.kwalecpiu@gmail.com)  
Website: [www.kemfsed.org](http://www.kemfsed.org)

**MAY, 2024**

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## ABBREVIATIONS AND ACRONYMS

AOI	Area of Interest
CPC	County Project Coordinator
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
ESS	Environment Safeguard Specialist
ESSO	Environmental Social Safeguards Officer
FAO	Food and Agriculture Organization
GBV	Gender-Based Violence
GO	Grievance Officer
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
JPSC	Joint Project Supervision Committee
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
KWAWASCO	Kwale 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 either on national, devolved or concurrent. In the counties, there are personnel from the County government and national government namely Kenya Fisheries Service (KeFS) who play a critical role in service delivery 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 SDF&BE, requested the World Bank to support the development of the sector through the Kenya Marine Fisheries and Socio-Economic Development (KEMFSED) project. Fisheries sector remains under developed in Kwale County in terms of infrastructure. The proposed construction of Kwale County Fisheries headquarter office in Msambweni is part of the contributions towards enhancing county fisheries infrastructure development under KEMFSED project. Aimed at improving fisheries management, which is significant in achieving coordinated and improved management of priority fisheries and mariculture in the county.

The fisheries department in Kwale County does not have any fisheries office space of its own and rely on borrowed space from other government departments. Although the County Government has a new headquarters' office block, the Ministry of Agriculture, Livestock Fisheries and cooperative were not lucky to be allotted space in the building. The different county fisheries departmental staffs are currently hosted in different office locations distance from each other around Kwale County. Some of the departmental staff are currently squeezed under the veterinary offices with no permanent office of their own. However, with the implementation of the project, it is anticipated to create a one-stop shop for the county fisheries' department clients. The construction of the new office shall be a contributing factor towards harnessing the effort of realizing the objective of the blue economy contribution to local and national economic development, through improved fisheries management.

The proposed development will be handy in addressing the current challenges by improving the existing situation through centralizing the administration of key county officers in the blue economy, minimize operating costs for the clients and the department of fisheries, reduce time wastage shuttling between offices located apart, 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. However, 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.

### **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. In this regard, summary project reports shall be submitted to NEMA for ESIA licensing. In response to the requirements of the law and World Bank safeguards policies, the NPCU and the Kwale county safeguards team prepared the ESIA project summary report for the proposed construction of Kwale County Fisheries Headquarter in Msambweni.

### **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. Implementation of the proposed sub-project is anticipated to improve the working conditions of the fisheries officers, enhance marine fisheries management and governance in the county, contribute towards the county’s objective of providing office space for fisheries department, improving the extension services to fishers and to consolidate all CPIU team members under one roof to improve staff productivity.

### **Proposed Project Design**

The proposed construction of Kwale County Fisheries Headquarter will consist of constructing one floor offices for department of fisheries and ample space to house the CPIU. The office block will have 11 offices with cabinets and furniture; the office to host county executives and 5 offices to host the county director fisheries and his secretariat and 6 CPIU offices, boardroom, kitchen, store and 3 lavatories.

### **Project Location**

The proposed Kwale County fisheries office in Msambweni is located on a piece of land measuring about 0.3 acres (0.12 hectares) owned by livestock department, the land ownership documents are as attached in Annex II. The proposed project is located in Kwale County, Msambweni Sub-county, Ramisi ward, Msambweni location and in Vingujini sub-location. The office is located at Vingujini trading centre and about 400m from Vingujini as indicated in Figure 0-1. The coordinates of the project site are Latitude 4°27'37.74"S and Longitude 39° 29'1.20"E.



Figure 0-1: Google Image Showing the Proposed Sub-project Location Site

### Estimated Cost

The estimated cost for construction of the proposed Kwale County fisheries headquarter in Msambweni is about KShs. 112,697,250<sup>1</sup>. These costs cover preliminaries, building works, mechanical works, perimeter wall, civil works, prime cost and provisional sums on labour, environmental and social management and monitoring costs, taxes and a factor on inflation. The breakdown of the project cost is as shown in Chapter 2 The estimated cost for constructing the proposed Kwale C.P.I.U office in Msambweni is about **KShs. 112,697,250**. This cost include preliminaries, office building works, guard house, electrical works, mechanical works, builder’s work in connection to specialized works, external works, day works, environmental and social management and monitoring costs, taxes and a factor on inflation and contingencies for the proposed structures. The breakdown of the project cost is as shown in **Error! Reference source not found**. The proposed project shall be implemented within a period of 12 month with an addition of 6 months for the defect liability period.

Table 2-5.

### Approach and Methodology

The main 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 including previous ESIA reports and project design report to compile relevant baseline biophysical and socio-economic information about the study area. Field surveys were conducted

<sup>1</sup> The estimate cost is according to the figures provided in the bill of quantities as provided by the project engineer. For USD estimates, the cost can be divided by 100.

on several occasions as indicated in section 1.5 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, solid and liquid waste, noise 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. The socio-economic survey approach consisted of collecting data from community meeting and various key informants from institutions both for National government agencies and County government departments as indicated in chapter 5. Ten 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, table below is a summary of the discussion as captured in chapter 5 of this report under table 5-2.

#### Summary of stakeholders Issues raised and the response

KEY ISSUES RAISED	RESPONSES
Members wanted to know if the project funding would be enough to complete the whole project at a go.	The BoQ had not been finalized but the deliberations were still ongoing since prior discussions showed that they would only complete the ground floor and the 1 <sup>st</sup> floor.
Food vendors also highlighted that workers normally don’t pay for food during construction.	A sub-committee comprising of contractor as well as county officials should listen, investigate and remedy the claims especially during payday, which normally happens in a fortnight.
There was a proposal to give priority when hiring the labour force to the residents of Vingujini and its surrounding.	Matter would be put forward to the contractor who would take a sizeable percentage of the workforce from the area.
Proposal to have the contractor come from Kwale county	Competitive bidding would be used and SDFA&BE would give priority to the winning bid.
The stakeholders asked if they could deliver the raw materials for the construction since some groups were engaged in tendering of the raw materials needed.	The community was assured that competitive bidding shall be adopted for fairness and the local supplier to be given priority in supply of materials. The contractor will make the final decision based on the qualifications.
There was a concern on occupational Health Safety/Accidents	<ul style="list-style-type: none"> <li>• There would be provision of PPEs.</li> <li>• There would be strict adherence to WIBA and DOSHS requirements by the contractor.</li> </ul>
There was an issue on provision of	The design team was asked to incorporate latrines on its

latrines to acts as supplements to the toilets	design.
There was an issue on water capacity of the storage tanks and whether they would be enough to serve the building.	Members suggested that an underground tank to be constructed which would harvest water and pump it to the overhead tank.
Noise pollution during work	Members resolved that no work should be done during the night and if it must a notification would be given.
Members suggested hiring of TVET students as part of enhancing their skills inclusion in activity	The students would hand in their CVs and the contractor would give them consideration based on his terms of work.
Incidences of child labour	<ul style="list-style-type: none"> <li>• Provision of ID before hiring</li> <li>• Sensitization of BMU as well as CPIUs.</li> </ul>
Members noted that as the construction was on-going, GBV/ Sexual Exploitation Abuse cases would increase in both genders.	A code of conduct should be signed by workers as well as the contractor which would bar everyone from engaging in the cases.
PWD/Women inclusion during construction	<ul style="list-style-type: none"> <li>• Contractor to consider PWDs in tasks that do not require physical strength e.g. recording keeping and tallying and counting of supplies or even given the tender to supply goods and services.</li> <li>• Women to be accorded equal rights as male and should be offered an equal chance.</li> </ul>
Grievance mechanism	Members were informed of a Grievance redress mechanism which would be constituted to handle all grievances that may arise within the project.
STI/HIV&AIDS control	<ul style="list-style-type: none"> <li>• Provision of condoms dispenser that would be replenished regularly.</li> <li>• Awareness creation among project workers and community members on STIs and HIV/AIDs.</li> <li>• Putting up of HIV/AIDs banners /boards within the construction site to sensitize workers.</li> </ul>
Members asked for consideration in their wages due to the high economic conditions.	The contractor would be informed so as to accommodate it in the BoQ.

### **Impacts of the Project**

The construction of the proposed Kwale County Fisheries headquarter in Msambweni Vingujini trading centre is anticipated to have both negative and positive impacts on; county fisheries infrastructure development, contribution to the blue economy, staff working conditions, enhanced service delivery to fisheries clients, the environment and on the project area in general, as indicated in chapter 6 of this report.

## Positive Impacts

The construction of the proposed Kwale County Fisheries headquarter in Msambweni Vingungini trading centre 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, improved security, business opportunities, aesthetic value to the site, securing and better land utilization and improved service delivery to the fish farmers.

## The Negative Impacts

The proposed project will comprise of a one floor 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 (*accidents and Injuries*), Public health and safety (*accidents and Injuries*), 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, 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 and Spread of COVID-19 during construction at work sites.

## Environmental and Social Management Plan during Construction

NO.	ASPECT	MITIGATION MEASURES
1.	Occupational Health and Safety ( <i>accidents and Injuries</i> )	<ul style="list-style-type: none"><li>▪ Contractor to develop a site safety action plan detailing safety equipment to be used, emergency procedures, restrictions 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</li><li>▪ Train workers on safety and first aid skills before commencing works</li><li>▪ Ensure provision of a fully equipped first aid kit and re-stocking periodically. Provide appropriate personal protective equipment (PPE) to workers and training on the appropriate use. (<i>Reflective jackets, helmets, face masks, ear plugs gloves, safety boots, etc.</i>)</li><li>▪ Adequate provision of requisite sanitation facilities for human waste disposal for workers on site</li><li>▪ Recording of all injuries that occur on site in the incident register, and corrective actions for their prevention as appropriate.</li><li>▪ The contractor is required to have WIBA insurance policy to</li></ul>

NO.	ASPECT	MITIGATION MEASURES
		<p>compensate workers in the event of injuries.</p> <ul style="list-style-type: none"> <li>▪ Provide clean drinking water for the workers to mitigate against dehydration.</li> <li>▪ Have an understanding with a nearby health facility for emergency cases on-site before decisions are made.</li> <li>▪ 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.</li> <li>▪ Training of workers on covid-19 rules and requirements.</li> <li>▪ As applicable, only qualified personnel shall be allowed to operate construction equipments on site that may require specialized skills.</li> </ul>
2.	Public health and safety ( <i>accidents and Injuries</i> )	<ul style="list-style-type: none"> <li>▪ Ensure the safety of residents and officers with offices near the site by providing safety signs at strategic places around the access roads.</li> <li>▪ Hoarding off working sites to protect the public or unauthorized persons from entry.</li> <li>▪ Use of signs and warnings on sites on areas with high risks.</li> <li>▪ 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.</li> <li>▪ Reduce unnecessary speeding by the construction vehicles to control for accidents from the movement of pedestrians in the area.</li> <li>▪ 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 (<i>2 weeks</i>) before commencement.</li> </ul>
3.	Visual/ aesthetic Impacts	<ul style="list-style-type: none"> <li>• Cleaning of the site and organized locating of different construction materials.</li> <li>• Backfilling of soil cuttings</li> <li>• Landscaping of the project site</li> <li>• hoarding of the construction site using appropriate screening materials</li> </ul>
4.	Leakages and spills	<ul style="list-style-type: none"> <li>▪ In the event of hazardous waste leakage or spills, engage authorized waste handlers to dispose of contaminated soils.</li> <li>▪ Disposing of contaminated soils in cutting pit if volumes are low.</li> <li>▪ Use of NEMA licensed hazardous waste handlers to dispose off in licensed disposal areas.</li> <li>▪ Development of site-specific incident management or response plan.</li> <li>▪ Use of an authorized garage or fuel station in the project area by the contractor or specific concrete and oil traps should be constructed at the contractor's yard.</li> </ul>
5.	Excessive Noise	<ul style="list-style-type: none"> <li>• The contractor to use equipment with low noise levels or fitted with silencers where appropriate.</li> <li>• Regular servicing of the equipment to reduce the possibility of noise from worn-out parts.</li> <li>• Informing the public about the possibility of unusual noise levels,</li> </ul>

NO.	ASPECT	MITIGATION MEASURES
		<p>particularly to residents and nearby offices, whenever working on such activities.</p> <ul style="list-style-type: none"> <li>• Ensure adherence to PPE by workers<sup>2</sup> working on excessive noise and vibration activities</li> <li>• Minimize unnecessary hooting and speeding by construction vehicles.</li> <li>• Restricting noisy activities to be during the day and no noisy activities should be conducted on site at night.</li> <li>▪ Regular measurement of noise levels and devising control measures.</li> </ul>
6.	Air pollution	<ul style="list-style-type: none"> <li>• Vehicles to be used on-site to meet NEMA emission standards as required under NEMA air quality regulations.</li> <li>• Reduce unnecessary speeding or idling of construction vehicles</li> <li>• Use of non-lead paints during construction.</li> <li>• Adherence to proper uses of PPE by the workers, especially those working on activities requiring mixing of cement.</li> <li>▪ 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.</li> </ul>
7.	Solid Waste generation	<ul style="list-style-type: none"> <li>• Provision of mobile sanitation facilities for adequate human waste management<sup>3</sup> during the construction phase for workers and persons on site.</li> <li>• 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 feasible, use of waste materials on-site for other purposes where appropriate, or selling to recycling merchants.</li> <li>• Designate proper waste transfer stations onsite with controlled access.</li> <li>• Seek appropriate approvals from NEMA and County Government on management and Disposal of the waste<sup>4</sup>. (<i>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 vehicles to ferry waste from site</i>)</li> <li>• Formulate a site-specific waste management plan informed by waste characterization<sup>5</sup>.</li> <li>▪ Observing waste management standards proposed under NEMA waste management regulations 2006. (<i>with a particular focus on</i></li> </ul>

<sup>2</sup> The measure should be according to the law (Occupation safety and health Act 2007, National Construction Act

<sup>3</sup> According to the Public Health Act Cap 242, 2012 and Occupation safety and Health Act 2007 requirements

<sup>4</sup> 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).

<sup>5</sup> Waste characterization should consider waste from construction site and the contractors' camp if any.



NO.	ASPECT	MITIGATION MEASURES
<i>waste separation and management before disposal)</i>		
8.	Increased Water consumption for construction	<ul style="list-style-type: none"> <li>• Sensitization and awareness creation among construction workers on significance of water conservation measures.</li> <li>• Curing the concrete structures during evening and early morning to reduce evaporation.</li> <li>• Covering the concrete structures to be cured with sand or any water retaining material to shield from direct sunlight</li> <li>• Regular maintenance and prompt response to leakage in the water system during construction phase. <ul style="list-style-type: none"> <li>▪ Use of alternative water sources if available, particularly rain water if any during construction phase</li> </ul> </li> </ul>
9.	Risk of Spread of HIV/AIDS	<ul style="list-style-type: none"> <li>• Promote HIV/AIDS Prevention messaging</li> <li>• Access to safe sex (condoms-Male and female)</li> <li>• Install HIV testing services at the construction site or an MoU with an existing government health facility in the area.</li> <li>• Support infected workers with ARVs <ul style="list-style-type: none"> <li>▪ Peer counseling services at the site</li> </ul> </li> </ul>
10.	Grievances	<ul style="list-style-type: none"> <li>• Establish grievance redress committees at the site</li> <li>• Ensure contractor staff grievance structures exist <ul style="list-style-type: none"> <li>▪ Sensitization and awareness creation among workers and the public on grievance redress mechanisms in place</li> </ul> </li> </ul>
11.	Effects of Immigrant workers	<ul style="list-style-type: none"> <li>▪ Contractor should use the local workforce as much as possible (preference to local community members on skills locally available).</li> <li>▪ Effective community engagement and strong grievance redress mechanisms on matters related to labour</li> <li>▪ All workers to sign an employment contract including a Code of Conduct governing appropriate behaviour</li> <li>▪ The workforce should be sensitized to local social and cultural practices and be educated on the expected behaviour and conduct</li> <li>▪ Contractor should prepare and enforce a No Sexual Harassment and Non-Discrimination Policy</li> <li>▪ Contractor should prepare and implement a gender action plan</li> <li>▪ 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</li> </ul>
12.	Child Labour and Protection	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ Ensure that any child sexual relations offenses among contractors'</li> </ul>

NO.	ASPECT	MITIGATION MEASURES
		workers are promptly reported to the police.
13.	Gender Equity, Sexual Harassment and abuse amongst workers in the workplace	<ul style="list-style-type: none"> <li>▪ The contractor should prepare and enforce a No Sexual Harassment and Non-Discrimination Policy</li> <li>▪ The contractor will strive to ensure equitable distribution of employment opportunities between men and women.</li> <li>▪ Provision of gender disaggregated bathing, changing, sanitation facilities</li> <li>▪ Whenever harassment are recorded on site, the contractor should ensure prompt and effective remedial action</li> <li>▪ The employees should be trained and sensitized on appropriate behavior</li> <li>▪ All workers signing a code of conduct</li> <li>▪ Sensitization and awareness creation</li> </ul>
14.	Gender-based violence at community level	<ul style="list-style-type: none"> <li>▪ The contractor will implement provisions that ensure that gender-based violence at the community level is not triggered by the Project, including:</li> <li>▪ Effective and on-going community engagement and consultation, particularly with women and girls;</li> <li>▪ Review of specific project components that are known to heighten GBV risk at the community level,</li> <li>▪ Specific plan for mitigating these known risks, e.g. sensitization around gender-equitable approaches to employment, representation, management, school pupils etc</li> <li>▪ 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.</li> </ul>
15.	Sexual exploitation and abuse (SEA)	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ The SEA action plan will include how the project will ensure necessary steps are in place for:</li> <li>▪ 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;</li> <li>▪ 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;</li> <li>▪ 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-level IEC materials; regular community outreach to women and girls about social risks and their PSEA-related rights;</li> </ul>

NO.	ASPECT	MITIGATION MEASURES
		<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>
16.	Spread of COVID-19 amongst community members during consultation processes	<ul style="list-style-type: none"> <li>• 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;</li> <li>• 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);</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• In situations where online interaction is challenging, disseminate information through digital platform (where available) like Facebook and Whats App &amp; Chat groups. <ul style="list-style-type: none"> <li>▪ Ensure online registration of participants, distribution of consultation materials and share feedback electronically with participants.</li> </ul> </li> </ul>
17.	Spread of COVID-19. During construction at work sites	<ul style="list-style-type: none"> <li>• 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;</li> <li>• Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel including workers and visitors;</li> <li>• 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;</li> <li>• 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; <ul style="list-style-type: none"> <li>▪ Ensure routine sanitization of shared social facilities and other</li> </ul> </li> </ul>

NO.	ASPECT	MITIGATION MEASURES
		communal places routinely including wiping of workstations, door knobs, hand rails etc.;

### Environmental and Social Management Plan (ESMP) during Operation

NO.	ASPECT	MITIGATION MEASURES
1.	Occupational Health and Safety ( <i>accidents and Injuries</i> )	<ul style="list-style-type: none"> <li>• 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</li> <li>• Provide personal protective equipment to operation and maintenance workers.</li> <li>• 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.</li> <li>• Cordoning off working sites to protect the public or unauthorized persons during repair and maintenance of the different utility systems on site</li> <li>• Creation of awareness and training of workers on site on safety and first aid skills.</li> <li>• Hiring employees with proper qualifications for specialized and risky tasks during operation and maintenance of the various utility systems.</li> <li>• Adherence to Covid-19 rules as provided by the Ministry of Health and the Bank while conducting daily duties.</li> <li>• Providing requisite PPE and training of workers on Covid-19 rules and requirements.</li> </ul>
2.	Public health and safety ( <i>accidents and Injuries</i> )	<ul style="list-style-type: none"> <li>• using signage during cleaning, maintenance, or repair to warn the public</li> <li>• Easily accessible fire risk information to the public visiting the premise</li> </ul>
3.	Solid Waste generation	<ul style="list-style-type: none"> <li>• 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.</li> </ul>

		<ul style="list-style-type: none"> <li>• Provide for a waste transfer station at the premise for temporal holding of waste before final disposal.</li> <li>• Sensitization and awareness creation among the office building users on the significance of waste recycling.</li> <li>• To engage the county government environment and natural resources department mandated with waste management to collect and properly dispose of the waste.</li> </ul>
4.	Waste water generation	<ul style="list-style-type: none"> <li>• Regular sensitization and awareness to building users as well as discouragement on releasing detergents or other chemical solutions in black water system.</li> <li>• Regular cleaning of the wastewater drainage system</li> <li>• Regular and proper maintenance of the drainage system</li> <li>• Prompt response to any reported blockage and leakages</li> <li>• Sensitization and awareness of building users from discharging or emptying any chemical solutions or oils to the sewer system.</li> <li>• Treating the waste water through a biodigester and using the water for landscaping.</li> </ul>
5.	Fire Hazards	<ul style="list-style-type: none"> <li>• Provide recessed swinging type hose reel complete with 30 meters of 20mm internal diameter rubber fire hose with nylon spray/jet shut off nozzle</li> <li>• Provision of a Fire assembly point in the design</li> <li>• Installation of fire extinguishers in the building</li> <li>• Provide signages of fire hose Reel, fire exits and fire instructions.</li> <li>• Provide for fire risk and appropriate response equipment as well as signage with short and clear information.</li> <li>• Train selected staff as fire marshals who can take lead in case of fire emergency in the building</li> <li>• Regular fire drills for the building users</li> <li>• Regular awareness and sensitization on fire safety measures and response to the users of the building.</li> <li>• Clear fire incidents reporting procedures and response. Ensure regular provision of operational emergency reporting contacts.</li> <li>• Regular servicing and maintenance of the fire extinguishers.</li> <li>• Ensuring availability of adequate water resources at the premise at all times for the hydrants as per the OSHA requirements.</li> </ul>
6.	Increased Water consumption	<ul style="list-style-type: none"> <li>• Sensitization and awareness creation among users of the building on significance of water conservation measures.</li> <li>• Use of water -efficient appliances (delay taps)</li> <li>• Regular maintenance and prompt response to leakage in the water system.</li> <li>• Use of alternative water sources eg rain harvesting</li> </ul>

		<ul style="list-style-type: none"> <li>• Prompting reporting of leakages through sensitization of the public members</li> </ul>
7.	Increased Energy consumption	<ul style="list-style-type: none"> <li>• Sensitization and awareness creation among office users on the significance of energy conservation measures</li> <li>• Sensitization and awareness creation among the maintenance team to continue observing the use of energy-saving electrical appliances on the building.</li> <li>• Proper and regular maintenance of the green energy appliances and equipment provided for in the design of the building.</li> </ul>
8.	Spread of COVID-19. During operation at work sites	<ul style="list-style-type: none"> <li>• 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;</li> <li>• Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all office users including visitors;</li> <li>• 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;</li> <li>• Ensure routine sanitization of shared social facilities and other communal places routinely including wiping of workstations, door knobs, hand rails etc.;</li> </ul>

### Environmental and Social Management Plan (ESMP) during Decommissioning.

NO.	ASPECT	MITIGATION MEASURES
1.	Occupational Health and Safety ( <i>accidents and Injuries</i> )	<ul style="list-style-type: none"> <li>• Preparation of project decommissioning plan.</li> <li>• Ensure the safety of the decommissioning workers by putting first aid area and injury reporting mechanism</li> <li>• The contractor should consider having a WIBA insurance policy to compensate workers in an event of an accident on site.</li> <li>• Provide personal protective equipment to workers.</li> <li>• Recording all injuries that occur on site in the incident register, corrective actions for their prevention.</li> <li>• Cordoning off demolition sites to protect the public or unauthorized persons</li> <li>• use of signs and warnings on sites with high risks</li> <li>• Creation of awareness and training of workers on-site on safety and first aid skills.</li> <li>• Hiring employees with proper qualifications for specialized and risky tasks.</li> </ul>

		<ul style="list-style-type: none"> <li>• Ensure compliance to Occupational Safety and Health Act Cap. 514 and it's Subsidiary Legislations.</li> </ul>
2.	Leakages and spills	<ul style="list-style-type: none"> <li>• In the event of hazardous waste leakage or spills, engage authorized waste handlers to dispose of contaminated soils.</li> <li>• Disposing of contaminated soils in cutting pit if volumes are low.</li> <li>• Use of NEMA licensed waste handlers to dispose of in licensed disposal sites.</li> <li>• Development of site-specific incident management or response plan.</li> <li>• Use of an authorized garage or fuel station in the project area by the contractor or specific concrete and oil traps should be constructed at the contractor's yard.</li> </ul>
3.	Excessive Noise	<ul style="list-style-type: none"> <li>• Adequate use of PPE by the workers e.g. earplugs</li> <li>• Working on and restricting noisy activities during the day</li> <li>• Reducing the duration of exposure of workers to high occupational noise levels during demolition.</li> <li>• Acquisition of permits/Licenses for any activity with high noise levels eg drilling of walls or slabs for demolition.</li> <li>• Using models of machines and equipment with low noise levels.</li> <li>• workers using drilling or handheld pneumatic equipment to be provided with specialized anti-vibrating gloves,</li> <li>• Switching off vehicles and machines when not in use,</li> <li>• Avoiding unnecessary hooting,</li> <li>• Warnings to be issued to the locals in case of any unusual noise levels,</li> <li>• Ensure that NEMA noise and Vibration standards are observed in all project activities.</li> </ul>
4.	Air pollution	<ul style="list-style-type: none"> <li>• Workers to use masks when working in dusty conditions during the decommissioning process.</li> <li>• Use all means possible to suppress dust if considered to be a menace during demolishing of obsolete walls or structures on-site</li> </ul>
5.	Solid Waste generation	<ul style="list-style-type: none"> <li>• Proper disposal of any hazards waste from the decommissioned site.</li> <li>• Preparation of waste management plan to guide waste management and disposal activities of all debris from demolition activities.</li> <li>• Disposal of debris to NEMA authorized dumping sites</li> <li>• Use of certified vehicles or NEMA licensed waste disposal firms for waste management and disposal</li> </ul>
6.	Spread of COVID-19. During construction at work sites	<ul style="list-style-type: none"> <li>• 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;</li> <li>• Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel</li> </ul>

- 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 of Blue Economy and Fisheries (SDBE&F) ) through NPCU, the Joint Project Supervision Committee (JPSC), Kwale County government, sub-project supervising consultant and the contractor who is expected to have an environment, health and safety officer to implement and report on safeguard requirements. The contractor's Environment, Health and Safety Officer through the guidance of the supervising consultant will prepare C-ESMP that shall guide the implementation of safeguards requirements. Reporting on implementation activities of the proposed construction of Kwale fisheries headquarter office shall be done at several levels. The sub-project supervising consultant in consultation with the Joint Project Supervision Committee (JPSC) shall be in charge of the daily reporting on site on behalf of the client (SDBE&F). The supervising consultant shall in consultation with the contractor's team prepare all the required reports including site meeting minutes and submit to the client. In addition, the sub-project supervising consultant 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 guidance. The supervising consultant safeguards officer shall on a daily basis during project implementation supervise the implementation of the C-ESMP, ESMP and ESMoP on site. 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 2.9M, 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. Specific mitigation measures have been proposed to control for the spread of Corona Virus Disease (COVID-19) pandemic during the construction period. Moreover, consultations required as part of the mitigation measures, such as training on environment and social issues, also pose a risk of infection to communities. For this reason, the risk of contracting the virus during consultations will be avoided, minimized, and mitigated with specific measures to ensure national requirements on social distancing and recommendations on how to minimize contact are adhered to.



## **Conclusion and Mandatory Requirements**

### **Conclusion**

The devolved fisheries sector in Kwale County play a critical role in service delivery to fishers at the community level yet the fisheries infrastructure in the county remains under developed. Efforts toward strengthening county institutional capacity to better safeguard marine fisheries and improving fisheries management and governance is therefore critical. The fisheries department in Kwale County does not have any fisheries office space of its own and rely on borrowed space from other departments. Although the County Government has a new headquarters office block, the Ministry of Agriculture, Livestock, Fisheries and cooperative were not lucky to be allotted space on the building. The different county fisheries departmental staffs are currently hosted in different office locations distance from each other around Kwale County. Some of the departmental staffs are currently squeezed under the veterinary offices with no permanent office of their own. However, with the implementation of the project, it is anticipated to create a one-stop shop for the county fisheries' department clients. The construction of the office is therefore anticipated to improve efficiency and productivity among Kwale County CPIU team members by bringing them under one roof, which currently is operating from shared different departmental office spaces. The proposed office shall improve project service delivery and strengthen the fisheries management institutions namely the county director of fisheries staff and KeFS. The proposed sub-project falls under the World Bank's support to the government of Kenya through investment lending to transform and strengthen sectors related to the blue economy under the KEMSFED project, to improve coastal communities' livelihoods. 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 urbanization. As mandated by the laws guiding and governing the project activities, several institutions will have different roles on the sub-project at varied phases of the project.

### **Mandatory Requirements**

The development of the proposed Kwale 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 and social assessment team proposes the implementations of the sub-project with the following recommendations which need are a requirement for the implementation of the sub-project;

- The contract shall be between the National Project Coordination Unit of the State Department of Fisheries, Aquaculture and Blue Economy (SDFA&BE) and the contractors
- The sub-contracts of the contractor will be accepted and cleared by the JPSC in charge of the supervision of the works. The JPSC will be responsible that the 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 Joint Project Supervision Committee to ensure full implementation by contractors and subcontractors of the ESMPs 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 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 Manager in charge of Environmental and Health and Safety, Labor and Social safeguards officer to prepare an Operation ESMP (ESMoP) to guide the operation and maintenance of the building by the Kwale County Government to do so during operation and decommissioning stages of the project as required.
- The Joint Project Supervision Committee 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 the operation of the building.
- The project contractor and Joint Project Supervision Committee shall implement a project Grievance Mechanism (GRM) 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 part 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 SDFA&BE, requested the World Bank to support the development of the sector through the Kenya Marine Fisheries and Socio-Economic Development (KEMFSED) project. The project shall enhance the 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). Despite Marine resources having a high potential for socio-economic development in Kwale County, the management of the fisheries sector remains inadequately developed with the main concern being inadequate development of fisheries infrastructure.

The fisheries department in Kwale County does not have any fisheries office space of its own and rely on borrowed space from other departments. Although the County Government has a new headquarters office block, the Ministry of Agriculture, Livestock Fisheries and cooperative were not lucky to be allotted space on the building. The different county fisheries departmental staffs are currently hosted in different office locations distance from each other around Kwale County. Some of the departmental staffs are currently squeezed under the veterinary offices with no permanent office of their own. However, with the implementation of the project, it is anticipated to create a resource for the county fisheries' department clients. The construction of the office is therefore anticipated to improve efficiency and productivity among Kwale County CPIU team members by bringing them under one roof, which currently is operating from shared different departmental office spaces. The proposed office shall improve project service delivery and strengthen the fisheries management institutions namely the county director of fisheries staff and KeFS.

The proposed construction works could have social and environmental implications if not well anticipated, enhanced or mitigated, 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 Kwale County Fisheries Office in Msambweni, Vingujini trading centre. 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 Kwale 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, as required by 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 the 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 to 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 collecting environmental and social baseline survey data, were desktop literature review and field surveys for environmental and social.

#### **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 aspects 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 occasion in March and April 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 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 CPC, NPCU environmental safeguards, CPIU safeguards, CPIU architecture and 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, Kenya Wildlife Service, Department of Environment and Natural Resources, county ecosystem conservators, 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 11<sup>th</sup> to 13<sup>th</sup> of April 2022. Public consultation meeting was organized on 11<sup>th</sup> of May 2022 to seek opinion of the public on the possible impacts of the project. 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 Kwale County fisheries office in Msambweni was prepared by a team of county government officers. Environmental 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 0-1.

**Table 0-1: ESIA SPR Preparation Team**

NO	NAME OF EXPERT	POSITION
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1.	Samuel Bandari	County Project Coordinator
2.	Michael K. Kuria	County Environment and Social Safeguards Officer
3.	Hassan Mwandaro	Civil/structural engineer
4.	Raphael Tsimba	Architecture
5.	Derick Wambua	Quantity Surveyor
6.	Godfrey Wabomba	Environmental Safeguards Specialist NPCU -Reviewer
7.	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 due diligence for the construction works of the proposed Kwale County fisheries 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 of Fisheries, Aquaculture and the Blue economy (SDFA&BE), Kwale County Government, Joint Project Supervising Committee (JPSC) 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 activities sub-projects.

### **1.6.2. Structure of the Report**

The report has been structured in 10 chapters to capture requirements under 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 Kwale County fisheries office in Msambweni.

### 2.2. Project Location

The proposed Kwale County fisheries office is located on a piece of land measuring about 0.3 acres (0.12 hectares) owned by livestock department, the land ownership documents are as attached in Annex II. The proposed project is located in Kwale County, Msambweni Sub-county, Ramisi ward, Msambweni location and in Vingujini sub-location. The office is located at Vingujini trading centre and about 400m from Vingujini as indicated in Figure 2-1. The coordinates of the project site are Latitude 4°27'37.74"S and Longitude 39° 29'1.20"E.



Figure 2-1: Google Image Showing the Proposed Sub-project Location Site

### 2.3. Sub-Project Development Objectives

The support for County infrastructure development under KEMFSED is aimed at improving fisheries management in Kwale County by improving fisheries infrastructure in the Country in general. The construction of the proposed Kwale County Fisheries office is therefore anticipated to contribute towards enhancing fisheries management in Kwale County.

### 2.4. 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 is very poor in some counties. Strengthening institutional capacity to better safeguard marine fisheries and improving fisheries

management and governance is therefore critical. Fisheries sector remains under developed in Kwale County in terms of infrastructure. The proposed construction of Kwale County Fisheries office in Msambweni is part of the contributions towards enhancing county fisheries infrastructure development under KEMFSED project. Aimed at improving fisheries management, which is significant in achieving coordinated and improved management of priority fisheries and mariculture in the county.

The fisheries department in Kwale County does not have any fisheries office space of its own and rely on borrowed space from other departments. Although the County Government has a new headquarters office block, the Ministry of Agriculture, Livestock Fisheries and cooperative were not lucky to be allotted space on the building. The different county fisheries departmental staffs are currently hosted in different office locations distance from each other around Kwale County. Some of the departmental staffs are currently squeezed under the veterinary offices with no permanent office of their own. However, with the implementation of the project, it is anticipated to create a resource for the county fisheries’ department clients. The construction of the new office shall be a contributing factor towards harnessing the effort of realizing the objective of the blue economy contribution to local and national economic development, through improved fisheries management.

The proposed development will be handy in addressing the current challenges by improving the existing situation through centralizing the administration of key county officers in the blue economy, minimize operating costs for the clients and the department of fisheries, reduce time wastage shuttling between office located apart, 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.

## **2.5. Proposed Project Design for the Facilities under Kwale Fisheries C.P.I.U Office**

### **2.5.1. Proposed Main office Building**

The main office building shall be a two-storey building with a height of 11.40 meters from the ground level. The built-up space of the main office building is proposed to be 1362m<sup>2</sup> with ground floor space taking up taking up (38%), first floor space taking up taking up (32%) and roof slab Space (30%) 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*

<b>SPACE</b>	<b>SUB-SPACES</b>
<b>Ground Floor</b>	Entry ramp, verandah, foyer, entrance lobby, 2 no. staircases, lift, reception and waiting area, director’s office with a washroom comprised of 1 no. shower, 1 no. toilet and 1 no. wash hand basin, secretary’s office, director’s office with a

	washroom comprised of 1 no. shower, 1 no. toilet and 1 no. wash hand basin, 3 no. general offices, data room, kitchen, gents' washroom with an airlock, 1 no PWD toilet, 2 no gents' toilet, 3 No. Urinals and 2 No. wash hand basins, ladies' washroom with an airlock, 1 no PWD toilet, 2 no ladies' toilets and a 2no. wash hand basins, lactating room, exit area and exit ramp
<b>First Floor</b>	Void, verandah, 2 no. staircase, lift, director's office with a washroom comprised of 1 no. shower, 1 no. toilet and 1 no. wash hand basin, secretary's office, director's office with a washroom comprised of 1 no. shower, 1 no. toilet and 1 no. wash hand basin, 2 no. general offices, library room, boardroom, data room, kitchen, gents' washroom with an airlock, 1 no PWD toilet, 2 no gents' toilet, 3 No. Urinals and 2 No. wash hand basins, ladies' washroom with an airlock, 1 no PWD toilet, 2 no ladies' toilets and a 2no. wash hand basins, lactating room.
<b>Roof Slab</b>	<ul style="list-style-type: none"> <li>Roof slab terrace, sky light, water tank area, solar power back up room and 600mm high parapet wall</li> </ul>

### 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, granito 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 plastered and 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.

#### 2.5.2. Proposed Gate House Building and gate entrance

The Gate House building shall be a single-storey with a height of 3.6 meters from the ground level and a gate entrance with a vehicular gate and pedestrian gate. The area in space of the gate house building is proposed to be 18.49m<sup>2</sup> with internal space taking up taking up (86%) and external Spaces (14%) of the total space area. The proposed space accommodation of the building and gate entrance 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 new office block building shall be utilized and the type of finishing envisioned for each space as captured from the design report.

*Table 2-2: Proposed Space Accommodation for the gate house building*

SPACE	SUB-SPACES
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<b>Ground Floor</b>	External paving, Guardhouse, gents' washroom with an airlock, 1 no gents' toilet, and 1 no ladies' toilet and gate entrance with a vehicular gate and pedestrian gate
<b>Roof</b>	Corrugated aluminum roof covering on cold-rolled light gauge steel trusses, 600mm high parapet wall and reinforced concrete gutter.

### Proposed Finishes

The finishes are proposed to entail paving slabs for paving finishes while the external wall to have rendered finish, natural stone cladding, marine grade bituminous and first quality exterior silicone paints 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 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 plastered and painted with emulsion paint. The reinforced concrete gutter will be finished with bituminous membrane on water proofing floor screed and a precast concrete coping of parapet wall.

#### 2.5.3. Proposed external works

The landscaping work which will including planting 416SM of grass, 52SM of ground covers, 173m of shrubs, 15 No. Assorted species of palm trees, 10 No. assorted species of indigenous trees and 5No. 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 620sm, walk way of 170sm, storm water drains of 186m and 50m foul drain.

#### 2.5.4. Proposed Boundary wall

The propose boundary wall will be 192m long with a height of 2.5 meters from the ground level and a gate entrance with a vehicular gate and pedestrian gate. The boundary wall be a 230mm thick natural stone walling with reinforced concrete columns spaced at a distance of 3.5m center to center finished with precast concrete copings. The proposed design of the boundary wall is as captured in the design drawings attached in Annex I.

Table 2-1 below is a summary of proposed boundary wall design and the type of finishing envisioned for each space as captured from the design report.

*Table 2-3: Proposed Elements for the boundary Wall*

ELEMENTS	SUB-ELEMENTS
<b>Boundary wall</b>	-230mm thick natural stone walling -Reinforced concrete columns -Reinforced concrete beams -Mild steel grill

	-Precast concrete copings
<b>Roof floor</b>	Roof slab terrace

### **Proposed Finishes**

The finishes are proposed to entail external wall to have render and plaster finish and exterior silicone paint on concrete and block work. The mild steel gates and grilles are proposed to have corrosion resistant marine metal paint.

#### **2.5.5. Electrical Design for the Proposed Kwale Fisheries C.P.I.U Office**

Electrical Supply and Distribution System is essential as a vital means for the operation of the Kwale Fisheries C.P.I.U officer 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.
- Standby 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

##### **2.5.5.1. Electrical MV Intake, Generator Plant Power House 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 a total of 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, 100% generator backup with 9hrs fuel supply capacity has been provided for. There will be 1 no. of 66KVA for the office prime rating, and diesel engine generators. The generators will be connected in parallel using Generator

Paralleling Switchgear to allow alternate and sharing operations. There will also be a 55kw Grid-Tied solar system serving the office with 96 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 (Im) 8.8A Rated voltage (Vm) 17,5v, Cell Efficiency - 15.0% and 25KWh Lithium Battery Pack Smart String 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%.

#### **2.5.5.2. 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.

#### **2.5.5.3. 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

#### **2.5.5.4. 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 50°C. 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.

#### **2.5.5.5. 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.

#### **2.5.5.6. 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

#### **2.5.5.7. 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.

#### **2.5.5.8. 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.

#### **2.5.5.9. 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.

#### **2.5.5.10. 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 (Kwale 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 landing sites will have a Fire Alarm Repeater Panel (FARP).

### **2.5.6. Mechanical Design for the Proposed Kwale Fisheries C.P.I.U Office**

#### **2.5.6.1. Domestic Water Supply**

Water supply will be by gravity from the 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.

#### **2.5.6.2. 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 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.

**2.5.6.3. 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 outside the office building 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.

#### **2.5.6.4. 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 7 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. Gully traps:** There shall be 7 No. masonry gully trap size 200x200mm, approx. depth 300mm, complete with seal and concrete cover, including all disposal.
- v. Biodigester and SoakPit-** 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.

**vi. 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 with pedestal size 510x420mm 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 wash hand basin to be as approved. The basin to be supplied and installed complete with 15mm diameter heavy duty Brass Pillar Tap as approved – **12 NO.**
- Semi recessed toilet roll holder in Vitreous China of size 165 x 165mm in approved color as approved. – **14 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. – **16 NO.**
- 15mm diameter heavy duty chrome plated bib tap to an 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. – **44 NO.**
- Robe hook in vitreous china mounted to concealed screw to wall wedges as approved. – **1 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. – **1NO.**
- 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, 4 No. 600mm grab rails with covered wall plates. The Disabled set shall be as approved. – **4 SETS**

- Arabic Shattaf Bidet spray c/w tube and head and fixing to wall. – **18 NO.**
- Automatic Hand Drier in approved cooler 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 Litres/Min and to be of size 270x264x143mm deep. It shall have a noise level of below 72.5dBA at 1.5m. – **12 NO.**
- Urinal system comprising of approved 1 No. 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. – **6 SET.**
- Semi recessed built in soap dish in vitreous china of size 150x150mm in approved color as approved. – **16 NO.**
- Chrome plated 20mm diameter x 800mm long approved towel rail and brackets as one piece, plugged and screwed into the wall. – **2 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 1 No. 15mm diameter heavy duty wall mount stainless steel bib tap. – **3 NO.**

#### **2.5.6.5. Waste water treatment plant**

Bio Digester 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

#### 2.5.6.6. Elevator

1050kg/13 passenger capacity elevator to serve 2 floors of 1.5 m/s speed for operation on 415 V, 3 Phase, 50 Hz AC supply, having AC variable voltage and variable frequency type traction control, electro-magnetic brake system, simple operation, operating panel with luminous buttons, over load warning indicator, battery operated alarm bell, CFL type emergency light, infrared rays sensing door protection for suitable height, reverse phase relay on controller, fireman's switch at ground floor, digital car position indicator in car and at all positions indicator in car at all floors with UP/DOWN directions, light fixtures, ventilation fan etc. complete with all accessories including automatic rescue device and having following other features

Travel Height: 3.6m

No. of Stops: 1

#### 2.6. 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 Kwale CPIU Office facilities and has been provided by the state department of fisheries Kwale County government. The documentations area as attached in annexes II.
- ii. **Water:** Water supply from KAWASCO will be used for construction of the proposed structures and shall be used during operation. The design has also catered for rain water harvesting and grey water treatment by biodigester and Soak Pit which is proposed for landscaping.
- 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 sub-project activities.
- iv. **Construction Materials:** Cement, Sand, Ballast, murrum, reinforcement bars, Coral Blocks, Aluminum Windows and Doors, Steel Doors, Emulsion Paint, Textured Paint, Granitto Floor Tiles, wood, Acoustic Ceiling, 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 murrum 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 premises will include installation of electrical gadgets and appliances including conduit cables, solar panels, generator, 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. 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 sub-project site and associated facilities. In addition, pipe work will be done to connect grey water from the office building to the bio-digester system and to drain storm water from the rooftop into rain water harvesting facilities. Plumbing activities will include metal and plastic cutting, the use of adhesive, metal grinding, and wall drilling, among others.

## 2.7. Project Activities, Material and Waste during Construction

Table 2-4 highlights anticipated project activities, materials and source as well as anticipate waste that shall be generated during the implementation of project activities.

Table 2-4: Proposed Materials and Waste

Element	Proposed Activities	Materials	Equipment's	Expected waste	Sources of materials
<b>Foundation</b>	<ul style="list-style-type: none"> <li>Excavation of trenches and column bases.</li> <li>Foundation walling</li> <li>Hardcore filling</li> <li>Murram blinding</li> <li>Antitermite treatment</li> <li>Damp proofing course</li> <li>Concrete works (Blinding, footing, column bases and columns, ground beam, floor slab)</li> </ul>	<ul style="list-style-type: none"> <li>Coral stone walling</li> <li>Reinforcement bars</li> <li>BRC</li> <li>Hardcore</li> <li>Antitermite</li> <li>Murram</li> <li>Hardcore</li> <li>DPC and DPM</li> <li>Cement</li> <li>Ballast</li> <li>Formwork</li> <li>water</li> </ul>	<ul style="list-style-type: none"> <li>Excavators</li> <li>Tippers</li> <li>Jembes</li> <li>Mattock</li> <li>Fork jembe</li> <li>Spades</li> <li>Concrete mixer</li> <li>Poker vibrator</li> <li>PPEs</li> <li>Drum vibrator</li> <li>Pneumatic hammer (25kg)</li> </ul>	Debris, Dust, Soil	Quarry, Hardware Manufactures and general suppliers.
<b>Reinforced Superstructure (Beams, Columns and Floor Slabs etc.)</b>	<ul style="list-style-type: none"> <li>Formwork placing</li> <li>Steel fixing</li> <li>Concreting</li> <li>Curing of concrete</li> </ul>	<ul style="list-style-type: none"> <li>Cement</li> <li>Ballast</li> <li>Formwork</li> <li>Reinforcement bars</li> <li>DPM</li> </ul>	<ul style="list-style-type: none"> <li>Spades</li> <li>Concrete mixer</li> <li>Concrete pump</li> <li>Poker vibrator</li> <li>Wheelbarrows</li> <li>PPEs</li> <li>Scaffolding</li> <li>Hoists</li> <li>60m<sup>3</sup>/hr Concrete Pump</li> </ul>	Dust, Concrete wastes and steel debris.	Quarry, Hardware Manufactures and general suppliers.
<b>Walling and</b>	<ul style="list-style-type: none"> <li>Coral Block Walling</li> </ul>	<ul style="list-style-type: none"> <li>Coral stones</li> </ul>	<ul style="list-style-type: none"> <li>Levers.</li> </ul>	Dust, Concrete	Quarry, Hardwares,

<b>partitions</b>		<ul style="list-style-type: none"> <li>• Sand</li> <li>• Cement</li> <li>• Hoop Iron</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• Pickups 3 tons</li> <li>• Tippers 10 tons</li> <li>• Water pump 1000lts/hr</li> </ul>	wastes and steel debris.	Manufactures and Suppliers
<b>Windows</b>	<ul style="list-style-type: none"> <li>• Windows fitting</li> <li>• Burglar proofing</li> <li>• Painting</li> <li>• Window Blinds</li> </ul>	<ul style="list-style-type: none"> <li>• Aluminum windows</li> <li>• 6mm Glazing</li> <li>• Steel Burglarproof</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• Paint brush</li> <li>• Portable Electrical welding</li> </ul>	Dust, Metal debris, Paint.	Hardware Manufactures and general suppliers.
<b>Doors</b>	<ul style="list-style-type: none"> <li>• Door fittings</li> <li>• Painting</li> <li>• Ironmongery</li> </ul>	<ul style="list-style-type: none"> <li>• Aluminum doors</li> <li>• Steel casement and grills doors</li> <li>• Ironmongery</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• Paint brush</li> <li>• Portable Electrical welding</li> </ul>	Dust, Metal debris, Paint.	Hardware Manufactures and general suppliers.
<b>Finishes</b>	<ul style="list-style-type: none"> <li>• Ceiling finishes</li> </ul>	<ul style="list-style-type: none"> <li>• Sand</li> <li>• Cement</li> <li>• Lime</li> <li>• Paint</li> <li>• Stainless Steel Plates</li> <li>• Polystyrene</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• Paint brush</li> <li>• Trowel</li> <li>• Spades</li> <li>• Scaffold</li> <li>• Portable Electrical welding</li> </ul>	Dust, Metal, Plastic debris and Paint.	Hardware Manufactures and general suppliers.
	<ul style="list-style-type: none"> <li>• Wall finishes</li> </ul>	<ul style="list-style-type: none"> <li>• Sand</li> <li>• Cement</li> <li>• Lime</li> <li>• White glazed Ceramic Wall tiles</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• Paint brush</li> <li>• Trowel</li> <li>• Scaffold</li> <li>• Tile cutter</li> </ul>	Dust, Metal, plastic debris, Paint.	Hardware Manufactures and general suppliers.
	<ul style="list-style-type: none"> <li>• Floor finishes</li> </ul>	<ul style="list-style-type: none"> <li>• Sand</li> <li>• Cement</li> <li>• Ceramic tiles</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• Trowel</li> <li>• Scaffold</li> <li>• Tile cutter</li> </ul>	Dust, Metal, Plastic debris, Paint.	Hardware Manufactures and general suppliers.
<b>Roofing</b>	<ul style="list-style-type: none"> <li>• Slab casting</li> <li>• Waterproofing</li> </ul>	<ul style="list-style-type: none"> <li>• Highyield steel bars to Bs 4461</li> </ul>	<ul style="list-style-type: none"> <li>• Human labour,</li> <li>• Concrete</li> </ul>	Dust, metal debris	<ul style="list-style-type: none"> <li>• Quarry in the case of Sand and</li> </ul>

		<ul style="list-style-type: none"> <li>• Bituminous Primer and membrane as per 'sirrah P4'</li> </ul>	<ul style="list-style-type: none"> <li>• mixing machine,</li> <li>• Spades,</li> <li>• Poker</li> <li>• Vibrator</li> </ul>		<ul style="list-style-type: none"> <li>• Ballast,</li> <li>• Hardware in cases of steel and Cement</li> </ul>
<b>Mechanical Installations</b>	<ul style="list-style-type: none"> <li>• Sanitary Fittings Installations</li> <li>• Internal Plumbing works</li> <li>• Rainwater harvesting facilities</li> <li>• Drainage works</li> <li>• Firefighting</li> <li>• Air-conditioning</li> <li>• Installation of an elevator</li> </ul>	<ul style="list-style-type: none"> <li>• Sanitary Fittings (Water Closet, Wash Hand Basis, Kitchen Sinks, Mirrors, Urinals, Soap Dispensers etc.)</li> <li>• PPR and UPVC plumbing and drainage pipes and extra over.</li> <li>• Air-conditioning units</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• etc.</li> </ul>	Dust, Metal and Plastic debris, Soil debris.	Hardware Manufactures and general suppliers.
<b>Electrical Installations</b>	<ul style="list-style-type: none"> <li>• Lighting points, fitting and fixtures</li> <li>• Power points fittings and fixture</li> <li>• Power Supply and Distribution</li> <li>• Solar Installation</li> </ul>	<ul style="list-style-type: none"> <li>• UPVC conduits</li> <li>• Copper Cables</li> <li>• Lighting and Power Fittings and Fixtures (Sockets, Switches, LED lights)</li> <li>• Distribution Board</li> <li>• Power generator Solar panels &amp; Batteries.</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• Snake wire</li> <li>• etc.</li> </ul>	Dust, Metal and Plastic debris, Soil debris.	Hardware Manufactures and general suppliers.
<b>Electrical Installations</b>	<ul style="list-style-type: none"> <li>• Lighting points, fitting and fixtures</li> <li>• Power points fittings and fixture</li> <li>• Power Supply and Distribution</li> <li>• Solar Installation</li> </ul>	<ul style="list-style-type: none"> <li>• UPVC conduits</li> <li>• Copper Cables</li> <li>• Lighting and Power Fittings and Fixtures (Sockets, Switches, LED lights)</li> <li>• Distribution</li> </ul>	<ul style="list-style-type: none"> <li>• Drills</li> <li>• Grinder</li> <li>• Snake wire</li> <li>• etc.</li> </ul>	Dust, Metal and Plastic debris, Soil debris.	Hardware Manufactures and general suppliers.

		Board			
		• Solar panels & Batteries.			
<b>Parkin g</b>	<ul style="list-style-type: none"> <li>• Site clearance and excavation</li> <li>• Hardcore filling</li> <li>• Murram blinding</li> <li>• Cabro paving and sanding</li> <li>• Roofing</li> </ul>	<ul style="list-style-type: none"> <li>• Antitermite</li> <li>• Murram dust</li> <li>• Hardcore</li> <li>• Cabro Blocks</li> <li>• Kerbs</li> <li>• Cement</li> <li>• Sand</li> <li>• Roof structure</li> </ul>	<ul style="list-style-type: none"> <li>• Compactor</li> <li>• Drills</li> <li>• Grinder</li> <li>• etc</li> </ul>	<ul style="list-style-type: none"> <li>• Excavated materials,</li> <li>• Steel and Cabro Debris.</li> </ul>	Quarry, Hardware Manufactures and general suppliers.

## 2.8. 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, waste water 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 many other activities. The activities shall have different impacts during the operation of the building. The county government of Kwale through the Fisheries department will be in charge of maintenance and repair of the building throughout its lifespan unless there is change of use or user in the future.

## 2.9. Sub-Project Alternatives

### 2.9.1. 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 Kwale County fisheries office in Msambweni 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 lack of space for the fisheries department and continued use of borrowed space. 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, reduce time wastage shuttling between office located apart, 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.



### 2.9.2. Project Development Option

The proposed construction of Kwale Fisheries office in Msambweni 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. The office shall play a key role towards harnessing the effort of realizing the objective of the blue economy contribution to local and national economic development, through improved fisheries management. Implementation of the proposed subproject is anticipated to improve the working conditions of the fisheries officers and to enhance marine fisheries management and governance in the county, contribute towards the county objective of improving the extension services to fish farmers, and to consolidate all CPIU team members under one roof to improve staff productivity.

### 2.9.3. Alternative Site Selection Option

Relocating the proposed construction of fisheries office from the current proposed site 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 fisheries department development for the county. The physical plan for Msambweni area showed that zoning of the land has been done and the site is allotted for government offices. Considering the above concerns and assessment of the current proposed site, relocation of the project is not a viable option. 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. Most of the plots around the area are either public or private plots and the process of acquiring land could take time and has a cost.

### 2.9.4. 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. 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 treating 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.

### 2.10. Project cost

The estimated cost for constructing the proposed Kwale C.P.I.U office in Msambweni is about **KShs. 112,697,250**. This cost include preliminaries, office building works, guard house, electrical works, mechanical works, builder's work in connection to specialized works, external works, day works, environmental and social management and monitoring costs, taxes and a factor on inflation and contingencies for the proposed structures. The breakdown of the project cost is as shown in **Error! Reference source not found**. The proposed project shall be

implemented within a period of 12 month with an addition of 6 months for the defect liability period.

*Table 2-5: Project Costs and Budget*

ITEM	DESCRIPTION	AMOUNT
1.	Particular Preliminaries	1,300,000
2.	General Preliminaries	5,477,000
3.	Office Building Works	41,771,860
4.	Gate House Building Works	1,237,500
5.	Electrical Works	21,791,430
6.	Mechanical Works	10,163,240
7.	Perimeter Wall	7,334,150
8.	Civil Works	10,462,670
9.	Landscaping Works	593,150
10.	Environment and Social Management (ESMP)	2,900,000
11.	Day Works	666,250
12.	Contingency and provisional Sums	9,000,000
13.	<b>Grand Total</b>	<b>112,697,250</b>

### 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 of Kwale County fisheries office will need to comply with various policies and regulations currently existing to safeguard the environment and the local communities. Different stakeholders' input shall be required from different institutions, nationally and at county government level 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 National Construction Authority Act, 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 requirements under the 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	<p>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.</p> <p>The vision recognizes the significance</p>	<p>The construction of the proposed Kwale County fisheries office building shall enhance 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 Kwale County a</p>

		of public sector reform as a key 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	chance to access service delivery by ensuring efficiency, quality, speed, convenience, and dignity in service delivery with a global competitiveness
2.	Kwale County Integrated Development Plan 2018-2022	The CIDP recognizes the significance of fisheries to local community livelihood and the focus of the county is to develop marine fisheries, enhance support services and strengthening partnerships with strategic stakeholder	The county is committed to invest more resources in the following areas: Mariculture development (sea weed farming and culturing of milk fish), up scaling of capture fisheries through procurement of modern fishing vessel (provision of modern and right fishing gears to fisher folks with appropriate technology) for offshore fishing, enhance fishers livelihood through provision of value addition and post harvest handling equipment (eg cold storage facilities, cooler boxes, fish handling crates); construction of modern fish depot at all landing sites to ensure Fish and Fish products are handled in hygienic conditions. The proposed sub-project shall enhance the coordination and management of the proposed service delivery.
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, use of recycled construction materia and increased use of renewable energy. The plan has been used to guide the design

			by providing for green building concepts, efficient waste water and solid waste 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 sub-project has complied with the policy by integration of environmental sustainability principles during implementation, operation, and decommissions stages of the proposed Kwale County fisheries office building. The proposed sustainability concepts are as captured in the ESMP of this report and in the design.
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 have been proposed under this report to encourage all genders to contribute to the proposed sub-project activities as inculcated in the ESMP. The construction of Kwale County Fisheries Headquarter in Msambweni 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 workers 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	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 in

		proliferation of informal urban settlements, outdated legal framework, institutional framework and information management	Msambweni is owned by the county livestock department and an approved PDP is available under annex II.
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 productive engagement at local, county and national level.	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 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 Kwale County fisheries office, the ESIA team took cognizance of the legislations that will govern the proposed project's activities during implementation, operation and decommissioning phases of the project. 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	The construction, operation and decommissioning of Kwale County fisheries headquarter office building 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

		reasonable access to all places, public transport, and information.	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	<p>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 Kenya Fisheries Service.</p> <p>The act also highlights the functions of the two levels of governance, of significance to this project is the function of SDFA&amp;BE 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.</p>	KEMFSED project is as an effort of the National government to mobilize resources partly to develop county infrastructures and the county government is expected to manage the infrastructure as indicated in the institutional framework of the proposed sub-project. The development of the county fisheries office is anticipated to enhance the management and governance of fisheries resources.
<b>Building and Construction</b>			
3.	The National Construction Authority Act No. 41 Revised Edition 2012 [2011]	<p>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; Accredite and certify skilled construction workers and construction sites supervisors and development and publish a code of conduct for the construction industry.</p>	The Act shall be applied in the management of the construction site of the proposed sub-project by ensuring qualified and accredited site personnel, site safety and construction quality standards are adhered.
4.	The National Construction	The Regulations requires that any contractor or construction workers	The regulations requirements shall guide on the qualification

<p>Authority regulation 2014</p>	<p>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 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.</p>	<p>of contractors and construction workers that shall be allowed to work on site for the proposed Kwale fisheries office block. NCA shall issue approvals and construction license regarding site activities.</p>
<p>5. The Draft National Building Code 2020</p>	<p>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.</p>	<p>The building codes shall guide the contractor, project engineer, and Kwale County CPIU on the expectations of NCA on quality standards regarding construction, operation, and decommissioning activities of the proposed office construction sub-project.</p>
<p><b>Environment and Natural Resources Management</b></p>		
<p>6. Environmental Management and Coordination Act, EMCA CAP 387</p>	<p>It sets the legal and institutional framework for the management of environmental issues in the country.</p>	<p>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</p>



			guide the relationship between SDFA&BE, Kwale County 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 (Impact Assessment and Audit) Regulations, 2003	The Environmental Regulations (2003) are ingrained under section 147 of the EMCA (Cap 387). The regulations provide for 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	The Act guided the 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	The regulations 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 particularly while working on site.
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	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

		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 other sources shall be general construction activities and conversation on site.	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 sources.	The regulations shall come in hand to ensure that water supplied to the building meet domestic water supply standards. The regulations shall also ensure that waste water produced from the building is treated and recycled for use. 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, Kwale County CPIU or SDFA&BE on issues related to the office construction or operation activities, the Act will be triggered in resolving the issues for any aggrieved party.
<b>Devolved Governance</b>			
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 have been acquired from Kwale County Government. A master plan for future development of the proposed project plot shall be prepared under the project.
14.	The Physical and Land Use Planning Act, 2019	The Act provides for planning and controlling for 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 Kwale County 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 relevant County departments after meeting the requirements of the Act.
15.	Kwale County Public Participation Act, 2014.	An act of the Kwale 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 a continuous process and concerns incorporated in the designs of the sub-project and also during the operation phase.
<b>Labour Relations</b>			
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 safety 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	The Act shall be applied to protect workers against; discriminations,

		employees and protecting their welfare as well as that of the employer	sexual harassment, forced labour, protection of wages, employment relations, settlement of disputes and protection of rights and duties in employment. There shall be equal employment opportunities to all and workers through GRM will be able to freely expresses themselves over the working conditions and terms of engagement.
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 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.	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 workers to be allowed to form associations to air out their grievances. Some of the requirements have been captured in the ESMP and under annexes VI. 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 Kwale County fisheries office sub-project implementation and operation.
<b>Public Health</b>			
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 Kwale CPIU
21.	Public Health Act, 1986 (Cap 242	The Act addresses matters of sanitation, hygiene, pollution, and general environmental health and safety, which are directly related to cases of pollution and	The Act shall be applied to ensure that all sanitation systems for the proposed fisheries office operation

	Revised edition 2012)	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.	activities meet the requirements of the Act. Any food vendors at the site to the workers during construction will also be expected to meet the requirements of the act.
<b>Cross Cutting Issues</b>			
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 and under annex VI. 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 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.	The design of the proposed Kwale County office building is compliant to the requirements of the law by ensuring ease of accessibility and mobility within the building for such persons 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 of 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. As indicated in annexes III and VI.
25.	Sexual	This Act protects people and employees	Any form of GBV and sexual

<p>Offences Act, 2006</p>	<p>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.</p> <p>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</p>	<p>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</p>
<p>26. HIV and AIDS Prevention and Control Act, 2006</p>	<p>This is an Act of Parliament providing 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, support, and care of persons infected or at risk of HIV and AIDS infection, and for connected purposes.</p>	<p>Requirements of the Act will ensure that the contractor together with Kwale County public health department provide for VCT services for employees and locals where appropriate and promote 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 on HIV and AIDS related issues.</p>
<p>27. The Children Act, 2001</p>	<p>The 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:</p> <ul style="list-style-type: none"> <li>• Economic exploitation.</li> </ul> <p>Any work that interferes with his/ her education or is harmful to the child's health or physical, mental, spiritual, moral, or social development.</p>	<p>The Act shall be applied to regulate any form of engaging underage to the project activities on site. Child labour in any form 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 as provided for under annex VI in this report.</p>

### 3.5. International Conventions and Treaties

The United Nations and other international institutions have drafted several international treaties and conventions aimed at enhancing social economic development, environmental sustainability and promoting fundamental human rights. The proposed 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	Kwale County 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 International Labour Organization and the eight fundamental Conventions	To advance social and economic justice through setting international labour standards.	The project has applied the requirements of ILO 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 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 and building concepts among others have been considered in the design of the project to mitigate against the impacts.

### 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 Kwale County fisheries office block will thus trigger the Bank's Safeguard Policies requirements (*OP/BP 4.01 Environment Assessment*) as depicted in Table 3-4, which requires undertaking 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 Kwale 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 project	The policy is triggered under KEMFSED and the construction of county infrastructure sub-projects. The policy informed ESIA preparation for the Kwale County fisheries office block construction, guiding on enhancing positive impacts of the project and mitigating negative ones.
	World Bank Environment, Health and safety guidelines	The proposed sub-project under KEMFSED triggers: environment, health and safety issues, and considerations of the guidelines shall come in hand to guide on the best course of action, For the 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	Some of the requirements of the guidelines informed the mitigation measures in the 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.

### 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 they meet



regulatory standards. Therefore, coordination and consultations shall be required at different levels depending on the activities at hand.

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

NO.	INSTITUTION	RESPONSIBILITY
1.	<i>National Construction Authority (NCA)</i>	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.	<i>Kwale County Government</i>	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 in addition through the fisheries department will oversee daily operation and maintenance of the proposed office building at the operation phase.
3.	<i>County Environment Committee</i>	Ensuring the project adheres to physical planning and environmental standards set by NEMA under various legislations and regulatory standards.
4.	<i>Kwale Water and Sanitation Company (KWAWASCO).</i>	Provision of water and sewerage services to the proposed office block.
5.	<i>National Environmental Management Authority</i>	Shall be in charge of overall management and coordination of all matters relating to the environment in the proposed development area through Kwale County Director of Environment (NEMA). The Authority shall issue the ESIA license authorizing the commencement of the sub-project activities following review and approval of the ESIA project report. The officers from the Authority will conduct periodic inspections of the project site to monitor adherence with the ESMP developed during the ESIA process
6.	<i>National Environment Tribunal</i>	Resolves conflicts between NEMA and any of their clients (KEMFSED, Kwale County CPIU or SDF&BE) regarding any

		environment issues arising during project implementation or operation.
7.	<i>Environment and Land Court</i>	Any matter that cannot be resolved amicably between Kwale County CPIU and NEMA pertaining to environmental issues arising from the project shall be addressed by the court
8.	<i>Directorate of Occupational Health and Safety Services (DOSHS)</i>	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. Officers from the directorate will Arbitrate any compensation claims for workers in the project occasioned by incidents of occupational diseases or accidents
9.	<i>Kwale County Commissioner</i>	Resolve any security issues, disputes on site and maintaining public order.
10.	<i>Kenya Power and Lighting Company (KPLC)</i>	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 the implementation and supervision of safeguards triggered by the project activities during the 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 Kwale County fisheries Office**

NO.	INSTITUTION/PERSONS	RESPONSIBILITY
1.	SDFA&BE	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 act on behalf of the client and link the construction team and KEMFSED National project coordination unit (NPCU). Representing the client, supervising contractor at the site in consultation with Joint Project Supervision Committee (JPSC) and general contract management of the contractor. The consultants safeguards officer will guide the

		contractor in preparation of the C-ESMP.
4.	NPCU- Safeguards Specialists (ESS & SSS)	<ul style="list-style-type: none"> <li>• Ensure the environmental and social requirements are prescribed in contractors bidding documents</li> <li>• Environmental and social requirements are prescribed in contractors bidding documents</li> <li>• Take overall responsibility of ensuring that the mitigation measures proposed in the ESIA/ ESMP and C-ESMP are implemented.</li> <li>• 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)</li> <li>• 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,</li> <li>• Ensure a functioning grievance redress mechanism and follow-up all environment and social issues raised,</li> <li>• Share the monthly and quarterly monitoring reports with the Bank.</li> <li>• Report immediately to the World Bank upon occurrence of any significant environmental, social, or health and safety incidents</li> <li>• Develop and fully implement including the necessary resources, all operational phase EHS plans</li> </ul>
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 oversee works for the proposed infrastructure and safeguards compliance. They will also sign 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.
7.	Contractor	<ul style="list-style-type: none"> <li>• Implement the proposed sub-project according to contractual obligations and observe all safeguards requirement.</li> <li>• Contractor will have an EHS officer on day to day guidance on project matters on environment, social, health and safety issues</li> <li>• Prepare contractor specific ESMP including OHS plans, waste management plans among other plans</li> <li>• Obtain the required licenses and permits such as the work place registration permit</li> <li>• Provide information to KEMSFED NPCU related to HSE (Health, Safety and Environment) performance, and immediately report any significant environmental incident or</li> </ul>

		worker accident.
8.	Contractor ESHS expert	<ul style="list-style-type: none"> <li>• Ensure implementation of environmental and social safeguards and occupational health and safety requirements during project implementation</li> <li>• Maintain log on grievances, accidents and incidents on site. Report on E&amp;S issues in the project progress reports.</li> </ul>

### 3.8. Construction Supervision, Monitoring and Reporting

The technical clauses attached in here under Annex VI 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 laws and World Bank requirements. Reporting on office construction implementation activities shall be done by the contractor in consultation with the sub-project supervising consultant. The contractor shall be in charge of the monthly reporting on site to supervision engineer from the County Government and National Government under Joint Works Supervision Committee.

The sub-project implementation progress reports prepared by the supervising consultant shall be on monthly and quarterly basis. The reports shall be submitted to the client (SDBE&F) and Kwale County Government shall review the reports and submit to the World Bank for comments and approvals through NPC. The Joint Project Supervision Committee (JPSC) shall meet at site on a monthly basis. NPCU team shall also conduct quarterly monitoring visits to advice on the progress of the project. The World Bank team on the other hand shall be conducting semi-annual monitoring mission to advice on the implementation progress. The supervising consultant's site agent together with EHS officer shall on a monthly basis supervise the implementation of the C-ESMP, ESMP and EMoP. The NPCU safeguards team shall also conduct regular and impromptu monitoring to ensure that all the safeguards requirements of the World Bank and National laws are adhered to as captured in the ESMP and ESMoP and are fully implemented. The safeguards team shall also through KEMFSED M&E develop GEMS tool for data collection, remote supervision and monitoring of safeguards compliance requirement implementation activities.

### 3.9. Contract Management, Administration and Conflict Resolution

The sub-project supervising consultant overseeing the works shall be in charge of managing the project contract on behalf of the client (SDBE&F) and the Kwale 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 VII shall be refined in alignment to site-specific C-ESMP that shall be prepared by the contractor. The sub-project construction supervising consultant shall also be responsible of resolving any conflicts that arises between the client (SDBE&F) and the contractor. The consultant 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 arises related

to the contract which 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 Kwale County fisheries office is located on a piece of land measuring about 0.3 acre 0.12 hectares) owned by the livestock department, the land ownership documents are as attached in Annex I. The proposed project is located in Kwale County, Msambweni Sub-County, Ramisi ward, Msambweni location and in Viungujini Sub-location. The offices are located at Viungujini trading centre Msambweni as shown Figure 4-1 from a Google image. The area has an elevation of 24m m with GPS coordinate of the project site being Latitude 4°27'37.74"S and Longitude 39° 29'1.20"E.



Figure 4-1: Google Image Showing the Proposed Sub-project Location 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 at Mombasa Port rezi weather station using the coordinates of the proposed project area. The station was found to be the nearest to Msambweni area. 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

Kwale County generally experiences semi-arid climatic conditions. However satellite derived precipitation from Mombasa Port rezi weather station (*FAO CLIMWAT data base*) for the past 42 years spanning between the years 1980-2022, showed that the area receives coastal rainfall which is relatively high. The project area coordinate points were used to assist in determining the general monthly average rainfall distribution and annual rainfall amount in the proposed project area. The project area usually experiences a bi-modal rainfall pattern with relatively high rainfalls under the long rains being experienced between March and June compared to the short rains received between September and December as indicated on Figure 4-2. The figure also shows that February is the driest months with less than 14mm while the month of 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 1162mm.

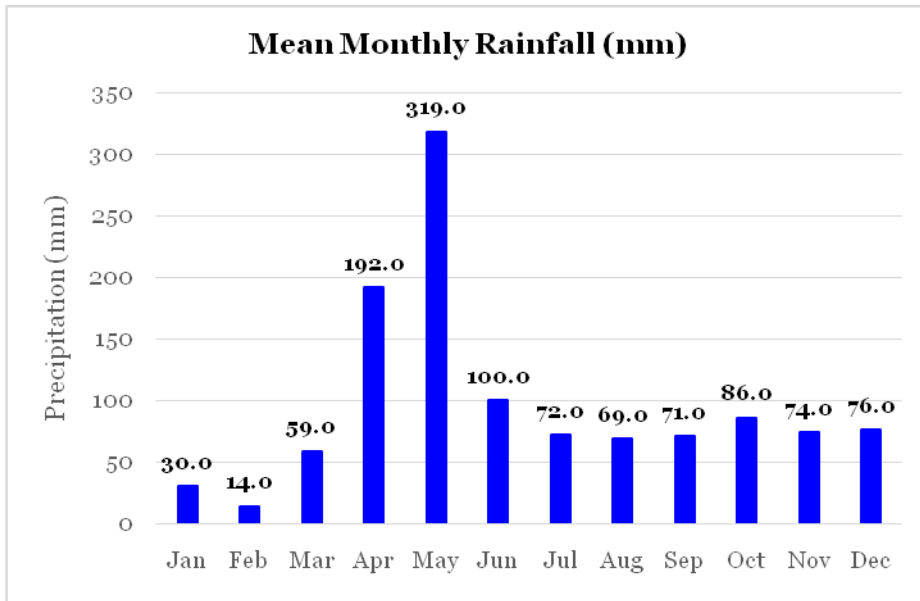


Figure 4-2: Mean Monthly Rainfalls source (*FAO CLIMWAT data base March 2022*)

#### 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 indicated in Figure 4-3 shows that March is the warmest months with an average temperature of 28.5°C while July with an average temperature of 24°C was the coldest. However, the average annual temperature in the project area was noted to be 26.29°C.

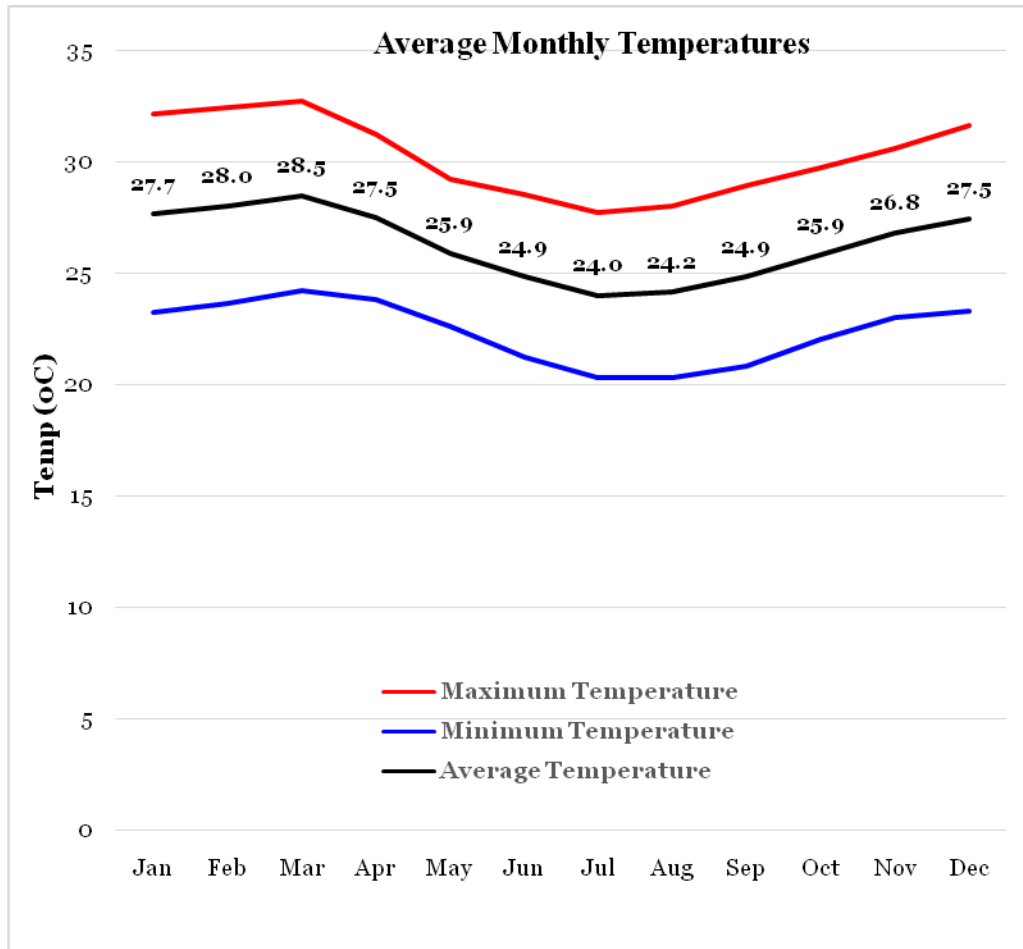


Figure 4-3: Mean Monthly Temperatures

#### 4.3.1.3. Relative Humidity

The average monthly relative humidity within the project Area of Interest (AOI) is about 78%, which is relatively high if compared with most parts in the country. Seasonal mean monthly values fluctuate between 73% in January and February to 83% in May as shown on **Error! Reference source not found.** The highlight on relative humidity within the project area is significant given the high solar radiation within the proposed project area that shall lead to increased 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.



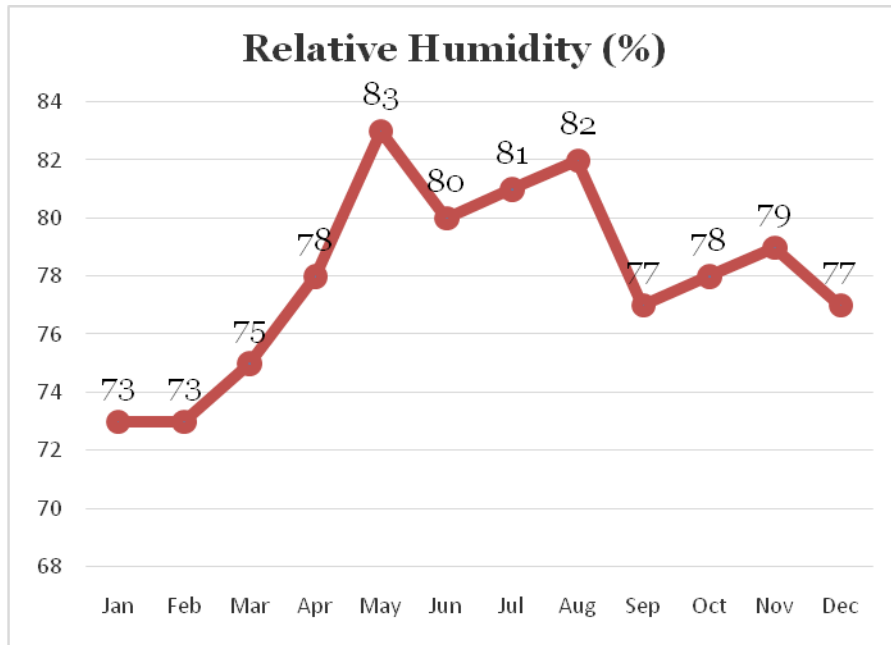


Figure 4-4: Average Monthly Relative Humidity

#### 4.3.1.4. Wind Speed

The satellite data for wind speed indicated that average monthly wind velocity experienced in the project area is about 4.58m/s with the lowest wind speed of about 3.90m/s being experienced in November while the highest is 5.10m/s occurring in May and June as indicated in Figure 4-5. Wind speeds influence the subsequent changes in the rate of heating, evaporation and the microclimate within the working area. The wind speed in addition may cause air pollution and aid in pollutant dispersion by carrying cement, dust particles or sand particles affecting air quality status on site for the workers and the general community health. The proposed Kwale County fisheries office is not anticipated to contribute significantly to air pollution due to the type and scope of the expected works.

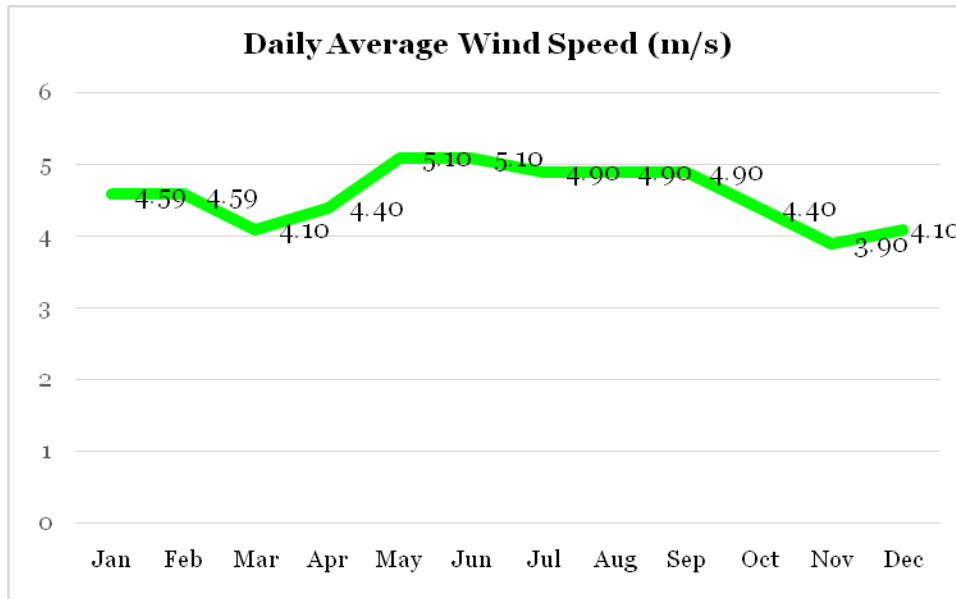


Figure 4-5: Daily Average Wind speeds

#### 4.3.1.5. Radiation

The proposed project area experiences an average monthly radiation of about 21.34 Rad (MJ/m<sup>2</sup>/day) with the maximum radiation of 24.1 Rad (MJ/m<sup>2</sup>/day) occurring in the month of February and a minimum of 17.7 Rad (MJ/m<sup>2</sup>/day) being experienced in the month of May and July as indicated in Figure 4-6. The average monthly sunshine hours on the other hand was noted to be 8.2hrs. 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 being the most affected. However for the case of Kwale County fisheries office works, radiation is not anticipated to be a challenge because the proposed works shall be conducted within an existing structure shielding off workers from sunshine or radiations.

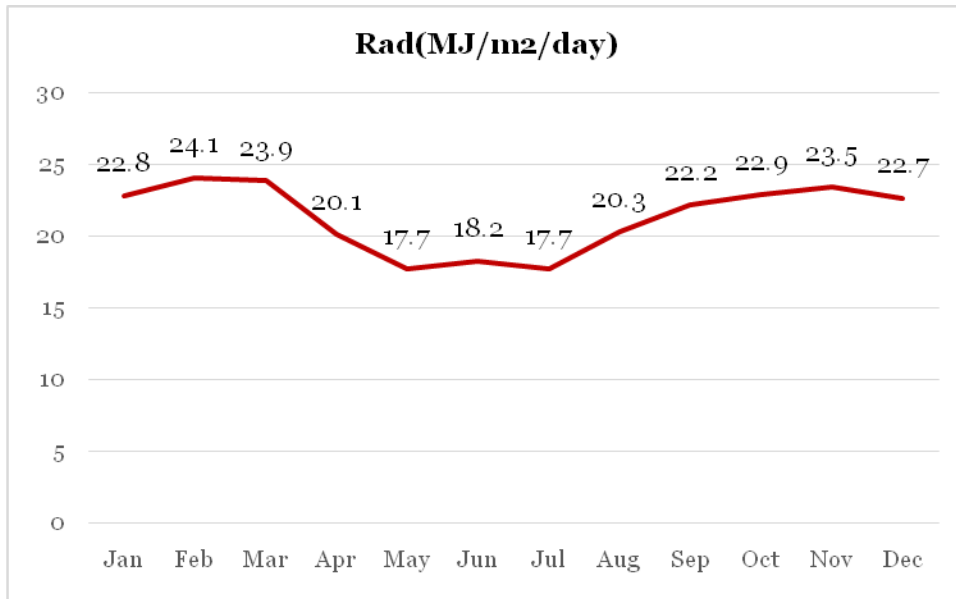


Figure 4-6: Average daily radiation

#### 4.3.2. Waste Generation and Management

The main source of litter noted in the project area during field survey was solid waste from residential areas, shops and hotels operating at trading centre as well as from national and county Administration offices. Though the Kwale County Government provide waste management services to the locals, the observed services within the area are inadequate with only one waste skip serving the entire Msambweni area. The potential users of the waste skip who live far are often tempted to go for alternative waste management other than moving all the way to dispose off their waste at the waste skip. During field survey it was observed that there was indiscriminate and crude dumping of solid waste within market, beside the roads, at residential areas and behind the shops as highlighted in Plate 4-1. The designated areas provided by the county government for waste disposal is a skip loader provided at market centers. However, only one such skip loader is provided at each market center which is sometimes is distant to some households and office premises. It also take long before the skips are emptied and during the field visit, the skip was observed full and spilling over littering the ground as indicated in Plate 4-2. Yet waste management whether liquid, solid or in gaseous form is critical in maintaining environmental integrity of an area. Haphazard littering and wind dispersal of waste in the environment were observed. The main type of waste observed was organic and inorganic materials, including plastics, pieces of glass bottles, paper, wood wastes, food remains, soil, plant remains, among others.

The residents cope with the inadequate waste collection challenge through burning in compounds or along the streets as highlighted in Plate 4-3 and Plate 4-4 below. 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 is

anticipated during the Kwale County fisheries office works activities, operation phase of the building, waste from the economic activities associated with the building and littering by the users, and debris waste at decommissioning. 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 lack of designated waste disposal area 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. This will include ferrying such wastes to the county disposal site provided at Kinondo village.



Plate 4-1: Indiscriminate Waste disposal in the area



Plate 4-2: A Skip Loader at Msambweni Market



Plate 4-3: Waste Burning as a management practice at one of the Office Premise



Plate 4-4: Waste Burning at The Market on the Road to Msambwweni Referral Hospital

### 4.3.3. Ambient Noise and Vibrations

The existing main source of noise at the proposed project area is the flow of traffic on the road to Msambweni referral hospital which passes about 50m away from the proposed office site. Msambweni market in addition is associated with transportation activities with use of motorcycles and autorick Shaw as the main mode of local transport, ferrying people from the Junction of Ukunda Lungalunga road to the Hospital and from the Hospital. It was noted that background noise in some instances was louder particularly from the auto-rickshaws whose

numbers are significantly growing in coastal towns. Based on studies done elsewhere, Autorickshaws produces noise in excess of 80 dB (Sen *et al.* 2011). However as one moves away from the market centre the noise level reduces as the anthropogenic activities also reduces. Noise pollution possesses both auditory and non-auditory effects on the exposed population if in excess of allowable limits. The noise level at the proposed project site is anticipated to change temporarily during rehabilitation works. In spite of this, there were no major noise receptors other than the local residential areas and nearby offices which were less than 50m away from the site.

#### **4.3.4. Ambient Air quality**

Air pollution at Msambweni market centre was noted to be mainly associated with emission pollutants generated from automobile, autorick shaws, motorcycle, haphazard burning of waste at residential areas and particulates from wind action on loose soil particles. The gaseous and particulates pollutants are anticipated to be generated from the proposed office rehabilitation works particularly from the rehabilitation of the ceiling activities and movement of rehabilitation vehicles. However, given the volume of the proposed works, with proper mitigation measures the pollution effect is not anticipated to be significant.

### **4.4. Biological Environmental Baseline Conditions**

#### **4.4.1. Modified Habitats**

The general area around the proposed project site is a highly modified environment due to anthropogenic activities as depicted in Plate 4-5 and Plate 4-6. The immediate surrounding area is built with national government offices, the police station, county government department offices, residential places, eatery areas and accommodation area. The vegetation within the proposed project area is introduced and most of the natural vegetation has been cleared for settlement or for agricultural activities. The proposed project shall have minimal impact on the surrounding vegetation since most of the area is bear with also an existing office structure. Landscaping shall involve reestablishing vegetation around to mitigate the minimal impact of vegetation during the proposed works.



*Plate 4-5: The main Street along the Road to Msambweni Referral Hospital*



*Plate 4-6: Part of the Build Environment in Msambweni*

## **4.5. Socio-Economic Baseline Conditions**

### **4.5.1. Administrative units**

The proposed project is located in Kwale County, Msambweni Sub- County, Ramisi ward, Msambweni location and in Vingujini Sub-location. The offices are located at Vingujini trading centre. The area has an elevation of 24m with GPS coordinate of the project site being estimated at Latitude 4° 27'37.74"S and Longitude 39°29'1.20" 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 Msambweni location indicated that the female population is slightly higher at 51.26% than male population which was 48.74%<sup>6</sup> consistent with Vingujini sub-locations with 51.31% and 48.69% respectively. The population and housing census further indicated that Vingujini sub-location has a total of 3,491 households with an average household size of 4.5 persons per household.

#### **4.5.2.2. Literacy Levels**

Literacy levels within the general Msambweni Sub-County is higher compared to the rest of the County followed by Matuga sub-county and LungaLunga and Kinango respectively. The national average was 82.8% based on the 2019 census, Kwale County was 67.58% and Msambweni Sub-county account for at least 23.22% 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 51.48% and 48.08% respectively. About 23.16% of the population does not have any form of formal education in Msambweni 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 54.13%, secondary levels at 24.28%, 7.15% for

<sup>6</sup> Kenya Population and Housing Census 2019: Volume II: Population by County and Sub-County

tertiary, 2.38% university and 0.7% 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 59.42% compared to 40.58% who were women. The literacy level figures at national, Kwale County and Msambweni Sub-county were as shown on **Error! Reference source not found.**<sup>7</sup>.

**Table 4-1: Literacy Level Attained in Msambweni Sub-County**

	Level of Literacy	Male	Female
National	82.8%	50.06%	49.96%
Kwale County	67.58%	51.92%	48.08%
Msambweni Sub-County	76.84%	51.48 %	48.52%
Pre-Primary level attained in Msambweni Sub-county	11.36%	50.22%	49.77%
Primary level attained in Msambweni Sub-county	54.13%	50.33%	49.66%
Secondary level attained in Msambweni Sub-county	24.28%	54.57%	45.43%
Tertiary College level attained in Msambweni Sub-county	7.15%	48.50%	51.49%
University College level attained in Msambweni Sub-county	2.38%	59.42%	40.58%
Other form of literacy level attained in Msambweni Sub-county	0.7%	50.42%	49.58%

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 proposed project activities.

### **4.5.3. Social Amenities and Physical Infrastructure**

#### **4.5.3.1. Project Area Accessibility**

There are limited options regarding the modes of transport to access the proposed project area. Generally Msambweni market centre is connected to other areas through road network. The main roads are the main tarmac road from Mombasa-Ukunda to Lungalunga, then branching off at Msambweni towards Msambweni referral Hospital as indicated in Figure 4-7 and Figure 4-8. The area was also noted to be accessed through water (*Indian Ocean*) which is near the referral Hospital.

<sup>7</sup> The data shown on the table was extracted from 2019 Kenya population and housing census Volume IV specifically table 2.4

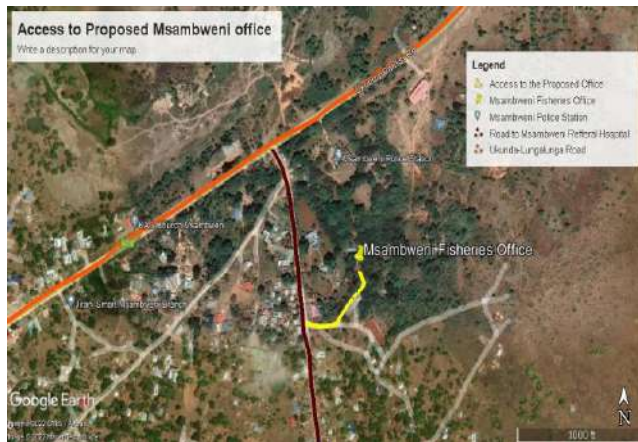


Figure 4-7: Accessibility Options to Project Site

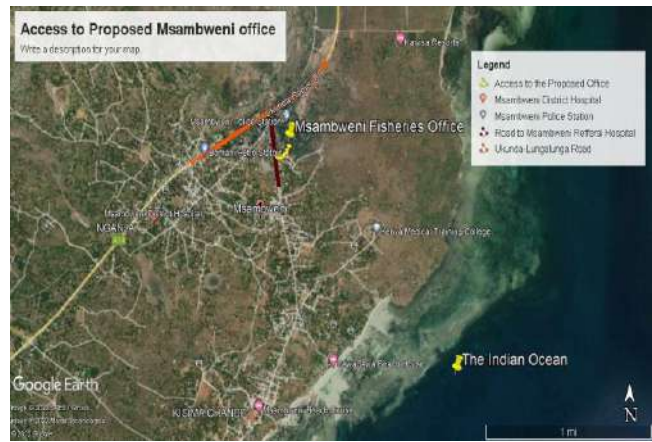


Figure 4-8 : The Ocean as an Access Route

#### 4.5.3.2. Communication Network

Msambweni trading centre and its immediate environs were generally noted to have adequate communication network relative to other areas particularly as one move away from Msambweni market. 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 wireless communication as the main mode of communication in the proposed project area as indicated in Plate 4-7 and Plate 4-8. 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, it was reported to be the most popular among the locals. Pay television decoders for Go-TV, DSTV and startimes were noted to be the main signal receivers in the area as indicated in Plate 4-9 and Plate 4-10. The audio media reported were Kaya FM, 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 50.4% of the population in Msambweni sub-county uses mobile phones, and it appears like more men own phones compared to women at 53.6% to 47.2%. Access to communication services particularly to mobile phones is critical for communication, access to mobile internet and also money transfer during project rehabilitation. The findings further show that 25.5% of the population use internet men accessing at 28.9% and women 22.1% but interesting is that only 10.1% of the population own a computer or a laptop. This indicates that of the 25.5% who use internet majority could be accessing the internet using the mobile devices which further shows the significance of communication through mobile phones. The available communication channels can be used in the event of need for community awareness and sensitizations is required.





Plate 4-7: Communication Mast for Safaricom



Plate 4-8: Communication Mast for Telecom



Plate 4-9: GoTV Receiver Dish



Plate 4-10: DSTV Dish for pay TV in the area

#### **4.5.3.3. The Main Water Sources and Reliability**

Msambweni Market relies on ground water, from community shallow wells and supplies by Kwale Water and Sanitation Company (KWAWASCO). According to the non-revenue water assistant officer, KWAWASCO run 2 boreholes in the area which is pumped into elevated steel storage tanks and distributed through gravity as shown in Plate 4-11. The supply of the water was reported to be unreliable and the locals cope through storage containers at household level. Indeed one of boreholes was reported to be broken down at the time of field assessment for this study. It was also reported that KWAWASCO is supplied in bulk with water by Coast Water Works Development Agency from Marere springs though is supplied intermittently. The proposed office to be constructed shall be supplied with water from KWAWASCO however, there is need to have water storage facilities in order to cope with the challenges of unreliable water supply. There are design includes proposal to harvest rain water to supplement the existing supply given the availability of rainfalls throughout the year as was noted in the area in

Plate 4-12. The design has also considered for rain water harvesting and grey water treatment by a biodigester and a soak pit are proposed and the water shall be used for landscaping purposes.

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.



*Plate 4-11: Elevated Steel Tank at Msambweni Referral Hospital*



*Plate 4-12: Water storage and rain water Harvesting facilities in the project area*

#### **4.5.3.4. Sanitation Coverage**

Human waste management is critical for the office users and the workers who shall be working on renovating the office building. Pit latrine is generally the main means of human waste management noted within the proposed project area as shown in Plate 4-13. The proposed Kwale County fisheries office block will consist of an ablution block coupled together with a bio digester waste management system. The resulting water from the bio digester will be used for landscaping purposes within the office area.



*Plate 4-13: One of the Pit Latrines seen in the Area*



*Plate 4-14: Connection of the existing offices in the plot to a septic Tank*

#### **4.5.3.5. Main Power supply**

The proposed Kwale County fisheries office land is connected to the national power grid through the Kenya Power and Lighting Company (KPLC) as highlighted in Plate 4-15. An existing office structure within the same plot of land is currently connected. Similarly the general Msambweni market is also connected to electricity as was noted through a power sub-station in the area as captured in Plate 4-16. In spite of having a power sub-station in the area, key informant interview findings indicated that the area experiences frequent power blackouts and that the supply is not reliable. The proposed scope of the rehabilitation works for the sub-project has considered power saving measures to capitalize on use of renewable energy-solar and use of energy saving bulbs LED for the office.



*Plate 4-15: One of the Power Distribution Transformers in Msambweni*



*Plate 4-16: Power sub-station for supply of power within Msambweni area*

#### 4.5.4. Land Use and Ownership

##### 4.5.4.1. Land use Pattern

According to the sub-county physical planning officer, the spatial plan for the general county was prepared and is awaiting county Assembly ratification. The proposed land zoning as per the plan was reported to be as indicated in Table 4-2.

Table 4-2: The existing and proposed main Land Use within Kwale County

No.	LAND PROPOSALS	MAIN LAND USE
1.	Residential spaces	Proposed high density, proposed medium density, proposed low density and government staff housing.
2.	Agricultural land	This is land set aside for household farming areas
3.	Educational spaces	Existing proposed secondary school, proposed primary school and proposed nursery school.
4.	Recreational spaces	proposed public parks and green spaces
5.	Public purpose	Existing; law court, sub-county headquarters, water offices, youth for a mission centre, mosques, site for CDIC, NCPB , site for team and team, Maendeleo ya wanawake, police lines, county commissioner administrative units, sub-county hospital, social hall, IEBC, Proposed site for; youth polytechnic, red cross, disabled, youth centre, show ground, medical staff quarters, conservation network, church, mosque, communication centre and fire station.
6.	Commercial purpose	Existing and proposed commercial centre and open market
7.	public utilities	Proposed Islamic and Christian cemeteries, waste dumping site and site for KPLC.
8.	transportation	Proposed site for bus park, parking and a yard.
9.	Industrial development	Proposed heavy industries, proposed medium and light industries, petrol station and proposed site for slaughter house.

##### 4.5.4.2. Land Tenure Status

The proposed Kwale County fisheries office shall be located on public land as indicated in annex I. The office is located on a land parcel that was initially allotted for the development of livestock offices, however due to lack of office space for some of the officers in the same devolved county Ministry of Agriculture, Livestock and Fisheries, the office space has been reassigned to fisheries department. The proposed land for the office sits on a land measuring 0.3 acres as indicated in annex II. Although the general Msambweni area is still undergoing succession, the proposed land for the sub-project has been surveyed and issued with a part development plan (PDP) as indicated in annex II, but the title is yet to be processed. Land will be a major factor in the implementation 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. Public land is held by the County Government in trust for the people resident in the County but administered by the National Land Commission.

#### **4.5.5. Livelihood and Economic Activities**

Livelihood comprises of the capabilities, assets and activities required for a means of a living<sup>8</sup>. 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 and public institutions provide employment opportunities to the local people. The casual labour is usually in farms, construction sites, as motorbike riders and working as hawkers. The public institutions in the area include department of agriculture, veterinary, livestock, social services, department of registrar of persons, interior and coordination of national government and Kenya forest service. The proposed Kwale County fisheries office is anticipated to add to temporal employment of the locals during construction, operation and decommissioning phase of the sub-project. The 2019 population and housing census data for Kwale County population indicated that about 44.85% of the population in Msambweni Sub-County was employed while 9.20% were unemployed and seeking for employment.

The data further shows that of the employed, 53.34% were men whereas 46.66% were women. The findings further showed that about 61.36% of the unemployed in the sub-county were men and 38.64% were women. This is the population that can potentially supply the labour market. The economically inactive population was about 45.92% which was noted to be higher than employed population and of whom men were 44.66% and women were about 55.34%. The economically inactive population indicates that most women in Msambweni 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 temporal employment to various groups of people.

##### **4.5.5.2. Trade and Commerce**

The proposed project area though falls mainly in Msambweni Market area, the market is not endowed with any industrial activities. Fishing as depicted in Plate 4-21, small business and agricultural production are the main sources of livelihood for the local people in the proposed

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<sup>8</sup> UNISDR Guidance note on Recovery: Livelihood.

[https://www.unisdr.org/files/16771\\_16771guidancenoteonrecoveryliveliho.pdf](https://www.unisdr.org/files/16771_16771guidancenoteonrecoveryliveliho.pdf)

project area. Small scale trade was observed and reported as the main commercial activities to most households in the proposed project area. The business activities were in the areas of retail trade as depicted in Plate 4-17 and Plate 4-18, sale of food stuffs, repair of motor cycles, transportation as highlighted in Plate 4-19 and Plate 4-20, accommodation and food services, education, human health, information and communication and social services among others. The businesses other than being a source of income to the entrepreneurs, they are also a source of employment to the locals who assist the owners. The employment mode within the area is mainly in form of casual labor and unpaid family workers.



Plate 4-17: Some of the shops at Msambweni



Plate 4-18: Grocery shop selling farm products



Plate 4-19: Tri-cycle (TukTuk) operators



Plate 4-20: Motorbike (Bodoboda) operators

#### 4.5.5.3. Livestock Production

Livestock keeping is one of the economic activities within Msambweni sub-County. Free range livestock were reported at the time of this study. the farmers in the sub-county keep cattle for

both dairy and beef, sheep for beef, goats for meat and dairy, poultry both layers and indigenous. Selling of livestock and livestock products for subsistence is one of the key sources of household income in the area.

#### 4.5.5.4. Crop Farming

Crop farming is one of the main economic activities within the proposed project area mainly as a source of household food security and also to supplement household income. The agricultural sector plays a critical role as a source of household sustenance and income within Msambweni Sub-county particularly in Ramisi Ward. Key informant findings indicated that crop farming is mainly at subsistence level with horticultural crops being the main crops produced in the area. Some of the products include green maize, kales, spinach, cassava, tomatoes, bananas, and fruits were noted on the market as indicated in Plate 4-22. Commercial farming involving cashew nuts, coconut, mangoes and citrus fruits is also part of household farming activities. It was noted that both women and men are involved in marketing of the produce at the open air market.



Plate 4-21: Women Selling fish and serials



Plate 4-22: Fruits vending kiosk

#### 4.5.6. Cultural heritage and Properties

Msambweni is home to several ethnic groups; Digo, Duruma, Wamakonde, Wakifundi and other ethnic groups from different parts of the Country including Kikuyu's, Luo, Kamba and Tharakas who either are civil servants or work in Ramisi sugar factory that is about 10km from Msambweni market area. The Digo community is predominant who constitute over 90% of the local population. The local community is governed through the local governing structures set by the county and national governments of Kenya. It is a very religious community with approximately 99% of the Digo community being of the Muslim faith. The remaining less than 1% mostly encompasses those that have intermarried with other tribes and converted to

Christianity. Livelihoods for the Digo community almost entirely depend on fishing and crop farming for subsistence and commercial farming of cashew nuts, coconut, mangoes and citrus fruits. The other ethnic groups from other parts of the country are mainly business people engaging in small businesses in the area or working as civil servants. Cultural practices are still operational though fading among the Digo community, where young women are more engaged in economic activities and older women work in farms. Such cultural factors may hinder women from participating as unskilled labor opportunity that may be available. In spite of this, the rehabilitation works through the contractor shall be required to take deliberate measures for any female workers and the youth who will be willing to work at the construction site. Stakeholder consultation and key informant interviews indicated that there were no any known archeological artifacts or properties at the proposed site since the area is has never been of any known historical heritage. The proposed project is not expected to have any adverse impacts or changes to the current traditional and governance structures. It is anticipated that the proposed rehabilitation works will be low.

#### **4.5.7. Child Labour Prevalence in the area**

Cases of child labour are challenging to detect in Kwale County, according to county director state department of labour, the cases usually occur in households where teenagers are employed as herdsmen, and it's not easy to tell whether they are still young, belong to the family or are employed. The other area is where teenagers are hired and involved in hawking of curio items at the beach or in fishing activities during high fishing seasons. Due to the high poverty levels among the locals, some offer their children for househelp work with relatives who live in urban areas and it's not easy track the cases. In spite of the observations, the cases are rarely report 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**

HIV prevalence for Kwale County is at 3.0% while Msambweni Sub-County is estimated to be at 4.7 with an estimated population of 110,640 people. According to HIV Estimates 2020 data, it seems the prevalence is higher among women at 6.5% compared to men at 1.6%. In spite of the figures, the proposed works for Msambweni fisheries office is not anticipated to significantly contribute to the cases of HIV. The scope of the works is low, it will take a short duration to implement the works, most of those who shall be engaged shall be locals and the number of workers involved shall be very few. The contractor shall be encouraged to source for local skills.

#### **4.5.9. Gender Based Violence (GBV) Prevalence**

According to Kwale county director state department for gender, cases of GBV within Msambweni Sub County are slightly higher than those reported. Total of 106 cases were reported in the last reporting year 2020/2021. The most reported cases were domestic violence followed by teenage pregnancies, early marriage, defilement and rape respectively. The officer observed that most local people prefer resolving GBV issues at community level. Cases involving defilement by family members are rarely reported. She also noted that it's challenging to collect



GBV data which is reported at multiple points including at school, police, at hospital and at the chief's office yet the data collection process is hitherto not streamlined. Double accounting in some cases are reported where reporting is done at the hospital and the police station. And in some cases it's not reported anywhere. Culturally issues of GBV such as sexual harassment cannot be disclosed and discussed in the open and women are never present in such forums. The contractor worker will be required to sign a code of conduct with zero tolerance to GBV and sexual harassment at the work place or in the community. The contractor shall assess all activities that may trigger cases of GBV, SEA and SH and prepare a risk management plan before the commencement of the assignment.

## **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. The Consultative Process Adopted**

The environmental survey team recognized 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 ESIA survey team 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 in the process of capturing their views, issues and concerns on the proposed project during data collection. The levels of project stakeholder engagement during data collection approaches and procedures were through key informant interview with county officers and community meeting.

### **5.3. Key Informant Interviews**

In order to adequately target the county infrastructure development priority interventions, several technical assessment consultations were conducted between NPCU infrastructure development technical team and relevant county government officials including the CECM Agriculture, Livestock, Fisheries and Cooperatives, director fisheries and officers from supporting departments mainly land and physical planning, who were supporting the interventions of the proposed construction works. The consultations were on several different occasions which were both formal and informal. One of the formal consultative missions was on 1/11/2021 as indicated in Plate 5-1 and Plate 5-2. Additional consultations were conducted on 13<sup>th</sup> and 14<sup>th</sup> April 2022, 30<sup>th</sup> and 31<sup>st</sup> of May 2022. The discussions during the consultation process were as captured in Table 5-1. The finding from the consultations indicated that, in spite of Fisheries sector being very critical to the socio-economic development of the local people, the county does not have an office for the fisheries department for coordinating of fisheries management in the county. There is an urgent need to create space for the fisheries department to harness the economic benefits of the blue economy opportunities. The fisheries infrastructure development is one of the key concerns in the County. From the rounds of consultations, the need to construct a departmental office for fisheries officers was apparent as one of the county priorities under KEMFSED project.



*Plate 5-1: NPCU infrastructure Team with Kwale County Senior officers*



*Plate 5-2: The CECMs and the Chief officer attending the consultations*

Table 5-1 highlights the summary of key observation made by purposively selected officers consulted during the study.

*Table 5-1: Summary of Consultation with county officers*

No.	KEY INFORMANT INTERVIEWED	SUMMARY OF REMARKS
1.	County Executive Committee Member (CECMs)	The county CECM who graced the meeting observed that the county had identified priority landing sites to be funded by the project but open to any suggestions for changes. The focus of the county was on landing sites with less land issues with Mwaepe singled out as a priority area. The CECM further observed that the construction of Kwale County fisheries office in Msambweni to be considered under the project. The Staff are currently squeezed under the veterinary offices with no permanent office of their own. The office is to be built for use by the project CPIU and the county fisheries officers. Land ownership for all infrastructure has been provided for evidence of ownership.
2.	Sub-county department of veterinary services	The proposed project implementation site being within the same parcel of land and adjacent to the veterinary departmental officer's offices, the officer's main concerns were on the management of noise, dust, wastes, and degradation of the natural environment. He specified that noise and dust is to be expected during construction, liquid and solid wastes during operation, and storm water runoff. According to the officer all these anticipated impacts can be well mitigated if included in the project design and approach from the onset. The officer recommended the reestablishment of the existent natural vegetation and landscaping upon completion of construction activities. The solid and liquid wastes should be well managed through aspects as reuse and use of the available

	county waste management systems. Rain water harvesting for office use should be a key consideration of the proposed project especially considering the unreliable water supply within the project area and the unreliable but heavy rainfall patterns.
3. Safeguards –NARIG	The county safeguards officer attached to NARIG project noted the similarities in development projects among world bank funded projects. He noted the importance of hastening the development of safeguards documents and their approvals so as to be able to implement the proposed projects timely. It is also vital all the associated stakeholders for the project be brought on board early enough especially those, whose certification or licenses may be need for approvals such as NEMA among others.
4. State department of Social development Officer	The officer commented that the poverty levels within Ramisi ward to be very high thus the need to prioritize the local community within for all employment opportunities that will arise from the proposed project implementation. The officer further stated that though the area is well connected with piped water and electivity, they are majorly unreliable for a steady supply. There are times the areas can stay for weeks without piped water supply while electricity connection goes off regularly owing to technical factors within KPLC. He advised for the consideration of alternative and cleaner sources of water and energy for the proposed project. The same to be applied to storm water drainage and waste management.
5. State department of gender officer	The state gender officer commented on the high rates of gender based violence within Ramisi ward; the proposed project area where child labor, teen pregnancies, emotional and physical abuse are common. According to the officer the proposed project has a risk of luring children to labor and further rising gender based violence cases among teens through influx of laborers and cash through wages; especially with the high poverty rate in the area, if not well mitigated. To mitigate against this the proposed project should consider to only employing locals within the area who are above the minimum employable age limit for the county. The officer also stated concerns on the use of piped water in the proposed project should not affect water availability to the neighbors and proper solid waste management should be considered.
6. County structural and quantity survey office	The officer commented on the use of radio, telephone, and internet platforms as major ways of communicating within the community in the project area. The officer’s main concern was on the designing of the proposed office structure. Factors considering the use of green and sustainable technologies should be enshrined in the proposed project for efficiency. Aspects such as the inclusion of a rain water harvesting system, a bio-digester, and use of solar energy as an alternative energy source to the currently unreliable KPLC electricity connection. The

		office being among other state offices and agencies in the proposed area, the inclusion of a boardroom would assist for consultative meetings.
7.	County works department office	The officer in charge commented on the need to anticipate for noise and dust pollution, soil erosion, solid and liquid waste from the proposed project. Due to the fact that the project area is within government land and an area reserved for development of state offices, it is well connected with water, electricity, waste disposal, and sewerage systems. The proposed project should apply to tap into these available systems as their first and main supply and disposal systems. This will provide for assured systems even as other mechanisms are being considered and put into place.
8.	KWAWASCO Assistant Non-Revenue Water officer	The officer observed that the company is the main water utility supplying water in Kwale County. He observed that the main source of water for the company is Marere springs which is supplied by Coast Water Works Development Agency (CWWDA). However the supply is inadequate hence rationed intermittently with the supply being after every 2 days. The residents of the area experience water supply reliability challenges and have developed coping mechanisms with the shortage through supply by the water private or county bowlers and through storage facilities.
9.	Msambweni Sub-county Public Health	The officer noted that HIV prevalence for Kwale County is at 3.0% while Msambweni Sub-County is estimated to be at 3.2% with an estimated population of 194,254 people. According to HIV Estimates 2020 data, it appears the prevalence is higher among women at 3.9% compared to men at 1.6%. In spite of the figures, the proposed construction of Kwale County fisheries headquarters office is not anticipated to significantly contribute to the cases of HIV in the area. Being an urban area, it is anticipated that awareness levels are high and that most of the workers on site shall be from the neighbourhoods. The officer requested the contractor to consider sourcing for local skills as a means to discourage against any immigration of labour.
10.	County Director state department of Labour	The officer noted that cases of child labour are challenging to detect in Kwale County, they usually occur in households where teenagers are employed as herdsmen, and it's not easy to tell whether they are still young, belong to the family or are employed? He observed that though the law is very silent regarding the employment of minors on site, it also stipulates that search minor should be above 16 years of age. The minor should work for six hours and should be under apprenticeship. The other area is where teenagers are hired and involved in hawking of curio items at the beach or in fishing activities during high fishing seasons. Due to the high poverty levels among the locals, some offer their children for

house help work with relatives who live in urban areas and it's not easy track the cases. In spite of the observations, the cases are rarely report and there are hardly any data on such incidences as it is considered part of family life and set up

#### **5.4. Msambweni Community Consultations**

The community consultation was held in addition to Key informant interviews as a means of seeking the opinion of community members regarding the proposed sub-project. The consultation meetings was organized by the area chief in consultation with CPIU team members particularly the CPC, CTA and ESSO and was held on 14<sup>th</sup> May 2022, at the project site as indicated in Plate 5-3 to Plate 5-5. During the consultation, community members who were invited to participate in the meeting were as indicated in the attendance list in Annex IV. The meetings consisted of men and women as well as youth and people with special needs. The ESSO presented the objective, design and the scope of the proposed sub-project. The participants were taken through the environmental and social impact assessment process. The aim was to get input and concerns that need to be considered in the ESIA project report, during implementation and operation of the office facility. From the findings of the discussions in the meeting, it was evident that the project was welcome and timely by the community members. The meeting discussions were guided by the environment and social safeguards' officer from the CPIU and some of the observations made by the participants were as captured and summarized in the minutes in Annex III. Some of the discussions were as captured below;

- Participants expressed their gratitude for the consideration to construct the county fisheries office as it would solve a space issue that currently exists in the county.
- Stakeholders meeting participants also agreed that the contractor should involve all the relevant stakeholders for community embracement of project. To foster this, majority of labour workforce should be sourced from Kwale.
- The Director further urged residents to move away from ocean fishing and take advantage of KEMFSED and diversify livelihood. He asked the fisher folks to embrace fish farming since it was the future going forward since ocean fishing had been characterized by many problems and hence not sustainable.
- The community members perceived the project as beneficial in various ways e.g foster integration within government departments fostering national unity, job opportunities, transfer of skill sets to the community members during construction, expected local business boom particularly food vending at the site and the growth and expansion of Kwale County as a wholesome county.
- The perceived negative impacts identified by the participants were: instances of injuries to the workers on the site; local workforce not being employed due to contractor coming with own personnel; increased conflicts resulting in marriage breakups due to expected sexual relations at the construction site; increase prevalence of sexually transmitted

infections such as STIs; increased prevalence of early pregnancies, abortion, and school dropout rates by the girl child and increased prevalence of child labour.

- In order to adhere with EIA requirements, trees are to be planted around the office to add to the existing greenspace.
- The community raised concerns on environmental pollution especially on increased air pollution (increased dust and smoke) which may reduce visibility, as well as increased noise pollution from the machinery that will be used. They suggested sprinkling of water before commencing work to minimize dust and noise pollution by the workers on the site.



**Plate 5-3: Presentation by the ESSO**



**Figure 5-1: Participants following the Presentation during the meeting**



Plate 5-4: The facilitating team following the discussions



Plate 5-5: One of the Participants contributing to the discussions

### 5.5. Summary of Issues Raised during public participation meeting and the responses

There were several issues that were raised by the community during public participation meeting and the team gracing the community meeting discussions gave responses to the concerns of the community as captured in Table 5-2.

Table 5-2: Summary of stakeholders Issues raised and the response

KEY ISSUES RAISED	RESPONSES
Members wanted to know if the project funding would be enough to complete the whole project at a go.	The BQ had not been finalized but the deliberations were still ongoing since prior discussions showed that funding is available to complete the proposed development.
Food vendors also highlighted that workers normally don't pay for food during construction.	A sub-committee comprising of contractor as well as county officials should listen, investigate and remedy the claims especially during payday, which normally happens in a fortnight.
There was a proposal to give priority when hiring the labour force to the residents of Msambweni and its surrounding.	Matter would be put forward to the contractor who would take a sizeable percentage of the workforce from the area.
Proposal to have the contractor come from Kwale county	Competitive bidding would be used and SDF&BE would give priority to the winning bid.
The stakeholders asked if they could deliver the raw materials for the construction since some groups were engaged in tendering of the raw	The community was assured that competitive bidding shall be adopted for fairness and the local supplier to be given priority in supply of materials. The contractor will make the final decision based on the qualifications.



materials needed.	
There was a concern on occupational Health Safety/Accidents	<ul style="list-style-type: none"> <li>• There would be provision of PPEs.</li> <li>• There would be strict adherence to WIBA and DOSHS requirements by the contractor.</li> </ul>
There was an issue on provision of latrines to acts as supplements to the toilets	The design team was asked to incorporate latrines on its design.
There was an issue on water capacity of the storage tanks and whether they would be enough to serve the building.	Members suggested that an underground tank to be constructed which would harvest water and pump it to the overhead tank.
Noise pollution during work	Members resolved that no work should be done during the night and if it must a notification would be given.
Members suggested hiring of TVET students as part of enhancing their skills inclusion in activity	The students would hand in their CVs and the contractor would give them consideration based on his terms of work.
Incidences of child labour	<ul style="list-style-type: none"> <li>• Provision of ID before hiring</li> <li>• Sensitization of BMU as well as CPIUs.</li> </ul>
Members noted that as the construction was on-going, GBV/ Sexual Exploitation Abuse cases would increase in both genders.	A code of conduct should be signed by workers as well as the contractor which would bar everyone from engaging in engaging in the cases.
PWD/Women inclusion during construction	<ul style="list-style-type: none"> <li>• Contractor to consider PWDs in tasks that do not require physical strength e.g. recording keeping and tallying and counting of supplies or even given the tender to supply goods and services.</li> <li>• Women to be accorded equal rights as male and should be offered an equal chance.</li> </ul>
Grievance mechanism	Members were informed of a Grievance redress mechanism which would be constituted to handle all grievances that may arise within the project.
STI/HIV&AIDS control	<ul style="list-style-type: none"> <li>• Provision of condoms dispenser that would be replenished regularly.</li> <li>• Awareness creation among community members on STIs and HIV.</li> <li>• Erection of HIV/AIDS banners /boards within the construction to sensitize workers.</li> </ul>
Members asked for consideration in their wages due to the high economic conditions.	The contractor would be informed so as to accommodate it in the BoQ.

## 6. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

### 6.1. Overview

This chapter covers the following highlights on the proposed development: positive impacts 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 Kwale County Fisheries headquarters in Msambweni 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 of 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
2.	Contribute to improved management of priority fisheries and mariculture	The proposed construction of Kwale County Fisheries headquarter office in Msambweni 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.
3.	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.
4.	Maximize employee satisfaction	The existing crowded fisheries offices under borrowed space, 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 other offices shall have working space.
5.	Enhance synergy and efficiency among the CPIU team members	The CPIU members are drawn from different departments and currently 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. Construction of the office shall also increase efficiency among the CPIU by enabling the officers to move near the departmental support

		which is critical for the implementation of the project. The CPIU currently is hosted in a different department office hence moving from office to the departmental office seeking support.
6.	Improve work productivity	Motivating the officers through improved working environment shall enhance the work productivity and the zeal to looking forward of going to the office to service the clients.
7.	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 the service at the construction site.
8.	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.
9.	centralizing administration of key institutions in blue economy,	The different county fisheries departmental staffs are currently hosted in different office locations distance from each other around Kwale County. And the CECMs for fisheries in Kwale County expressed the concern of Staff being squeezed under the veterinary offices with no permanent office of their own. The implementation of the project is therefore anticipated to create a one-stop shop for the county fisheries department clients.
10.	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.
11.	Acquiring a fisheries office	Kwale county do not have any fisheries of its own and this will be a great opportunity to acquire one under the proposed project activities
12.	Improved Service Delivery to the fish farmers	Improving the productivity of county workers shall trickle down to improved service delivery to the fish farmers within the county. This shall go a long way in improving extension services among the farmers.

### 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	DESCRIPTION
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<p>2. Occupational Health and Safety (<i>accidents and Injuries</i>)</p>	<p>Working on a construction site comes with risks and accidents to the workers. The risk could be associated with falling objects, injury due to the nature of occupational activities (ergonomic), operating or movement of machines and equipment, and falling of workers from heights. The occupational 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.</p>
<p>3. Public health and safety (<i>accidents and Injuries</i>)</p>	<p>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.</p>
<p>4. Visual/ aesthetic Impacts</p>	<p>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.</p>
<p>5. Leakages and spills</p>	<p>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.</p>
<p>6. Noise and vibrations</p>	<p>The movement of construction vehicles to 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 vehicle movement in and out of the office premises. Noise is also anticipated to be generated during decommissioning activities of the project.</p> <p>Measures have been proposed to mitigate against the amount of noise generated during construction.</p>
<p>7. Air pollution</p>	<p>Air quality is anticipated to be affected by exhaust fumes on site from operating of machines and moving of construction vehicles transporting materials from the site or to the site, from dust particles on-site during foundation excavation activities and during mixing of cement on site. Decommissioning activities, notably demolition and transportation of the waste, could be sources of particulate matter on site in addition to</p>

		the movement of the contractor's vehicles and machines undertaking the demolition activities.
8.	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.
9.	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.
10.	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 ( <i>provided for Recessed swinging type hose reel, Fire assembly point in the design, installation of fire extinguishers and provision of signages of fire hose Reel, fire exits and fire instructions</i> ) And additional measures have also been proposed in the ESMP.
11.	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. 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.
12.	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. 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
13.	Risk of Spread of HIV/AIDS	During construction, the project will employ a lot of youth. This particular category are 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 provide condom dispensers on site.
14.	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.
15.	Child Labour and Protection	Due to provision of cheap labour and differentiation in bargaining power, the underage workers may be employed leading to exploitation.
16.	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 favour. This could occur owing to differentiation in power or economic status.
17.	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 perceived well by some of the community or family members crating some violence against such.
18.	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
19.	Spread of COVID-19 amongst community	To meet requirements, there is need for community sensitization and awareness creation which is a highly consultative process.

members during consultation processes	Consultations activities increase the chances of interaction among the community members and in the event of an infected person, the virus shall spread among the community members.
20. Spread of COVID-19. During construction at work sites	The virus is highly infectious and there are high chances that it could spread at the work place in the event of an infection on the work site.

## 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.

Although 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 implementation of some of the ESMP actions will require a response beyond the project level. The project implementing agency (*SDFA&BE together with the county government through Joint 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	Frequency	Cost (KES)
1.	Occupational Health and Safety <i>(accidents and Injuries)</i>	Injuries and accidents	Workers on site	<ul style="list-style-type: none"> <li>▪ Contractor to develop a site safety action plan detailing safety equipment to be used, emergency procedures, restriction on site, frequency, 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</li> <li>▪ Train workers on safety and first aid skills before commencing works</li> <li>▪ Ensure safety of the construction workers by providing fully equipped first aid kit and ensure re-stocking</li> <li>▪ Provide appropriate personal protective equipment (PPE) to workers and training on appropriate use. <i>(Reflective jackets, helmets, face masks, ear plugs gloves, safety boots, etc.)</i></li> <li>▪ Adequate provision of requisite sanitation facilities for human waste disposal for workers on site</li> <li>▪ Ensure the work place is registered by Directorate of Occupational Health and Safety (DOHS) and maintain the log of all injuries that occur on site in the incident register, corrective actions for their prevention as appropriate.</li> <li>▪ The contractor is required to have WIBA insurance policy to compensate workers in the</li> </ul>	To ensure the safety of workers and persons on site	contractor and Joint Project supervising committee	daily basis	800,000

				<p>event of injuries.</p> <ul style="list-style-type: none"> <li>▪ Provide clean drinking water for the workers to mitigate against dehydration.</li> <li>▪ Have an understanding with a nearby health facility for emergency cases on-site before decisions are made.</li> <li>▪ 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.</li> <li>▪ Training of workers on covid-19 rules and requirements.</li> <li>▪ As applicable, only qualified personnel shall be allowed to operate construction equipments on site that may require specialized skills</li> </ul>				
2.	Public health and safety ( <i>accidents and Injuries</i> )	injuries and accidents	officers using nearby offices and Residents of the staff quarter	<ul style="list-style-type: none"> <li>▪ Ensure the safety of residents and officers with offices near the site by providing safety signs at strategic places around the access roads.</li> <li>▪ Hoarding off working sites to protect the public or unauthorized persons from entry.</li> <li>▪ Use of signs and warnings on sites on areas with high risks.</li> <li>▪ 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.</li> <li>▪ Reduce unnecessary speeding by the construction vehicles to control for accidents from the movement of pedestrians in the area.</li> <li>▪ Prior creation of awareness and sensitization of the public and the officers of any activities</li> </ul>	To ensure public safety at site area	contractor and the joint Project supervision committee	daily	250,000

				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	<ul style="list-style-type: none"> <li>• Cleaning of the site and organized locating of different construction materials.</li> <li>• Backfilling of soil cuttings</li> <li>• Landscaping of the project site</li> <li>• hoarding of the construction site using appropriate screening materials</li> </ul>	To reduce psychological impacts to public, residents, and workers on site	contractor and the joint Project supervision committee	daily	part of construction cost
4.	Leakages and spills	contamination and pollution	soil, water, plants, and air	<ul style="list-style-type: none"> <li>▪ In the event of hazardous waste leakage or spills, engage authorized waste handlers to dispose of contaminated soils.</li> <li>▪ Disposing of contaminated soils in cutting pit if volumes are low.</li> <li>▪ Use of NEMA licensed hazardous waste handlers to dispose off in licensed disposal areas.</li> <li>▪ Development of site-specific incident management or response plan.</li> <li>▪ Use of an authorized garage or fuel station in the project area by the contractor or specific concrete and oil traps should be constructed at the contractor's yard.</li> </ul>	to avoid any contamination and pollution on-site or at the contractor's camp	contractor and the joint Project supervision committee	often as required	part of construction cost
5.	Excessive Noise	auditory injuries	workers, officer sharing site and the	<ul style="list-style-type: none"> <li>• The contractor to use equipment with low noise levels or fitted with silencers where appropriate.</li> <li>• Regular servicing of the equipment to reduce the possibility of noise from worn-out parts.</li> </ul>	to ensure Workers and public safety	contractor and the Joint Supervision	regularly (weekly)	200,000

			public	<ul style="list-style-type: none"> <li>• Informing the public about the possibility of unusual noise levels, particularly to residents and nearby offices, whenever working on such activities.</li> <li>• Ensure adherence to PPE by workers<sup>9</sup> working on excessive noise and vibration activities</li> <li>• Minimize unnecessary hooting and speeding by construction vehicles.</li> <li>• Restricting noisy activities to be during the day and no noisy activities should be conducted on site at night.</li> <li>• Regular measurement of noise levels and devising control measures.</li> </ul>		Committee		
6.	Air pollution	air pollution	workers, area residents, and the general public	<ul style="list-style-type: none"> <li>• Vehicles to be used on-site to meet NEMA emission standards as required under NEMA air quality regulations.</li> <li>• Reduce unnecessary speeding or idling of construction vehicles</li> <li>• Use of non-lead paints during construction.</li> <li>• Adherence to proper uses of PPE by the workers, especially those working on activities requiring mixing of cement.</li> <li>• Inform the public and residents about activities with possibility of unusual air pollutants</li> <li>• Consider wetting all the sand or soil materials being transported to or from the construction site. Where appropriate, cover the materials</li> </ul>	to ensure workers and public safety	contractor and the joint project supervision committee	Regularly	200,000

<sup>9</sup> The measure should be according to the law (Occupation safety and health Act 2007, National Construction Act

				being transported to avoid being blown by the wind during transportation.				
7.	Solid Waste generation	increased waste generation at project site and contractor's camp if any	The environment in general (public nuisance, soil, water and air)	<ul style="list-style-type: none"> <li>• Promotion and adoption of the principles of waste avoidance, reduction, reuse and recycle. Through avoiding unnecessary generation of waste, use of debris for backfilling, use of waste materials on-site for other purposes where appropriate, or selling to recycling merchants.</li> <li>• Construction workers should be sensitized on appropriate waste handling and disposal of all construction related waste in designated areas</li> <li>• Designate proper waste transfer stations with adequate waste receptacles that encourage segregation and with controlled access.</li> <li>• Seek appropriate approvals from NEMA and County Government on management and Disposal of the waste<sup>10</sup>.<i>(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 vehicles to ferry waste from site)</i></li> <li>• Consider formulating a site-specific waste management plan informed by waste characterization<sup>11</sup>.</li> <li>• Observing waste management standards proposed under NEMA waste management</li> </ul>	to ensure waste is managed properly	contractor and the joint project supervision committee	regularly (weekly)	50,000

<sup>10</sup> 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).

<sup>11</sup> Waste characterization should consider waste from construction site and the contractors' camp if any.

				regulations 2006. ( <i>with a particular focus on waste separation and management before disposal</i> )				
8.	Increased waste water generation	increased waste generation at project site	The environment in general (public nuisance, soil and water)	<ul style="list-style-type: none"> <li>• Provision of mobile sanitation facilities for adequate human waste management<sup>12</sup> during the construction phase for workers and persons on site.</li> </ul>		Contractor and the supervising consultant	Regularly	part of construction and cost
9.	Increased Water consumption for construction	pressure on existing water resources	Kwale water and sewerage company and other water users	<ul style="list-style-type: none"> <li>• Sensitization and awareness creation among construction workers on significance of water conservation measures.</li> <li>• Curing the concrete structures during evening and early morning to reduce evaporation.</li> <li>• Covering the concrete structures to be cured with sand or any water retaining material to shield from direct sunlight</li> <li>• Regular maintenance and prompt response to leakage in the water system during construction phase.</li> <li>• Use of alternative water sources if available, particularly rain water if any during construction phase</li> </ul>	to ensure efficient and sustainable consumption of water resources	KWAW ASCO, contractor and the Joint Project Supervision Committee	Regularly	part of construction and cost
10.	Risk of Spread of HIV/AIDS	Increased cases of STI and	Surrounding community	<ul style="list-style-type: none"> <li>• Promote HIV/AIDS Prevention messaging</li> <li>• Access to safe sex (condoms-Male and female)</li> </ul>	HIV free site	contractor and the joint	weekly	100,000

<sup>12</sup> According to the Public Health Act Cap 242, 2012 and Occupation safety and Health Act 2007 requirements

		HIV/AIDS in view of worker on site	ty	<ul style="list-style-type: none"> <li>• Provide separate sanitary convenience to male and female workers</li> <li>• Install HIV testing services at the construction site or an MoU with an existing government health facility in the area.</li> <li>• Support infected workers with ARVs</li> <li>• Peer counseling services at the site</li> </ul>		Project supervision committee		
11.	Grievances	conflict between affected parties	All project stakeholders	<ul style="list-style-type: none"> <li>• Establish grievance redress committees at the site</li> <li>• Ensure contractor staff grievance structures exist</li> <li>• Sensitization and awareness creation among workers and the public on grievance redress mechanisms in place</li> </ul>	Prompt addressing of grievances and issues of concern	contractor and the joint project supervision committee	weekly	250,000
12.	Effects of Immigrant workers	increase in grievance	workers and the local communities	<ul style="list-style-type: none"> <li>▪ Contractor should use the local workforce as much as possible (preference to local community members on skills locally available).</li> <li>▪ Effective community engagement and strong grievance redress mechanisms on matters related to labour</li> <li>▪ All workers to sign an employment contract including a Code of Conduct governing appropriate behaviour</li> <li>▪ The workforce should be sensitized to local social and cultural practices and be educated on the expected behaviour and conduct</li> <li>▪ Contractor should prepare and enforce a No Sexual Harassment and Non-Discrimination Policy</li> <li>▪ Contractor should prepare and implement a gender action plan</li> </ul>	Maximize benefit to local people and conflict with immigrant	contractor and the joint project supervision committee	Regularly	Part of construction cost

				<ul style="list-style-type: none"> <li>▪ 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</li> </ul>				
13.	Labour related disputes/Child Labour and Protection	Abuse and exploitation of children	children	<ul style="list-style-type: none"> <li>▪ Prioritize to the extent possible recruitment of local labor</li> <li>▪ Adherence to labor laws and practices such as the working hours, payment, and no child/forced labor in their workforce</li> <li>▪ Ensure the workers have contracts with terms and conditions consistent with national labour laws and policies</li> <li>▪ The Contractor shall keep complete and accurate records of the employment of labor at the Site to include the names, ages, genders, hours worked, wages paid to all workers</li> <li>▪ 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.</li> <li>▪ Ensure that any child sexual relations offenses among contractors' workers are promptly reported to the police.</li> </ul>	zero tolerance to child labour	contractor and the joint project supervision committee	Regularly	Part of construction cost
14.	Gender Equity, Sexual Harassment	Injury and Psychological	Vulnerable persons at the work	<ul style="list-style-type: none"> <li>▪ The contractor should prepare and enforce a No Sexual Harassment and Non-Discrimination Policy</li> <li>▪ The contractor will strive to ensure equitable distribution of employment opportunities between men and women.</li> </ul>	Gender equity at work place and free of SEA	contractor and the joint project supervision	weekly	250,000



	and abuse amongst workers in the workplace		place.	<ul style="list-style-type: none"> <li>▪ Provision of gender disaggregated bathing, changing, sanitation facilities</li> <li>▪ Whenever harassment are recorded on site, the contractor should ensure prompt and effective remedial action</li> <li>▪ The employees should be trained and sensitized on appropriate behavior</li> <li>▪ All workers signing a code of conduct</li> <li>▪ Sensitization and awareness creation</li> </ul>		on committee		
15.	Gender-based violence at community level	Injury	Vulnerable persons in the community.	<ul style="list-style-type: none"> <li>▪ The contractor will implement provisions that ensure that gender-based violence at the community level is not triggered by the Project, including:</li> <li>▪ Effective and on-going community engagement and consultation, particularly with women and girls;</li> <li>▪ Review of specific project components that are known to heighten GBV risk at the community level,</li> <li>▪ Specific plan for mitigating these known risks, e.g. sensitization around gender-equitable approaches to employment, representation, management, school pupils etc</li> <li>▪ the contractor to implement the SEA/SH action plan fully</li> </ul>	prevent cases of GBV in the community due to project activities	contractor, community leadership and the joint project supervision committee	weekly	300,000
16.	Sexual exploitation and abuse (SEA)	Injury	Vulnerable persons in the community.	<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ The SEA action plan will include how the project will ensure necessary steps are in place for:</li> <li>▪ Prevention of SEA: including CoCs and</li> </ul>	zero tolerance to SEA	contractor and the joint project supervision committee	Regularly	300,000

				<p>ongoing sensitization of staff on responsibilities related to the CoC and consequences of non-compliance; project-level IEC materials;</p> <ul style="list-style-type: none"> <li>▪ 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;</li> <li>▪ 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-level IEC materials; regular community outreach to women and girls about social risks and their PSEA-related rights;</li> <li>▪ 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.</li> </ul>				
17.	Spread of	Infection or loss of	Community	<ul style="list-style-type: none"> <li>• Electronic means of consulting stakeholders and holding meetings shall be encouraged,</li> </ul>	avoidance	contractor and the	Daily	50,000

	COVID-19 amongst community members during consultation processes	life	members	<p>whenever feasible. One-on-one engagements with stakeholders while observing social distance and adhering to PPE wearing shall be enforced;</p> <ul style="list-style-type: none"> <li>• 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);</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• In situations where online interaction is challenging, disseminate information through digital platform (where available) like Facebook and WhatsApp &amp; Chat groups.</li> <li>• Ensure online registration of participants, distribution of consultation materials and share feedback electronically with participants.</li> </ul>	of infection	joint supervision committee		
18.	Spread of COVID-19. During construction at work sites	Infection or loss of life	workers and members of the public accessing	<ul style="list-style-type: none"> <li>• 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</li> </ul>	avoidance of infection	contractor and the joint supervision	Daily	50,000

			<p>the site for some reason</p> <p>with the World Bank guidance on COVID-19, Ministry of Health Directives and site-specific project conditions;</p> <ul style="list-style-type: none"> <li>• Mandatory provision and use of appropriate Personal Protective Equipment (PPE) shall be required for all project personnel including workers and visitors;</li> <li>• 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;</li> <li>• 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;</li> <li>• Ensure routine sanitization of shared social facilities and other communal places routinely including wiping of workstations, door knobs, hand rails etc.;</li> </ul>		<p>committee</p>		
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The estimated total cost for the implementation of the construction phase ESMP is 2.9 Million, including monitoring. 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**

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	GOAL	RESPONSIBILITY	FREQUENCY	COST (KES)
1.	Occupational Health and Safety ( <i>accidents and Injuries</i> )	Injuries and accidents	Maintenance and repair workers	<ul style="list-style-type: none"> <li>• Ensure compliance to Occupational Safety and Health Act Cap. 514 and it's Subsidiary Legislations standards.</li> <li>• Provide personal protective equipment to operation and maintenance workers.</li> <li>• 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.</li> <li>• Cordoning off working sites to protect the public or unauthorized persons during repair and maintenance of the different utility systems on site</li> <li>• Creation of awareness and training of workers on site on safety and first aid skills.</li> <li>• Hiring employees with proper qualifications for specialized and risky tasks during operation and maintenance of the various utility systems.</li> <li>• Adherence to Covid-19 rules as provided by the ministry of health and the bank while conducting daily duties.</li> <li>• Providing requisite PPE and training of workers on covid-19 rules and</li> </ul>	Ensure the safety of workers who will be conducting routine repair and maintenance activities.	contractor and county government fisheries department	regularly	To be determined under operation and maintenance costs

requirements.								
2.	Public health and safety ( <i>accidents and Injuries</i> )	Injury and accidents	clients of the county fisheries department	<ul style="list-style-type: none"> <li>• using signage during cleaning, maintenance, or repair to warn the public</li> <li>• Easily accessible fire risk information to the public visiting the premise</li> </ul>	ensure protection and safety of the public who visit the office building	contractor and county fisheries department	Regulatory	To be determined under operation and maintenance costs
3.	Solid Waste generation	contamination and littering	public nuisance, soil, water and air	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Provide for a waste transfer station at the premise for temporal holding of waste before final disposal.</li> <li>• Sensitization and awareness creation among the office building users on the significance of waste recycling.</li> <li>• To engage the county government environment and natural resources department mandated with waste management to collect and properly dispose of the waste.</li> </ul>	to ensure waste is managed properly	county government environment and natural resources and fisheries departments	Regulatory	To be determined under operation and maintenance costs
4.	Waste water generation	increased waste water generation during	public nuisance, soil and water	<ul style="list-style-type: none"> <li>• Regular sensitization and awareness to building users as well as discouragement on releasing detergents or other chemical solutions in black water system.</li> <li>• Regular cleaning of the wastewater drainage system</li> </ul>	to ensure adequate treatment and management of waste	KWAWAS CO and county government fisheries department	Regulatory	To be determined under operation and maintenance

		operatio n		<ul style="list-style-type: none"> <li>• Regular and proper maintenance of the drainage system</li> <li>• Prompt response to any reported blockage and leakages</li> <li>• Sensitization and awareness of building users from discharging or emptying any chemical solutions or oils to the sewer system.</li> <li>• Treating the waste water through a biodigester and using the water for landscaping.</li> </ul>	water			nce costs
5.	Fire Hazards	destructi on of property in the building and injury to users	office building users and County government assets	<ul style="list-style-type: none"> <li>• Provide recessed swinging type hose reel complete with 30 meters of 20mm internal diameter rubber fire hose with nylon spray/jet shut off nozzle</li> <li>• Provision of a Fire assembly point in the design</li> <li>• Installation of fire extinguishers in the building</li> <li>• Provide signages of fire hose Reel, fire exits and fire instructions.</li> <li>• Provide for fire risk and response signage with short and clear information.</li> <li>• Regular fire drills for the building users</li> <li>• Regular awareness and sensitization on fire safety measures and response to the users of the building.</li> <li>• Clear fire incidents reporting procedures and response. Ensure regular provision of operational emergency reporting contacts.</li> </ul>	to ensure the building is protected from fire hazards	contractor and county government fisheries department	Regula rly	To be determine d under operation and maintena nce costs

				<ul style="list-style-type: none"> <li>• Regular servicing and maintenance of the fire extinguishers.</li> <li>• Ensuring availability of adequate water resources at the premise at all times for the hydrants.</li> </ul>				
6.	Increased Water consumption	pressure on existing water resources	Kwale water and sewerage company (KAWASCO) and other water users	<ul style="list-style-type: none"> <li>• Sensitization and awareness creation among users of the building on significance of water conservation measures.</li> <li>• Regular maintenance and prompt response to leakage in the water system.</li> <li>• Use of alternative water sources eg rain harvesting</li> <li>• Prompting reporting of leakages through sensitization of the public members</li> </ul>	to ensure efficient and sustainable consumption of water resources	KAWASCO and county government fisheries department	Regularly	To be determined under operation and maintenance costs
7.	Increased Energy consumption	contribution to carbon generation and pressure on energy resources	energy resources and climate change	<ul style="list-style-type: none"> <li>• Sensitization and awareness creation among office users on the significance of energy conservation measures</li> <li>• Sensitization and awareness creation among the maintenance team to continue observing the use of energy-saving electrical appliances on the building.</li> <li>• Proper and regular maintenance of the green energy appliances and equipment provided for in the design of the building.</li> </ul>	to ensure efficient and sustainable consumption of energy resources	county government fisheries department	Regularly	To be determined under operation and maintenance costs
8.	Spread of COVID-19. During operation at work sites	Infection or loss of life	Office Users	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	avoidance of infection	Public Health and County Government	Daily	To be determined under operation and



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.;

departments

maintenance costs

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

NO.	ASPECT	IMPACT	RECEPTOR	MITIGATION MEASURES	GOAL	RESPONSIBILITY	FREQUENCY	COST (KES)
1.	Occupational Health and Safety ( <i>accidents and Injuries</i> )	Injury and accidents	Workers	<ul style="list-style-type: none"> <li>• Preparation of project decommissioning plan.</li> <li>• Ensure the safety of the decommissioning workers by putting first aid area and injury reporting mechanism</li> <li>• The contractor should consider having a WIBA insurance policy to compensate workers in an event of an accident on site.</li> <li>• Provide personal protective equipment to workers.</li> <li>• Recording all injuries that occur on site in the incident register, corrective actions for their prevention.</li> <li>• Cordoning off demolition sites to protect the public or unauthorized persons</li> <li>• use of signs and warnings on sites with high risks</li> <li>• Creation of awareness and training of workers on-site on safety and first aid skills.</li> <li>• Hiring employees with proper qualifications for specialized and risky tasks.</li> <li>• Ensure compliance to Occupational Safety and Health Act Cap. 514 and it's Subsidiary Legislations.</li> </ul>	to ensure workers safety	County Department of fisheries and decommissioning contractor	Daily	To be determined under the decommissioning plan
2.	Leakages and spills	contamination and	soil, water,	<ul style="list-style-type: none"> <li>• In the event of hazardous waste leakage or spills, engage authorized waste handlers to</li> </ul>	to reduce contamination	contractor	regularly	To be determined

		pollution	plants, and air	dispose of contaminated soils.	on on site			ed under the decomm issionin g plan
				<ul style="list-style-type: none"> <li>• Disposing of contaminated soils in cutting pit if volumes are low.</li> <li>• Use of NEMA licensed waste handlers to dispose of in licensed disposal sites.</li> <li>• Development of site-specific incident management or response plan.</li> <li>• Use of an authorized garage or fuel station in the project area by the contractor or specific concrete and oil traps should be constructed at the contractor's yard.</li> </ul>				
3.	Excessive Noise	Auditory injuries and psychological nuisance	workers, residents and neighbouring offices	<ul style="list-style-type: none"> <li>• Adequate use of PPE by the workers e.g. earplugs</li> <li>• Working on and restricting noisy activities during the day</li> <li>• Reducing the duration of exposure of workers to high occupational noise levels during demolition.</li> <li>• Acquisition of permits/Licenses for any activity with high noise levels eg drilling of walls or slabs for demolition.</li> <li>• Using models of machines and equipment with low noise levels.</li> <li>• workers using drilling or handheld pneumatic equipment to be provided with specialized anti-vibrating gloves,</li> <li>• Switching off vehicles and machines when not in use,</li> <li>• Avoiding unnecessary hooting,</li> <li>• Warnings to be issued to the locals in case of any unusual noise levels,</li> </ul>	to ensure workers and public safety	County department of fisheries and decommissioning contractor	Daily	To be determined under the decomm issionin g plan

				<ul style="list-style-type: none"> <li>• Ensure that NEMA noise and Vibration standards are observed in all project activities.</li> </ul>				
4.	Air pollution	contamination of air	air, local communities, and workers	<ul style="list-style-type: none"> <li>• Workers to use masks when working in dusty conditions during the decommissioning process.</li> <li>• Use all means possible to suppress dust if considered to be a menace during demolishing of obsolete walls or structures on-site</li> </ul>	to ensure workers and public safety	County department of fisheries and contractor	Daily	To be determined under the decommissioning plan
5.	Solid Waste generation	littering environment and contamination	water, air, soils, environment, and local residents	<ul style="list-style-type: none"> <li>• Proper disposal of any hazards waste from the decommissioned site.</li> <li>• Preparation of waste management plan to guide waste management and disposal activities of all debris from demolition activities.</li> <li>• Disposal of debris to NEMA authorized dumping sites</li> <li>• Use of certified vehicles or NEMA licensed waste disposal firms for waste management and disposal</li> </ul>	to ensure waste is managed properly	county department of environment and natural resources, department of fisheries and decommissioning contractor	Weekly	To be determined under the decommissioning plan
6.	Spread of COVID-19. During construction at work sites	Infection or loss of life	workers and members of the public accessing the site	<ul style="list-style-type: none"> <li>• 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-</li> </ul>	avoidance of infection	contractor and the joint supervision committee	Daily	To be determined under the decommissioning

for some  
reason

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.;

e

g plan

## 8. Environmental and Social Monitoring Plan (EMoP)

### 8.1. Chapter Overview

The chapter highlights the environmental and social monitoring indicators for the anticipated negative impacts as captured in Table 8-1 . The preparation of the plan was informed and guided by the indicators that were anticipated in the KEMFSED project Environmental and Social Management Framework 2019.

The institutional responsibilities for implementation and supervision are presented in Section 3.7 of this report. The progress reports prepared, incorporating ESMP implementation progress status, shall be on a monthly and quarterly basis. The client (SDF&BE) including the project joint supervising committee and the safeguards consultants shall review the reports and submit to the World Bank.

In addition to regular reporting, all 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.

**Table 8-1: Environmental And Social Monitoring Plan (EMoP)**

PARAMETER/ ACTIVITY	LOCATION	MEANS OF MONITORING	FREQUENCY	RESPONSIBLE AGENCY	
				IMPLEMENTED BY	SUPERVISED BY
<b>Occupational Health and Safety</b>	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,	Daily	Contractor	Supervising consultant/JSPC

		overall, sanitation facilities, anti-vibrating gloves			
COVID-19 spread among workers	Construction and at operation phase	Approved SOPs in line with World Bank and 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	weekly	Contractor	Supervising consultant/JSPC
COVID-19 spread among community members during consultations	at construction	visual inspection of social distance, electronic channels adopted for engagement of stakeholders, the number of stakeholders per meeting, provision of appropriate PPE during meetings, traditional communication channels in use, feedback and suggestion platforms for participants, size of groups attending meetings and digital platforms in use to disseminate information to stakeholders	regularly based on the consultation sessions	Contractor	Supervising consultant/JSPC
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.	weekly	Contractor	Supervising consultant/JSPC
Leakages and spills of greases, oil or	contractor yard and construction	Visual inspection of hazardous waste leakage or spills to soils on site, records of cutting pits	weekly	Contractor	Supervising consultant/JSPC

fuel	n site	for disposed off contaminated soils, Developed site-specific incident management or response plan.			SPC
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.	weekly	Contractor	Supervising consultant/J SPC
Air quality	Construction site and along construction vehicle movement routes	Physical inspection of vehicles records to ensure meets emission requirements, Use of masks while working in dusty conditions, shielding wind impacts during construction, low speed of construction vehicle, catalytic devices on vehicle and suppress dust	daily	Contractor	Supervising consultant/J SPC
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.	Monthly	Contractor	Supervising consultant/J SPC
Grievances among project stakeholders	construction site	grievance redress committee formed, existence of grievance redress structures put in place, sensitization and awareness creation among workers and other stakeholders on grievance redress structures in place, grievance log forms and	Monthly	contractor and safeguards officer	Supervising consultant/J SPC



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.	Monthly	contractor	Supervising consultant/J SPC
Gender Equity, Sexual Harassment and abuse amongst workers in the workplace	construction site	Training of workers on sexual harassment, signing of code of conduct prohibiting GBV/SEA, equitable distribution of employment opportunities, disaggregated bathing and sanitation facilities on site and records of sexual harassment.	Monthly	contractor	Supervising consultant/J SPC
GBV at community	construction site	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.	Quarterly	safeguards officer	Supervising consultant/J SPC
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 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	Quarterly	safeguards officer	Supervising consultant/J SPC
Child Labour and Protection	construction site	Workers to have national identification card, recruitment	Monthly	safeguards	Supervising consultant/J

		policy prohibiting child labour put in place and review of employee records		officer	SPC
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 employment records. No. of Grievance recorded from employees and how they were addressed	Monthly	safeguards officer	Supervising consultant/JSPC

**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)	<ul style="list-style-type: none"> <li>No of local workers employed at construction site</li> <li>No of local service providers employed on site to provide security or electrical conduits or cables.</li> </ul>	Monthly	Contractor	Supervising consultant /JSPC
Business opportunities	Construction site	Materials available within the local, Identify local suppliers and identified women food vendor	<ul style="list-style-type: none"> <li>Amount of materials Sourced locally</li> <li>No of local suppliers</li> <li>No of local women food vendors supplying the site.</li> </ul>	Monthly	Contractor	Supervising consultant /JSPC
Acquiring a fisheries office	operation	Constructed office	Operational offices	Monthly	Contractor	Supervising consultant /JSPC

## **9. GRIEVANCES MANAGEMENT SYSTEM AND PROCEDURE**

### **9.1. Chapter Overview**

This 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 Kwale County fisheries headquarter office sub-project construction activities or the contractor activities as part of the ESIA ESMP implementation. The 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 Kwale county fisheries headquarter in Msambweni 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 is 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 Kwale 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 Log**

Documentation of complaints and grievances is important, including those that are communicated informally and orally. These should be logged, assessed, assigned to an individual for management, tracking and closed out when resolved. Records provide a way of understanding patterns and trends in complaints, disputes and grievances over time.

The log will contain a record of the person responsible for an individual complaint, and record dates for the following events:

- i. Date the complaint was reported;
- ii. Date the grievance log was uploaded onto the project database;
- iii. Date information on proposed corrective action sent to complainant (if appropriate);
- iv. The date the complaint was resolved

A sample grievance redress form is included in Annex VIII of this report.

Once parties agree on a path forward – such as an apology, compensation or an adjustment to operations – an action plan should be formalized and implemented. Depending on the issue, responses may vary from a single task to a program of work that involves different parts of the operation. Effective responses will also include engagement with parties involved to ensure that the response continues to be appropriate and understood.

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

- Ensure access to service – health, psychosocial, legal/security, safe house/shelter, livelihood
- 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

### **9.2.4. Principles of the GRM**

Fairness and transparency – For anyone seeking to resolve their complaints, the perception of a fair and transparent process is extremely important. The GRM systems will be fair and incorporate all principles of natural justice.

- Established early during commencement of the project – Early establishment of grievance management process at the project site will help create a foundation for an open, respectful and trusting connection with community stakeholders, and set a positive tone for future dialogue with the project.

- Scaled to fit the project needs – The GRM system will be scaled to fit the project needs and will not be uniform across the board. It will be relative to the level of risks and potential impacts the project is likely to create.
- Simplicity – The GRM system will be as simple and accessible to the community and other stakeholders in the simplest way possible.
- Timely – the GRM will receive and resolve all grievances with 14 days. All grievances will be recorded with clear timeframes. All recorded complaints will be responded to, and be closed out within 14 days.
- Verifiable records and tracking of grievances – All grievances will be recorded, tracked and reported on status. The complainant will be briefed at every stage of addressing the grievance and will be escalated in case they cannot be managed at the local level

### 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:

- County 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.

### **9.3.3. Third Level: Sub-County - Grievance Redress Committee (SC-GRC)**

If the complainant is dissatisfied and a satisfactory resolution cannot be reached by the JPSC, the complaint will be handled by the Grievance Committee. A dedicated Grievance Committee will be established to assess grievances that arise from disputes and membership will include:

- *One representative of the Sub-County Administration - National Government*
- *One representative of Sub- County Administration; - County Government of Kwale*
- *One representative of the Department of Fisheries;*
- *Environmental or Social Officer from the County Government*
- *One representative of the construction contractor, acting as an observer*
- *Three representatives of the affected people, amongst them at least one woman, chosen i.e. from community based organizations, elders, PWDs.*

KEMFSED technical assistants will organize and facilitate the meetings to happen. This committee must have a quorum of at least four persons. The Grievance Committee will be constituted for as long as grievances are being lodged. Once the Grievance Committee has determined its approach to the lodged grievance, this will be communicated to the GO, who will communicate this to the complainant. If satisfied, the complainant signs to acknowledge that the issue has been resolved satisfactorily. If the complainant is not satisfied, however, the complainant notes the outstanding issues, which may be re-lodged with the Grievance Committee or the complainant may proceed to lodge complain to the next level through the CPIU. The complainant will be informed of the options available to address their concerns and assisted to do so.

### **9.3.4. Fourth Level: National Project Coordinating Unit**

The NPCU will be composed of the project Coordinator, Project Engineer, the project technical advisor, Project Financial Specialist and the NPCU Environmental and Social Safeguards specialists. The NPCU will assess and consider grievances referred to them from the Sub-County Grievance Redress Committee through the CPIU. It is assumed that most of those complain will mainly be those that related to need for additional resources and major decisions to be made.

### **9.3.5. Fifth Level: World Bank Grievance Redress Service**

The World Bank's Grievance Redress Service (GRS) is a grievance mechanism managed by the World Bank. It provides a fast and accessible complaint mechanism for individuals and communities who believe that a World Bank-financed project causes harm to their community.

The GRS is an additional tool that supplements project-level grievance redress mechanisms. If issues cannot be resolved at the project level, grievances can be brought directly to World Bank Management through the GRS. The GRS screens complaints and supports World Bank teams and complainants to identify a timely solution to issues raised in complaints. In terms of the support it provides, the GRS offers various services to teams, ranging from support in reviewing project documents and identifying issues of compliance with Bank policies, facilitating dialogue between the project teams and communities, to advising on possible solutions and best practices. The process established by the GRS helps affected individuals and communities engage with the World Bank and the project implementing agency to address issues as they happen, for faster resolution of complaints. The GRS is part of World Bank Management but is functionally separate and independent from the Bank's teams that are responsible for preparing and supporting the implementation of projects. The project implementing team will create awareness among the community members on existence of World Bank Grievance Redress Service (GRS) and how they can file grievance online.

#### **9.3.6. Sixth Level; The Environment court and Other Judicial Process**

Since the project is related to natural resources management, it is anticipated that emotive issues related to access to natural resources and land use management main come to the fore during implementation of sub-project activities. The Environment and Land Court is one of the Courts contemplated by article 162(2) as a Superior Court to adjudicate matters related to environment, land and public consultation. The court has the same status as the High Court. The court is established under section 4 of the Environment and Land Court Act No. 19 of 2011<sup>13</sup>. The Court has original and appellate jurisdiction to hear and determine all disputes in accordance with Article 162(2) (b) of the Constitution and with the provisions of this Act or any other law applicable in Kenya relating to environment and land. Further, in exercise of its jurisdiction under Article 162(2) (b) of the Constitution, the Court has power to hear and determine disputes, relating to environmental planning and protection, climate issues, land use planning, title, tenure, boundaries, rates, rents, valuations, mining, minerals and other natural resources; relating to compulsory acquisition of land; relating to land administration and management; relating to public, private and community land and contracts, choices in action or other instruments granting any enforceable interests inland; and any other dispute relating to environment and land. The Court is also empowered to hear and determine applications for redress of a denial, violation or infringement of, or threat to, rights or fundamental freedom relating to a clean and healthy environment under Articles 42, 69 and 70 of the Constitution. The Court may make any order and grant any relief as the Court deems fit and just, including, interim or permanent preservation orders including injunctions; prerogative orders; award of damages; compensation; specific performance; restitution; declaration; or costs.

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<sup>13</sup>No. 8 of 1999, Laws of Kenya, s. 3(3); See also Environmental Management and Co-ordination (Amendment) Act, 2015 which expands the provisions to include the right to clean and healthy environment and also the right of a person to file suit on his behalf or on behalf of a group or class of persons, members of an association or in the public interest (s. 3).

Where applicable, the court is empowered to adopt and implement, on its own motion, with the agreement of or at the request of the parties, any other appropriate means of alternative dispute resolution including conciliation, mediation and traditional dispute resolution mechanisms in accordance with Article 159(2) (c) of the Constitution. Indeed, where alternative dispute resolution mechanism is a condition precedent to any proceedings before the Court, the Court must stay proceedings until such condition is fulfilled. It is therefore clear that environmental rights in Kenya are well entrenched under the Constitution and statutes on environmental law.

## **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 fisheries office at Amu Island 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. Complainants 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 chair person 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 and 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 and 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.

#### **9.5. Institutional Arrangement at SL-GR**

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

- 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 will be oriented with the grievance management system suggested in the ESIA and provided with skills to handle complaints in a just and fair manner. The capacities of the Grievance Redress Committee members will also be enhanced around project mobilization, implementation, Gender Based Violation, Sexual Harassment, Labor issues, child labor and conflict management.

## **10. CONCLUSION AND RECOMMENDATIONS**

### **10.1. Conclusion**

The proposed construction of Kwale County Fisheries Headquarters office infrastructure will consist of constructing of a 2-storey building, boundary wall, gate house, a bio-digester and civil works (*parking, walk way, storm water drains*). The proposed project area was noted to be a highly modified habitat through anthropogenic activities mainly from residential homes and public offices. The project has generally positive impacts and for the negative impacts, easily implementable mitigation measures have been proposed. Several institutions as mandated by the laws guiding and governing the project activities will have differing roles on the sub-project at varied phases of the project cycle which shall require synergy as facilitated by SDBE&F. The environmental and social assessment findings indicate 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, the nature of anticipated sub-project activities and with mitigation measures having been proposed under this report.

### **10.2. Mandatory Requirements**

The development of the proposed Kwale 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 need are a requirement for the implementation of the sub-project;

- The contract shall be between the National Project Coordination Unit of the State Department of Fisheries, Aquaculture and Blue Economy (SDFA&BE) and the contractors
- The subcontracts of the contractor will be accepted and cleared by the JPSC in charge of the supervision of the works. The JPSC will be responsible that the 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 Joint Project Supervision Committee to ensure full implementation by contractors and subcontractors of the ESMPs 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 to prepare a Construction ESMP to be implemented in construction by the contractor and all its subcontractors.

- 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 to prepare an Operation ESMP (EMoP) to guide the operation and maintenance of the building by the Kwale County Government to do so during operation and decommissioning stages of the project as required.
- The Joint Project Supervision Committee 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 project 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. Kwale County Integrated Development Plan 2018-2022
12. The Fisheries Management and Development Act, 2016, Kenya Gazette Supplement No. 156 (Acts No. 35)
13. The Physical and Land Use Planning Act, 2019, Kenya gazette supplement No. 129 (Acts No. 13).
14. The Public participation Act 2016, Kenya gazette supplement No. 175 (senate bills No. 15) *Government printer, Nairobi.*

**ANNEXES**

## **I. PROJECT DESIGN AND DRAWINGS**

**As per attached Annex 1: Msambweni New Office Designs**



**ANNEX 1 – PROJECT DESIGNS  
AND  
DRAWINGS**

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## PROJECT 06

### PROPOSED DEVELOPMENT OF FISHERIES OFFICES IN MSAMBWENI.

No.	DRAWING NUMBER.	DRAWING SHEET.	DRAWING FORMAT.	DOCUMENT STATUS.	
0 1	SITE PLAN	06 - 001 - 001	A 3	P D F	PROVIDED
0 2	GROUND FLOOR	06 - 001 - 002	A 3	P D F	PROVIDED
0 3	1 ST FLOOR	06 - 001 - 003	A 3	P D F	PROVIDED
0 4	ROOF 01	06 - 001 - 004	A 3	P D F	PROVIDED
0 5	ROOF 02	06 - 001 - 005	A 3	P D F	PROVIDED
0 6	01 ELEVATION	06 - 001 - 006	A 3	P D F	PROVIDED
0 7	02 ELEVATION	06 - 001 - 007	A 3	P D F	PROVIDED
0 8	03 ELEVATION	06 - 001 - 008	A 3	P D F	PROVIDED
0 9	04 ELEVATION	06 - 001 - 009	A 3	P D F	PROVIDED
1 0	X-X SECTION	06 - 001 - 010	A 3	P D F	PROVIDED
1 1	GATE HOUSE	06 - 001 - 011	A 3	P D F	PROVIDED
1 2	DOOR SCHEDULE	06 - 001 - 012	A 3	P D F	PROVIDED
1 3	WINDOW SCHEDULE 01	06 - 001 - 013	A 3	P D F	PROVIDED
1 4	WINDOW SCHEDULE 02	06 - 001 - 014	A 3	P D F	PROVIDED
1 5	WINDOW SCHEDULE 03	06 - 001 - 015	A 3	P D F	PROVIDED
1 6	WINDOW SCHEDULE 04	06 - 001 - 016	A 3	P D F	PROVIDED
1 7	3D	06 - 001 - 017	A 3	P D F	PROVIDED

- NOTES:**
- GENERAL**
- All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
  - The contractor must check and verify all dimensions before commencing any work. Any discrepancy must be notified to the architect.
  - 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**
- Damp proof course must be provided under all external walls at grade. DPC to be minimum 150mm above ground level.
  - All slab at grade to be poured on 1000gauge polythene on 50mm stone dust blinding on compacted hardcore.
  - All soils under slab and around external foundation to be treated for termite control.
  - Window cills must be finished before internal plastering.
- CIVIL**
- All soils on cut embankment to be stabilized. The slope is not to exceed the natural angle of repose of the soil.
- STRUCTURAL**
- All RC works to Structural Engineer's details.
  - Depth of foundation to be determined on site to SE approval.
  - All walls less than 200mm thick to be reinforced with hoop iron at every alternate course.
- MECHANICAL**
- All plumbing and drainage to comply with the relevant approving local authority's specifications.
  - All service ducts to be accessible from all floors.
  - Deep seal or anti-vac to all fittings connected to the SVP's or waste pipes. All bends and junctions to have inspection plates.
  - SVP to be provided at the head of the drainage.
  - Drain pipes passing beneath buildings and driveways to be encased in 150mm concrete surround.
  - All underground foul and waste drain pipes shall be UPVC and comply to BS 414 and 5255; cast iron to comply to BS 497 table 6 grade C except ones in the driveway which shall comply to BS 556.
  - All inspection chamber covers and frames shall be cast iron to comply to BS 497 table 6 grade C except
  - Storm water drain shall comply to BS 556.
  - Minimum slopes to drains shall be 1%.
  - 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.
  - All testing of pipes must be completed before plastering.
  - All mechanical works must be co-ordinated with electrical works. Any conflicts must be clarified before work begins.
- ELECTRICAL**
- All conduits must be laid before plastering.
  - All electrical work must be co-ordinated with mechanical works. Any conflicts must be clarified before work begins.
- FIRE**
- Install water ring main with fire hydrant with 2.5" instantaneous coupling adaptors
  - Provide underground water tank with automatic electric booster pump for ring main
  - Provide automatic push button fire alarm system
  - Provide heat and smoke detectors in each room
  - Provide 9kg. dry powder fire extinguishers to ME specifications

REVISIONS		
No.	Description	Date

Project : **PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

Plot L. R. No.:

Location : **MSAMBWENI, KWALE COUNTY**

Client : **STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

DRAWING NO.:

Signature \_\_\_\_\_

Subject : **WORKING DRAWINGS.**

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

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

# SITE PLAN



SITE PLAN  
SCALE 1:100

- NOTES:**
- GENERAL**
- All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
  - The contractor must check and verify all dimensions before commencing any work. Any discrepancy must be notified to the architect.
  - 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**
- Damp proof course must be provided under all external walls at grade. DPC to be minimum 150mm above ground level.
  - All slab at grade to be poured on 1000gauge polytheneon 50mm stone dust blinding on compacted hardcore.
  - All soils under slab and around external foundation to be treated for termite control.
  - Window cills must be finished before internal plastering.
- CIVIL**
- All soils on cut embankment to be stabilized. The slope is not to exceed the natural angle of repose of the soil.
- STRUCTURAL**
- All RC works to Structural Engineer's details.
  - Depth of foundation to be determined on site to SE approval.
  - All walls less than 200mm thick to be reinforced with hoop iron at every alternate course.
- MECHANICAL**
- All plumbing and drainage to comply with the relevant approving local authority's specifications.
  - All service ducts to be accessible from all floors.
  - Deep seal or anti-soc to all fittings connected to the SVP's or waste pipes. All bends and junctions to have inspection plates.
  - SVP to be provided at the head of the drainage.
  - Drain pipes passing beneath buildings and driveways to be encased in 150mm concrete surround.
  - All underground foul and waste drain pipes shall be UPVC and comply to BSS 614 and 5255; cast iron to comply to BSS 497 table 6 grade C except ones in the driveway which shall comply to BSS 556.
  - All inspection chamber covers and frames shall be cast iron to comply to BSS 497 table 6 grade C except
  - Storm water drain shall comply to BSS 556.
  - Minimum slopes to drains shall be 1%.
  - 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.
  - All testing of pipes must be completed before plastering.
  - All mechanical works must be co-ordinated with electrical works. Any conflicts must be clarified before work begins.
- ELECTRICAL**
- All conduits must be laid before plastering.
  - All electrical work must be co-ordinated with mechanical works. Any conflicts must be clarified before work begins.
- FIRE**
- Install water ring main with fire hydrant with 2.5" instantaneous coupling adaptors
  - Provide underground water tank with automatic electric booster pump for ring main
  - provide automatic push button fire alarm system
  - provide heat and smoke detectors in each room provide 9kg. dry powder fire extinguishers to ME specifications

**REVISIONS**

No.	Description	Date

Project : **PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

Plot L. R. No. : **MSAMBWENI, KWALE COUNTY**

Location : **MSAMBWENI, KWALE COUNTY**

Client : **STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

DRAWING NO. : **06 - 001 - 001**

Signature : \_\_\_\_\_

Subject : **WORKING DRAWINGS.**

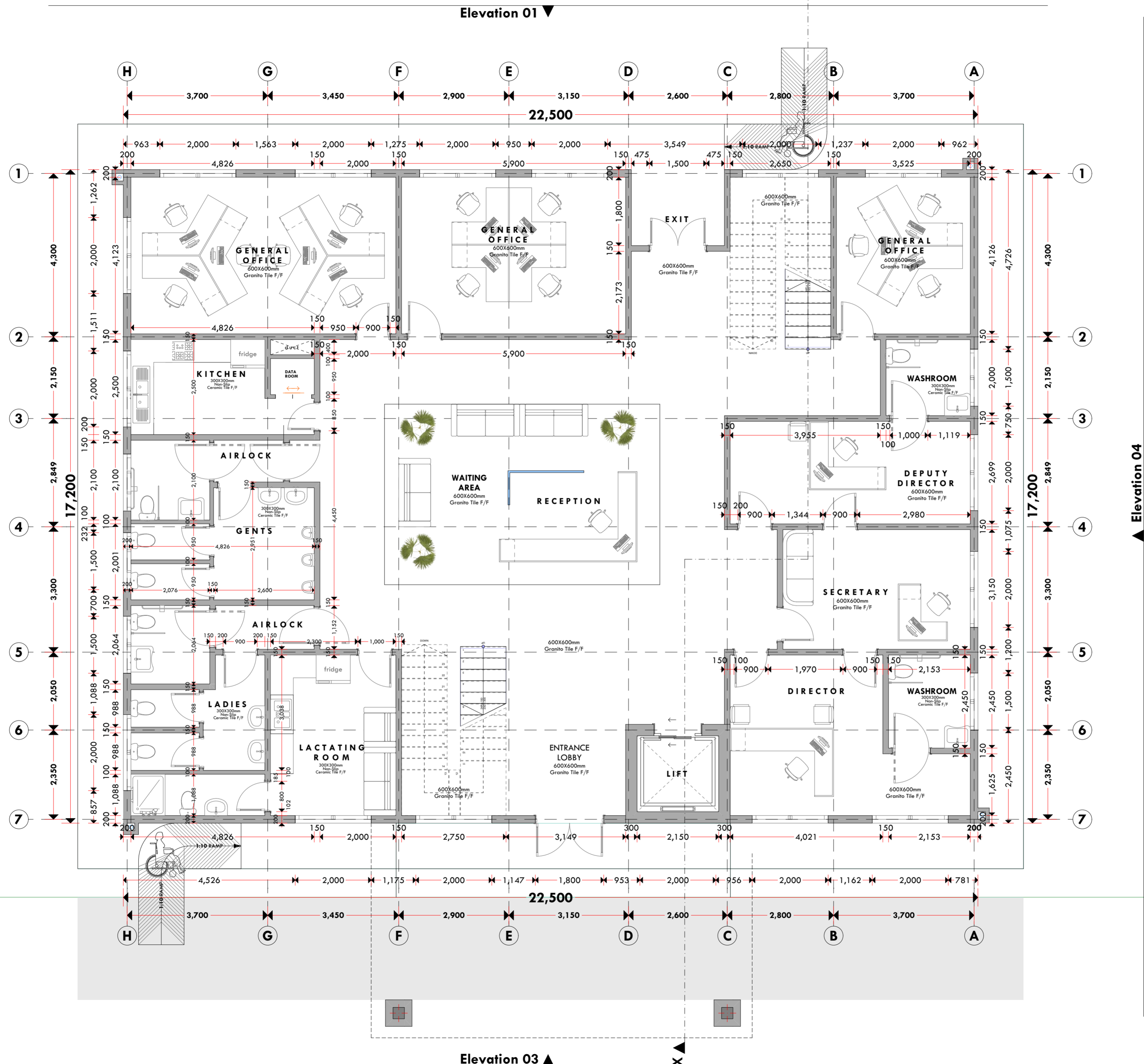
Consultancy : **ARPRIM CONSULTANTS**  
P.O BOX 12969-0040 NAIROBI  
TEL: 020-884312/8  
Website : www.arprimconsultants.com

Drawn by : <b>PETER MOMANYI</b> B. Arch. (Hons).	Checked by : <b>F. TUNDULI</b> B. Arch. (Hons) .M. Arch. (reg. No. A1552)	Checked by : <b>J. MOMANYI</b> B. Arch. (Hons) .M. Arch. (reg. No. A1122)
--	---	---

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

Scale 1:100

# GROUND FLOOR



- NOTES:**
- GENERAL**
- All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
  - The contractor must check and verify all dimensions before commencing any work. Any discrepancy must be notified to the architect.
  - 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**
- Damp proof course must be provided under all external walls at grade. DPC to be minimum 150mm above ground level.
  - All slab at grade to be poured on 1000gauge polythene on 50mm stone dust bedding on compacted hardcore.
  - All soils under slab and around external foundation to be treated for termite control.
  - Window cills must be finished before internal plastering.
- CIVIL**
- All soils on cut embankment to be stabilized. The slope is not to exceed the natural angle of repose of the soil.
- STRUCTURAL**
- All RC works to Structural Engineer's details.
  - Depth of foundation to be determined on site to SE approval.
  - All walls less than 200mm thick to be reinforced with hoop iron at every alternate course.
- MECHANICAL**
- All plumbing and drainage to comply with the relevant approving local authority's specifications.
  - All service ducts to be accessible from all floors.
  - Deep seal or anti-suck to all fittings connected to the SVP's or waste pipes. All bends and junctions to have inspection plates.
  - SVP to be provided at the head of the drainage.
  - Drain pipes passing beneath buildings and driveways to be encased in 150mm concrete surround.
  - 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.
  - 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.
  - Minimum slopes to drains shall be 1%.
  - 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.
  - All testing of pipes must be completed before plastering.
  - All mechanical works must be co-ordinated with electrical works. Any conflicts must be clarified before work begins.
- ELECTRICAL**
- All conduits must be laid before plastering.
  - All electrical work must be co-ordinated with mechanical works. Any conflicts must be clarified before work begins.
- FIRE**
- Install water ring main with fire hydrant with 2.5" instantaneous coupling adaptors.
  - Provide underground water tank with automatic electric booster pump for ring main.
  - Provide automatic push button fire alarm system.
  - Provide heat and smoke detectors in each room provide 9kg. dry powder fire extinguishers to ME specifications.

**REVISIONS**

No.	Description	Date

**Project:** PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT

**Plot L. R. No.:**

**Location:** MSAMBWENI, KWALE COUNTY

**Client:** STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY

**DRAWING NO.:** 06 - 001 - 002

**Signature:** \_\_\_\_\_

**Subject:** WORKING DRAWINGS.

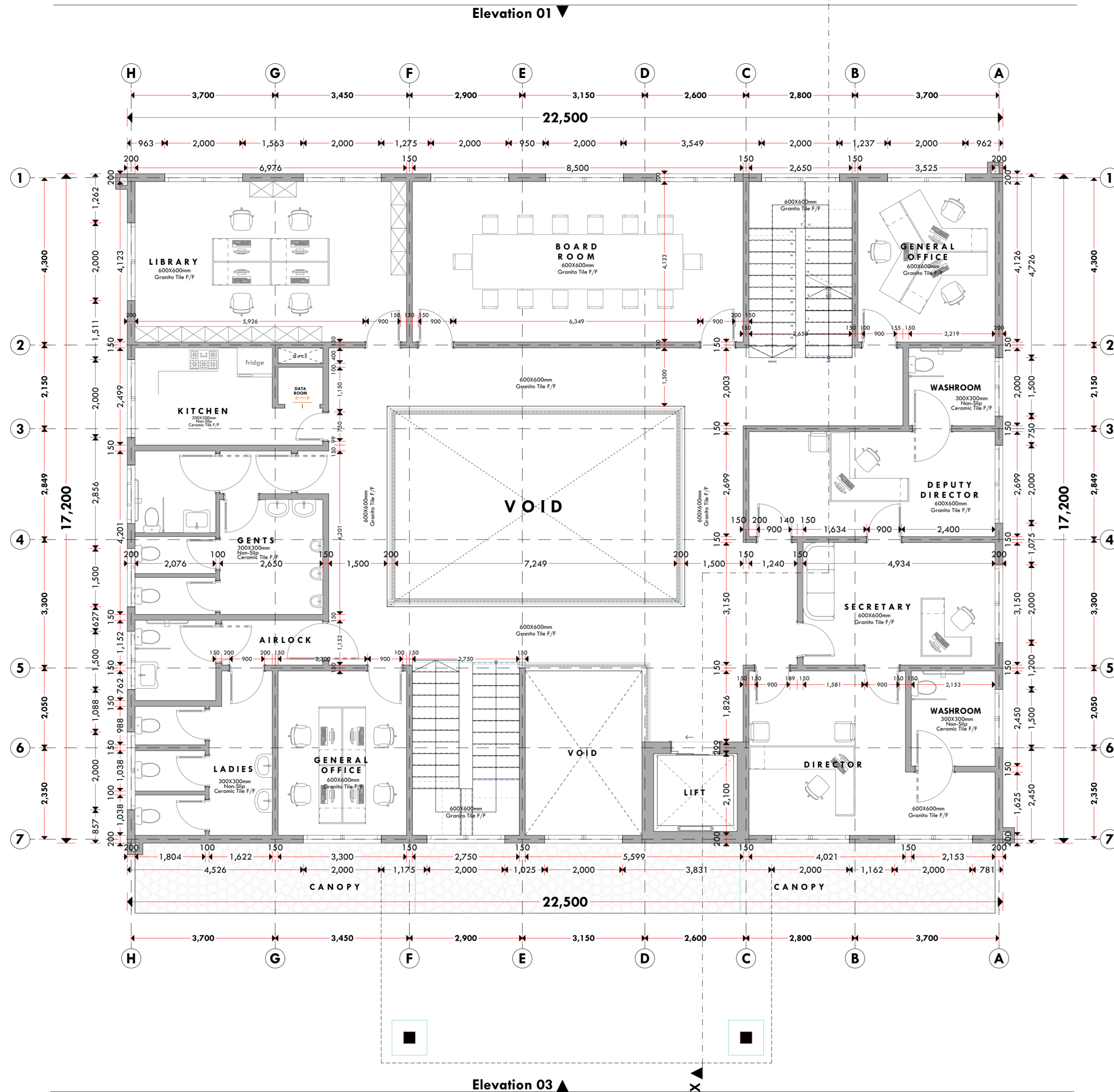
**Consultancy:** ARPRIM CONSULTANTS  
P.O BOX 12969-0040 NAIROBI  
TEL: 020-884312/8  
Website :www.arprimconsultants.com

<b>Drawn by:</b> PETER MOMANYI B. Arch. (Hons)	<b>Checked by:</b> F. TUNDULU B. Arch. (Hons) M. Arch. (reg. No. A1552)	<b>Checked by:</b> J. MOMANYI B. Arch. (Hons) M. Arch. (reg. No. A1122)
--	---	---

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

**Scale:** 1:100

**1ST FLOOR**



**NOTES:**

- GENERAL**  
 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing.  
 2. The contractor must check and verify all dimensions before commencing any work. Any discrepancy must be notified to the architect.  
 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 polythene on 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 BS 4514 and 5255; cast iron to comply to BS 497 table 6 grade C except ones in the driveway which shall comply to BS 556.  
 18. All inspection chamber covers and frames shall be cast iron to comply to BS 497 table 6 grade C except  
 19. Storm water drain shall comply to BS 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 work 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. Install 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**

No.	Description	Date

Project : **PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

Plot L. R. No. :  
 Location : **MSAMBWENI, KWALE COUNTY**

Client : **STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

DRAWING NO. : **06 - 001 - 003**

Signature :  
 Subject : **WORKING DRAWINGS.**

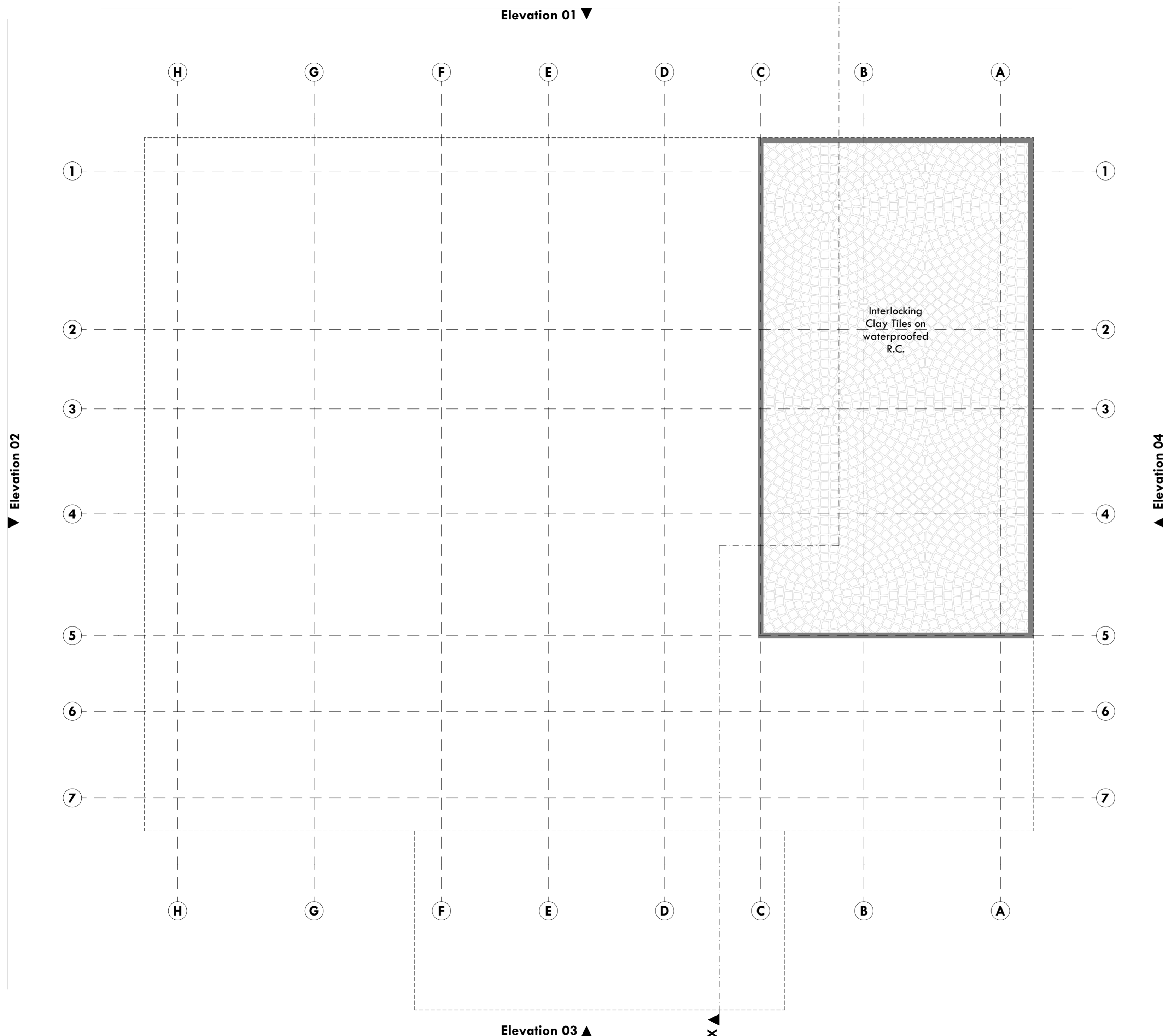
Consultancy :  
 ARPRIM CONSULTANTS  
 P.O BOX 12969-0040 NAIROBI  
 TEL: 020-884312/8  
 Website :www.arprimconsultants.com

Drawn by : <b>PETER MOMANYI</b> B. Arch. (Hons)	Checked by : <b>F. TUNDULI</b> B. Arch. (Hons) M. Arch. (reg. No. A1552)	Checked by : <b>J. MOMANYI</b> B. Arch. (Hons) M. Arch. (reg. No. A1122)
---	--	--

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



# ROOF PLAN



### NOTES:

#### GENERAL

- All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
- The contractor must check and verify all dimensions before commencing any work. Any discrepancy must be notified to the architect.
- 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

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

#### CIVIL

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

#### STRUCTURAL

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

#### MECHANICAL

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

#### ELECTRICAL

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

#### FIRE

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

### REVISIONS

No.	Description	By	Date

Project : **PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

Plot L. R. No.:  
Location : **MSAMBWENI, KWALE COUNTY**

Client : **STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

DRAWING NO. **06 - 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.) . M. Arch. (reg. No. A1552)	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

# NORTH ELEVATION



- NOTES:**
- GENERAL**
- All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
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- CONSTRUCTION**
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  - All slab at grade to be poured on 1000gauge polythene 50mm stone dust blinding on compacted hardcore.
  - All soils under slab and around external foundation to be treated for termite control.
  - Window cills must be finished before internal plastering.
- CIVIL**
- All soils on cut embankment to be stabilized. The slope is not to exceed the natural angle of repose of the soil.
- STRUCTURAL**
- All RC works to Structural Engineer's details.
  - Depth of foundation to be determined on site to SE approval.
  - All walls less than 200mm thick to be reinforced with hoop iron at every alternate course.
- MECHANICAL**
- All plumbing and drainage to comply with the relevant approving local authority's specifications.
  - All service ducts to be accessible from all floors.
  - Deep seal or anti-vac to all fittings connected to the SVP's or waste pipes. All bends and junctions to have inspection plates.
  - SVP to be provided at the head of the drainage.
  - Drain pipes passing beneath buildings and driveways to be encased in 150mm concrete surround.
  - All underground foul and waste drain pipes shall be UPVC and comply to BS 614 and 5255, cast iron to comply to BS 497 table 6 grade C except ones in the driveway which shall comply to BS 556.
  - All inspection chamber covers and frames shall be cast iron to comply to BS 497 table 6 grade C except
  - Storm water drain shall comply to BS 556.
  - Minimum slopes to drains shall be 1%.
  - 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.
  - All testing of pipes must be completed before plastering.
  - All mechanical works must be co-ordinated with electrical works. Any conflicts must be clarified before work begins.
- ELECTRICAL**
- All conduits must be laid before plastering.
  - All electrical work must be co-ordinated with mechanical works. Any conflicts must be clarified before work begins.
- FIRE**
- Install water ring main with fire hydrant with 2.5" instantaneous coupling adaptors
  - Provide underground water tank with automatic electric booster pump for ring main
  - Provide automatic push button fire alarm system
  - Provide heat and smoke detectors in each room
  - Provide 9kg. dry powder fire extinguishers to ME specifications

**REVISIONS**

No.	Description	Date

**Project :**  
**PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

**Plot L. R. No.:**

**Location :**  
**MSAMBWENI, KWALE COUNTY**

**Client :**  
**STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

**DRAWING NO.:**  
**06 - 001 - 006**

Signature .....

**Subject :**  
**WORKING DRAWINGS.**

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

Drawn by: <b>PETER MOMANYI</b> B. Arch. (Hons)	Checked by :- <b>F. TUNDULI</b> B. Arch. (Hons) . M. Arch. (reg. No. A1552)	Checked by :- <b>J. MOMANYI</b> B. Arch. (Hons) . M. Arch. (reg. No. A1122)
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Date: NOV 2023 Job No. : 2023/Nov/KIDONGO

Scale 1:100

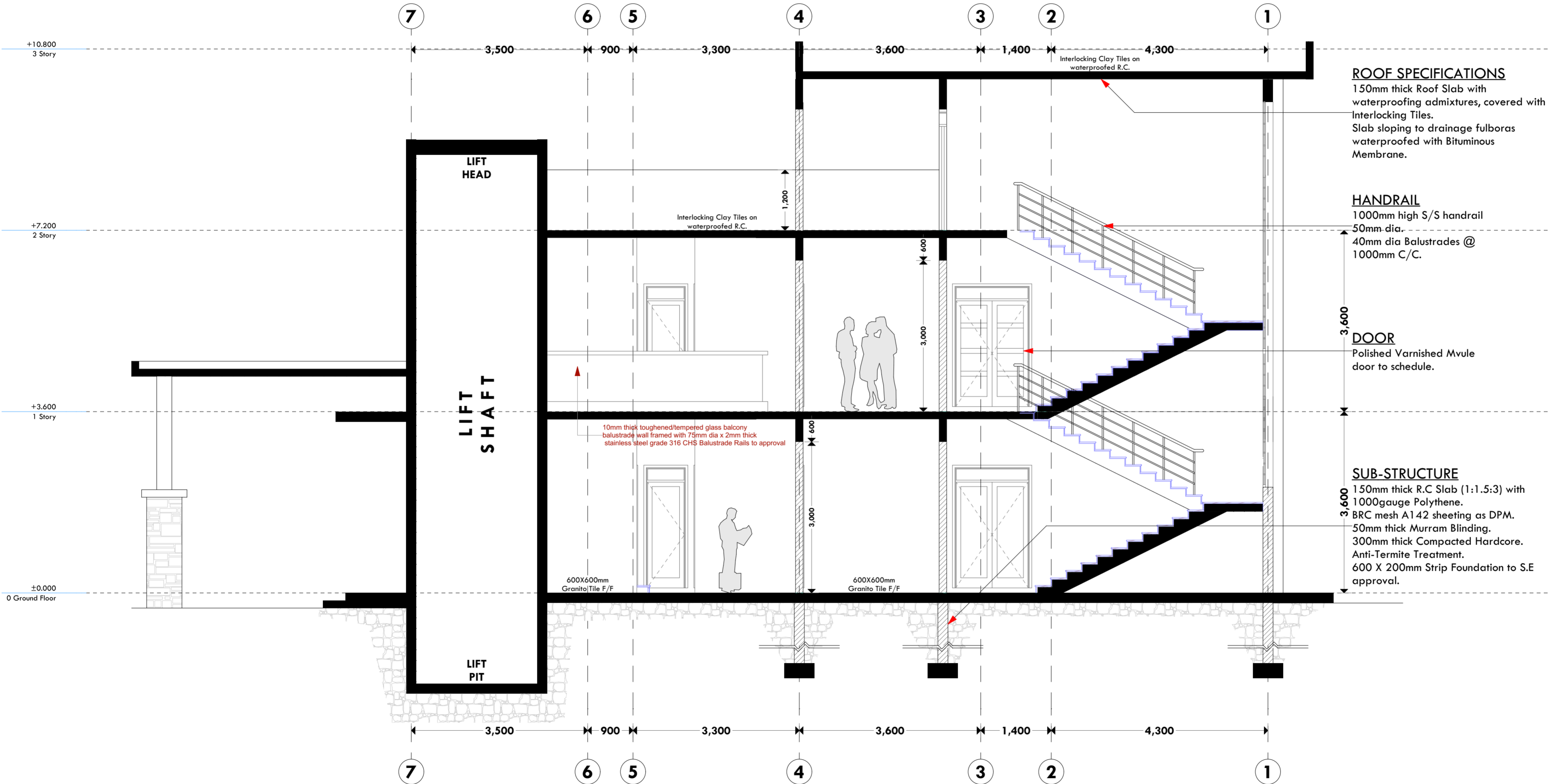








# X-X SECTION



- NOTES:**
- GENERAL**
- All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
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  - All slab at grade to be poured on 1000gauge polythene on 50mm stone dust blinding on compacted hardcore.
  - All soils under slab and around external foundation to be treated for termite control.
  - Window cills must be finished before internal plastering.

- CIVIL**
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- STRUCTURAL**
- All RC works to Structural Engineer's details.
  - Depth of foundation to be determined on site to SE approval.
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- MECHANICAL**
- All plumbing and drainage to comply with the relevant approving local authority's specifications.
  - All service ducts to be accessible from all floors.
  - Deep seal or anti-vac to all fittings connected to the SVP's or waste pipes. All bends and junctions to have inspection plates.
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  - All mechanical works must be co-ordinated with electrical works. Any conflicts must be clarified before work begins.

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

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

**REVISIONS**

No.	Description	Date

Project : **PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

Plot L. R. No.:  
Location : **MSAMBWENI, KWALE COUNTY**

Client : **STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

DRAWING NO. **06 - 001 - 010**

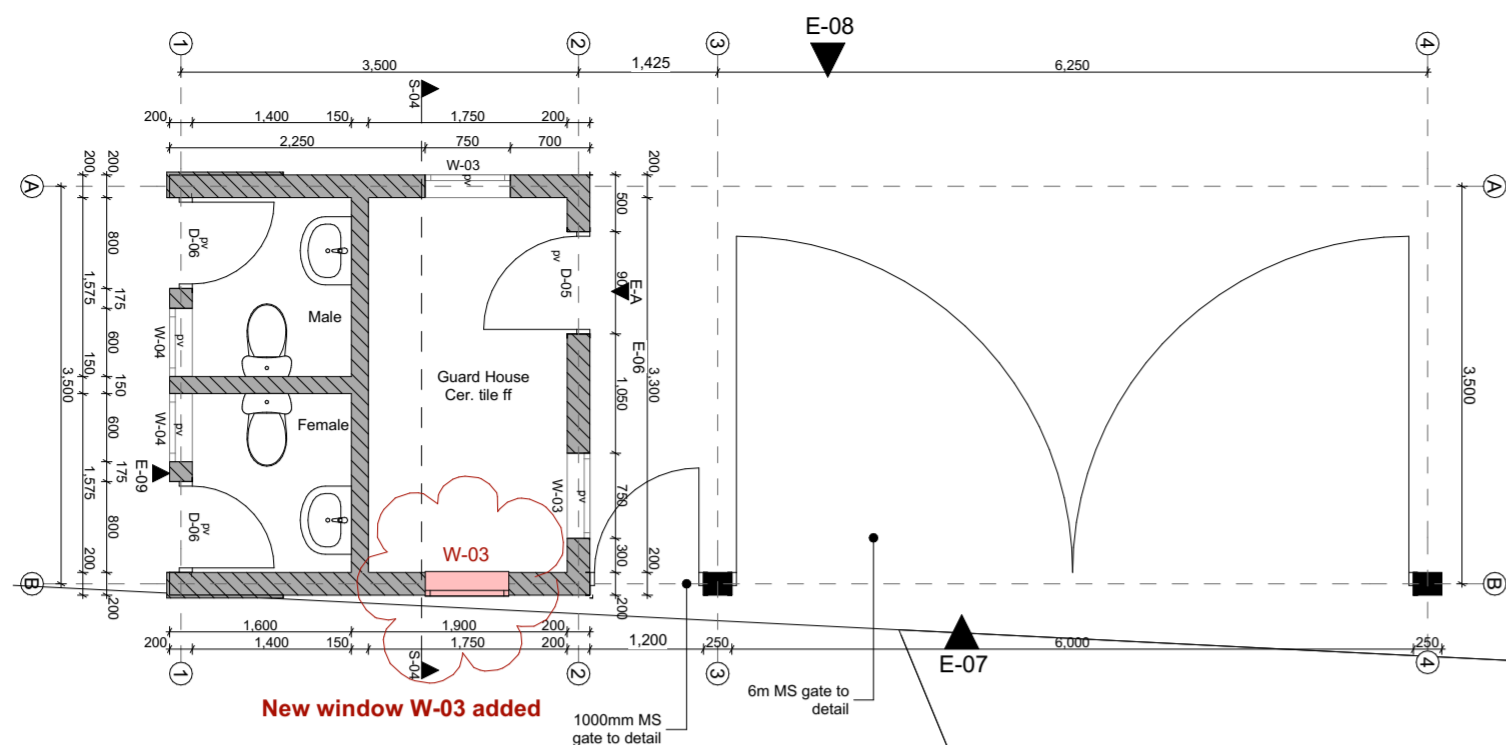
Signature :  
Subject : **WORKING DRAWINGS.**

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

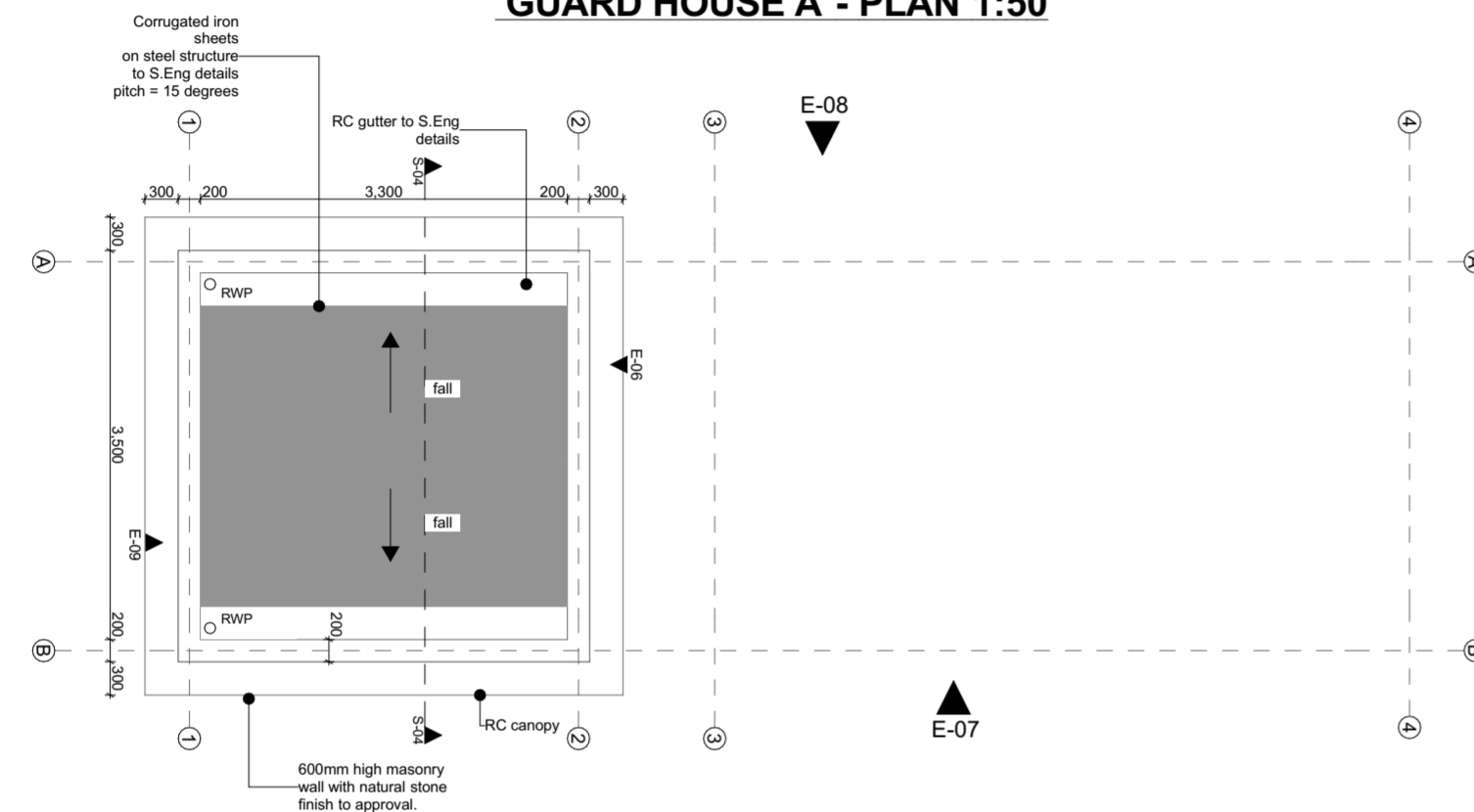
Drawn by : <b>PETER MOMANYI</b> B. Arch. (Hons).	Checked by : <b>F. TUNDULI</b> B. Arch. (Hons) . M. Arch. (reg. No. A1552)	Checked by : <b>J. MOMANYI</b> B. Arch. (Hons) . M. Arch. (reg. No. A1122)
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Date: NOV 2023 Job No. : 2023/Nov/KIDONGO  
Scale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

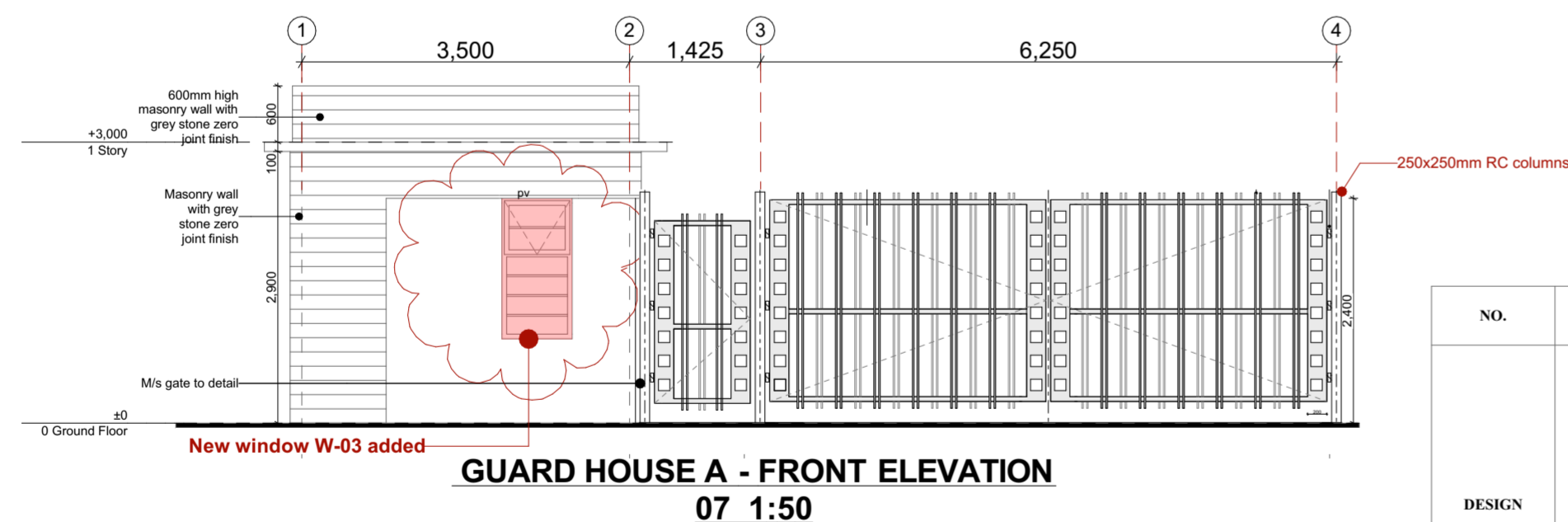
# GATE HOUSE



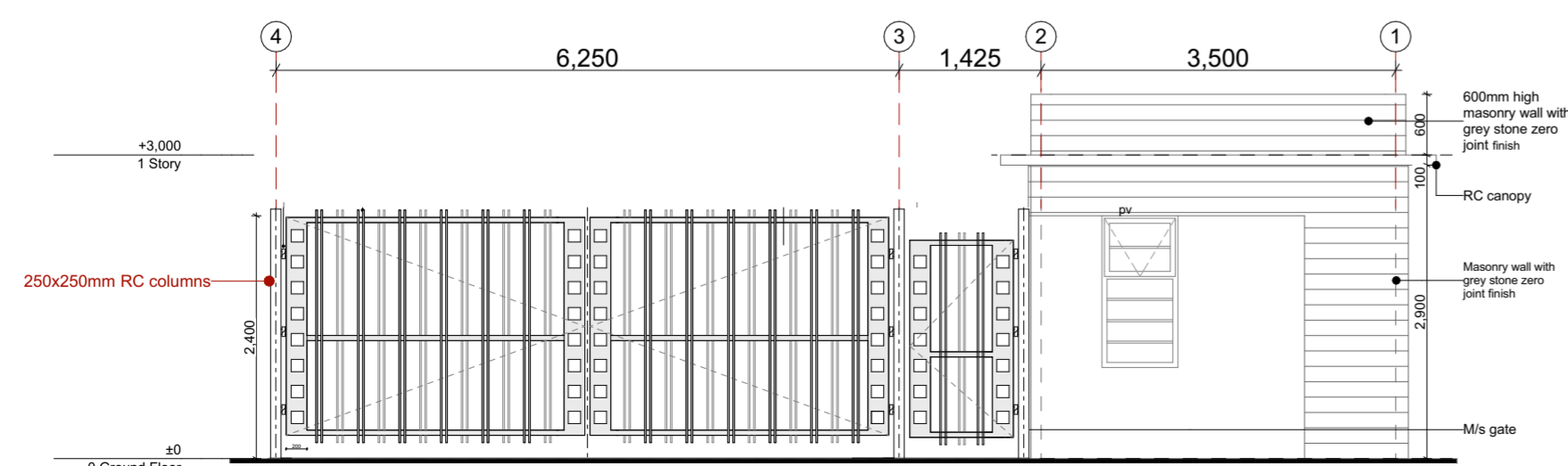
**GUARD HOUSE A - PLAN 1:50**



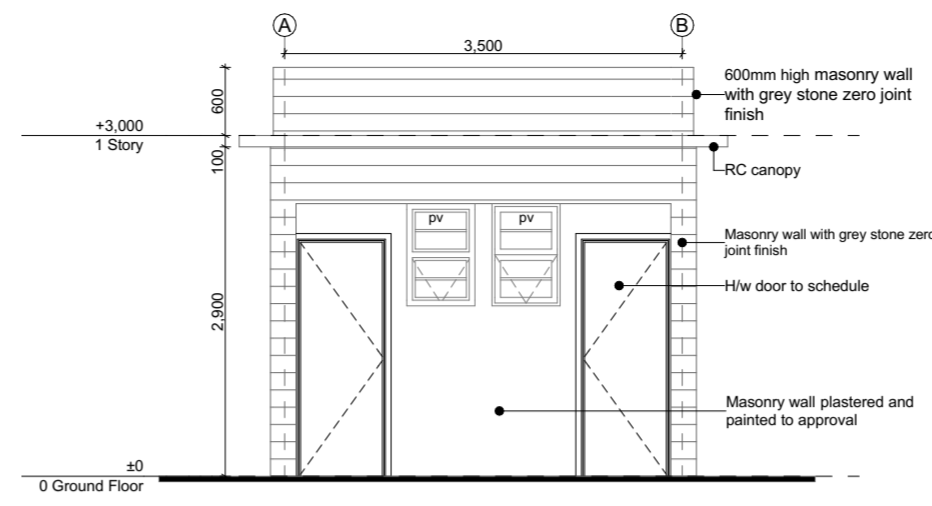
**GUARD HOUSE A - ROOF PLAN 1:50**



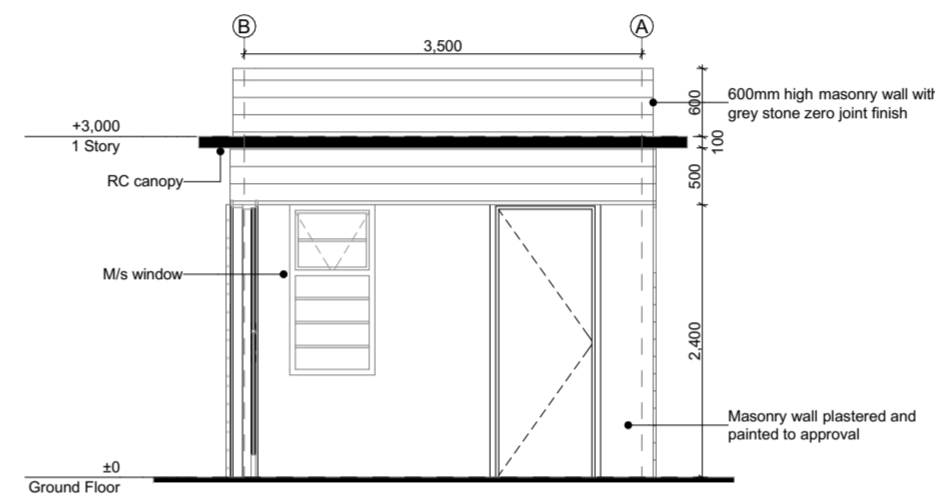
**GUARD HOUSE A - FRONT ELEVATION 07 1:50**



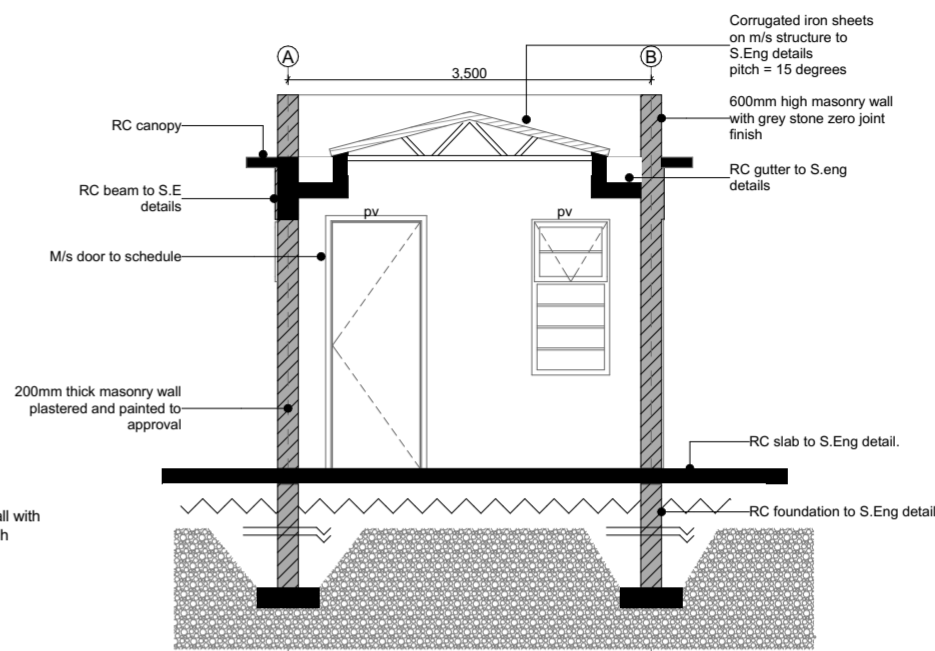
**GUARD HOUSE A - REAR ELEVATION 08 1:50**



**GUARD HOUSE A - SIDE ELEVATION 09 1:50**



**GUARD HOUSE A - SIDE ELEVATION 06 1:50**



**GUARD HOUSE A - SECTION 04 1:50**

NO.	D - 0 1	D - 0 2
DESIGN		
LOCATION	GUARD HOUSE OFFICES	WASHROOMS
DESCRIPTION	2,100 X 900mm Powder Coated Aluminium Door Panel. Sand Blasted 5mm thick Glass Panel within the Aluminium Frame. 2,600 X 900mm Powder Coated Aluminium door frame with 200 X 50mm section. 900 X 500mm Fanlight with P.V.	2,100 X 800mm Powder Coated Aluminium Door Panel. Sand Blasted 5mm thick Glass Panel within the Aluminium Frame. 2,600 X 800mm Powder Coated Aluminium door frame with 200 X 50mm section. 800 X 500mm Fanlight with P.V.
QUANTITIES	0 1	0 2

NO.	W - 0 1	W - 0 2
DESIGN		
LOCATION	WASHROOMS	GUARD HOUSE OFFICES
QUANTITIES	0 2	0 3
DESCRIPTION	Powder coated aluminium framed sliding windows complete with ironmongery, mullions, transoms, 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.	

- NOTES:**
- GENERAL**
1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
  2. The contractor must check and verify all dimensions before commencing any work. Any discrepancy must be notified to the architect.
  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 polytheneum 50mm stone dust bedding 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 BS 514 and 5255. cast iron to comply to BS 497 table 6 grade C except ones in the driveway which shall comply to BS 556.
  18. All inspection chamber covers and frames shall be cast iron to comply to BS 497 table 6 grade C except ones in the driveway which shall comply to BS 556.
  19. Storm water drain shall comply to BS 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 work 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. Install 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**

NO.	DESCRIPTION	DATE

Project : **PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

Plot L. R. No.: **MSAMBWENI, KWALE COUNTY**

Location : **MSAMBWENI, KWALE COUNTY**

Client : **STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

DRAWING NO. **06 - 001 - 011**

Signature : \_\_\_\_\_

Subject : **WORKING DRAWINGS.**

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

Drawn by : **PETER MOMANYI**  
B. Arch. (Hons)

Checked by : **F. TUNDULU**  
B. Arch. (Hons)  
M. Arch. (reg. No. A1552)

Checked by : **J. MOMANYI**  
B. Arch. (Hons)  
M. Arch. (reg. No. A1122)

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

Scale 1:100





# WINDOW SCHEDULE 02



WINDOW DESIGN	
NAME	W - 01
QUANTITY	11
LOCATION	
SPECIFICATIONS	powder coated aluminium framed sliding windows complete with ironmongery, mullions, transoms, ralling and necessary intermediate reinforcement elements including oil weather strips, rubber glazing strips, couplings, sliding rails bars, window cills and window boards, quadrant and painted externally and internally; panes fixed with 6mm thick one way glass fixed with beadings.

**NOTES:**

**GENERAL**

- All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
- The contractor must check and verify all dimensions before commencing any work. Any discrepancy must be notified to the architect.
- 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**

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

**CIVIL**

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

**STRUCTURAL**

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

**MECHANICAL**

- All plumbing and drainage to comply with the relevant approving local authority's specifications.
- All service ducts to be accessible from all floors.
- Deep seal or anti-vac to all fittings connected to the SVP's or waste pipes. All bends and junctions to have inspection plates.
- SVP to be provided at the head of the drainage.
- Drain pipes passing beneath buildings and driveways to be encased in 150mm concrete surround.
- 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.
- 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.
- Minimum slopes to drains shall be 1%.
- 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.
- All testing of pipes must be completed before plastering.
- All mechanical works must be co-ordinated with electrical works. Any conflicts must be clarified before work begins.

**ELECTRICAL**

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

**FIRE**

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

REVISIONS	

Project : **PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

Plot L. R. No.:

Location : **MSAMBWENI, KWALE COUNTY**

Client : **STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

DRAWING NO. **06 - 001 - 014**

Signature : .....

Subject : **WORKING DRAWINGS.**

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

Drawn by: **PETER MOMANYI**  
B. Arch. (Hons).

Checked by: **F. TUNDULI**  
B. Arch. (Hons)  
. M. Arch.  
(reg. No.A1552)

Checked by: **J. MOMANYI**  
B. Arch. (Hons)  
. M. Arch.  
(reg. No.A1122)

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

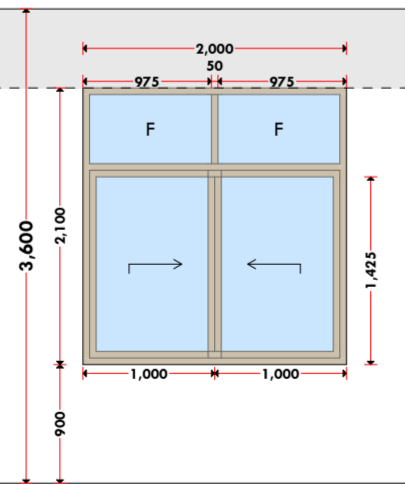
Scale 1:100



# WINDOW SCHEDULE 03



WINDOW DESIGN	
NAME	W - 01
QUANTITY	07
LOCATION	
SPECIFICATIONS	powder coated aluminium framed sliding windows complete with ironmongery, mullions, transoms, 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.



- NOTES:**
- GENERAL**
- All measurements are shown in millimeters. Measurements should not be scaled off the drawing.
  - The contractor must check and verify all dimensions before commencing any work. Any discrepancy must be notified to the architect.
  - 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**
- Damp proof course must be provided under all external walls at grade. DPC to be minimum 150mm above ground level.
  - All slab at grade to be poured on 1000gauge polythene on 50mm stone dust blinding on compacted hardcore.
  - All soils under slab and around external foundation to be treated for termite control.
  - Window cills must be finished before internal plastering.
- CIVIL**
- All soils on cut embankment to be stabilized. The slope is not to exceed the natural angle of repose of the soil.
- STRUCTURAL**
- All RC works to Structural Engineer's details.
  - Depth of foundation to be determined on site to SE approval.
  - All walls less than 200mm thick to be reinforced with hoop iron at every alternate course.
- MECHANICAL**
- All plumbing and drainage to comply with the relevant approving local authority's specifications.
  - All service ducts to be accessible from all floors.
  - Deep seal or anti-suck to all fittings connected to the SVP's or waste pipes. All bends and junctions to have inspection plates.
  - SVP to be provided at the head of the drainage.
  - Drain pipes passing beneath buildings and driveways to be encased in 150mm concrete surround.
  - All underground foul and waste drain pipes shall be UPVC and comply to BS 614 and 5255, cast iron to comply to BS 497 table 6 grade C except ones in the driveway which shall comply to BS 556.
  - Minimum slopes to drains shall be 1%.
  - All inspection chamber covers and frames shall be cast iron to comply to BS 497 table 6 grade C except.
  - Storm water drain shall comply to BS 556.
  - Minimum slopes to drains shall be 1%.
  - 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.
  - All testing of pipes must be completed before plastering.
  - All mechanical works must be co-ordinated with electrical works. Any conflicts must be clarified before work begins.
- ELECTRICAL**
- All conduits must be laid before plastering.
  - All electrical work must be co-ordinated with mechanical works. Any conflicts must be clarified before work begins.
- FIRE**
- Install water ring main with fire hydrant with 2.5" instantaneous coupling adaptors
  - Provide underground water tank with automatic electric booster pump for ring main
  - provide automatic push button fire alarm system
  - provide heat and smoke detectors in each room provide 9kg. dry powder fire extinguishers to ME specifications

**REVISIONS**

No.	Description

Project : **PROPOSED KENYA MARINE FISHERIES AND SOCIO-ECONOMIC DEVELOPMENT**

Plot L. R. No.:

Location : **MSAMBWENI, KWALE COUNTY**

Client : **STATE DEPARTMENT FOR FISHERIES AQUACULTURE AND THE BLUE ECONOMY**

DRAWING NO. : **06 - 001 - 015**

Signature .....

Subject : **WORKING DRAWINGS.**

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

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







## II. Land Ownership Documentations





**MINISTRY OF LANDS, PUBLIC WORKS, HOUSING  
AND URBAN DEVELOPMENT.**  
DEPARTMENT OF LAND ADJUDICATION AND SETTLEMENT

Telephone: 020-2169319

Ref: No. 21/2022/MSA  
Umbe Settlement Scheme



LAND ADJUDICATION AND  
SETTLEMENT OFFICE  
P.O. BOX 17-80403,  
KWALE.

TO WHOM IT MAY CONCERN

Date: 16/05/2022

RE: PLOT NO. 3 Umbe Settlement Scheme

**ADJUDICATION SECTION/SETTLEMENT SCHEME: KWALE COUNTY**

This is to confirm that at the time of demarcation/allocation land P/NO..... was recorded in the name(s)

of.....

AGRICULTURE

As it exists in our demarcation books/accountability list.

**LAND ADJUDICATION AND SETTLEMENT OFFICER**  
**FOR: LAND ADJUDICATION AND SETTLEMENT OFFICER,**  
**MATUGA/MSAMBWENI/LUNGA LUNGA SUB-COUNTIES.**  
Area = 3.0 H



**COUNTY GOVERNMENT OF KWALE**  
**DPT. ENVIRONMENT, NATURAL RESOURCES AND**  
**URBAN PLANNING.**

P.O. Box 4 – 80403  
Kwale, Kenya

Email: [info@kwale.go.ke](mailto:info@kwale.go.ke)  
Website: [www.kwale.go.ke](http://www.kwale.go.ke)

REF: CG.KWL/6/42/2023/18

DATE: 16<sup>TH</sup> MAY, 2023

TO  
CECM- AGRICULTURE, LIVESTOCK & FISHERIES

**RE: CONFIRMATION OF OWNERSHIP STATUS OF LAND PARCEL**

This is to confirm that the land of the site in Tumbe Scheme Settlement (Kwale/Tumbe Settlement Scheme/3) is County Government land and the project can commence.

Kindly find the adjudication search confirming the same.

Regards

**SAUMU BEJA MAHAJA**  
**CECM-ENVIRONMENT, NATURAL RESOURCES & URBAN PLANNING**



### III. Minutes for public Consultation and Participation Meeting



#### KENYA MARINE FISHERIES SOCIOECONOMIC DEVELOPMENT (KEMFSED) PROJECT



**Minutes of the stakeholder engagement meeting of Kwale County held on 14<sup>th</sup> May 2022 at Kwale Amphitheater& Cultural Center.**

**Members present**

Hamisi- Youth rep  
Martha – Pastor  
Edith- Business community  
Caroline- Agricultural officer  
Mercy- Fisheries  
Hezron- Fisheries  
William- Business  
Tindi- VMG  
Ondiku- ESO  
Mwanahamisi – ESO  
Sigei- Fisheries  
Tenda- Women rep  
Martin Kiogora – Director Fisheries  
Mike – Fisheries

**Absent with apology**

The department of public works (design team) had sent an apology as they had a prior engagement. The members were to be taken through the design by Mike.

**In attendance**

Lazarus Kubasu- Social Safeguards Consultant  
Dennis Mungai – Intern NPCU

**Min 1/14/05/22: Preliminaries**

The Director of Fisheries called the meeting to order at 9:35 am and welcomed everybody officially. He then invited a member from the group to open the meeting with a word of prayer. The Director later on outlined the purpose of the meeting as well as the objectives of ESIA for the proposed construction of the Fisheries county offices in the county. He asked everyone to be open and free and give their thought since they were vital for the succession of the project.

### **Min 2/14/05/22: Project Overview**

Members were taken through the KEMFSED project in a synopsis since they had already been sensitized earlier on about the project. They were reminded of the PDO as well as the 3 components that were key in the project's deliverables.

Component 1.3 which is Infrastructure & development for fisheries was the key reason for the meeting. In this regard, KEMFSED intended to finance construction of a county fisheries headquarter building block alongside other infrastructural activities including refurbishment of existing offices at Msambweni as well as landing sites at Mwaepe, Majorenoi, Vanga, Mkunguni and Nyari Kikadini .

### **Min 3/14/05/22: Design/ Proposed Building**

Members were shown the proposed County Fisheries Building which was to host 2 floors. The building would host the Departments of Agriculture, Livestock and Fisheries and their respective offices.

Key factors that had been considered in functionality were:

- Solar energy as an alternative source for energy/electricity
- Pool office to accommodate many people.
- Availability of ramps aside from stairs to assist the PWDs.
- PWD toilets at all levels of the building.
- Biodigesters would be used to direct waste water.
- Run off water from the roof was meant to be collected and stored in a tank for use.

### **Min 4/14/05/22: Pre-construction Phase**

Members were taken through the pre-construction phase and the likely impacts that would result. The following were the key issues noted:

#### **a. Site clearing**

- The site was an open field and hence clearing was not necessary. Excavation was to begin without a fuss.
- There was no dispute of land since the land belonged to the Department of Veterinary (government land) and all supporting document were available.
- There existed some human activity i.e. maize farming . Members were assured that the farming was conducted by a county officer and he was to be notified to cease use and pave way for the works.
- Presence of an existing path.

From the site picture presented, a path was noted to being the primary used to access the area hence there was a need to identify an alternative path. In addition, members agreed it was necessary to come up with a notification for a diversion to another route to create space for the site.

- Members were informed that the money allocated was insufficient and could only be only able to build the ground floor and 1 floor as per last review. Deliberations were still on-going so that the project could be done as a whole or part based on agreements reached.

#### **b. Parking area**

Since the building block brought with it an influx in population, members wanted to know if the parking was sufficient. This concern as well as the use of cabro was to be taken to the design team.

#### **c. Security**

Members wanted to know the safety mechanisms that were being put in place of the site. Several recommendations were made:

- A good gate that would ensure controlled movement.
- A compound perimeter wall.
- At the gate, there was to be a deceleration lane to control the traffic in and out since there was an anticipation of influx in number of cars as well as visitors.
- There existed a dangerous corner and to prevent accidents from happening, sign posts should be erected with the assistance of road works concerned parties.

#### **d. Water**

Members noted that water proved to be a necessity since toilets were to use water alongside other general use. A storage tank was therefore deemed necessary. Members gave a recommendation of having two tanks, one underground/ constructed and the other an overhead which could be pumped into from the harvested water. This would help sort issues of lack of water especially when piped water was not available.

#### **e. Toilet**

- Members noted the need for latrines which were to be used as a back-up in cases of water scarcity. This had not been captured in the design hence a need to include it.
- Members were informed of the need for a decentralized treatment facility (DTF) within the site since the county had no sewer line present. This had not been considered in the design hence designer should put it under consideration upon revision.

### **Min 5/14/05/22: Construction Phase**

During construction, members gave out their suggestions on the issues that could arise and in the same regard gave their mitigation measures as outlined below:

#### **i. Noise pollution**

- Members noted that notification was necessary to inform the residents about the construction since the surrounding area was a residential area.

- Members agreed that strictly there was no work was to be conducted at night unless that one which could not wait e.g. Koroga. However if such cases arose, it was necessary to issue a notification prior to that being done.

## **ii. Contractor issues**

Members identified that for the work to continue without a hitch, there was need to ensure that few clauses be included in the contract e.g.

- a) Members requested that the contractor consider hiring a sizeable magnitude of the workforce from the county of operations and around the area. This would enhance community ownership of the project..
- b) Members also requested for the involvement of PWDs in construction work. There were some roles which did not require physical strength and could easily be done by the PWDs e.g. record keeping, stock taking, payroll register etc.
- c) Members also suggested hiring of TVET students as part of enhancing their skills inclusion in activity. It was agreed that the students would hand in their CVs and the contractor would give them consideration based on his terms of work.
- d) Child labor prevention

Members were informed of the strict guidelines and policy that the World Bank had against child labor and the negative impacts it could have on the project if a single case was to be discovered e.g. suspension and withdrawal of funds. To avoid this, several recommendations were put across:

- There was to be a sensitization of CPIU as well as BMUs on project labor required.
- Provision of ID card so as to ascertain people being hired were adults.
- A clause should be included in the contract stating, “No employment for people below 18 years.”

### e) Occupation Health Safety/Accidents

There exists many occupation health concerns e.g. risk of debris falling, accidents, noise etc. As a result, members resolved the following as a remedy.

- i. PPE equipment should be provided so that the workers could protect themselves.
- ii. Contractor should take up insurance covers for the workers as per WIBA (Workers Insurance Benefit Act, DOSH as well as Health & Safety regulations so as to cater for accidents if and when they occur. In addition, a grievance redress committee would be trained on the above to avoid exploitation by contractor.

### f) GBV/ Sexual Exploitation Abuse

Members noted that as the construction was on-going, GBV/ Sexual Exploitation Abuse cases would increase in both genders. As a remedy for this, a code of conduct should be signed by workers as well as the contractor which would bar everyone from engaging in engaging in the cases.

- g) Failure of workers to pay for hospitality.

Members were informed of absconding of payment by casuals to the shops and eateries after being served with snacks and lunch during the construction phase. To address this, a sub-committee comprising of contractor as well as county officials should listen, investigate and remedy the claims especially during paydays.

### **Min 6/14/05/22: Operational Phase**

Members suggested on some key benefits that would accrue upon completion and use of the building as follows:

- Efficient service delivery since offices will be located in one place.
- Efficient work spaces especially due to COVID that would allow easier working. Store which was a challenge would also be resolved.
- Diligence to work since people will be more motivated.
- Integration would be promoted among the other department housed within the county building block.
- Members also noted that due to the increase in office, it was necessary to put signs by the door for easier direction by visitors.
- Members also suggested putting up a complain box should to cater for complaints and suggestions.
- Members also proposed to have an underground parking to increase the parking space so as to accommodate the number of increase that would come about during operations.
- Members raised issues of quality check and maintenance of the building owing to the bad state of the existing/current government offices.

They were informed that there was a window upon which the contractor handles the building repairs hence the worries had been addressed by that clause. Upon expiry of the window given the county budget would set aside office maintenance for the office to ensure it lives its mandated time before decommissioning.

### **Min 7/14/05/22: Decommissioning Phase**

After 50 years or so the building would have lived its life and necessitated for demolitions.

Members identified the following impacts and suggested their mitigation as outlined below:

- i. Relocation offices after the demolition hence necessitated finding an alternative relocation of officers.
- ii. After demolition, it was necessary to find an alternative use of the land other than leave it bare or let it go to waste.
- iii. Proper solid waste handling as per the rules and regulation at the time.

### **Min 8/14/05/22: Positive Impacts of the Project**

Several positive impacts resulting from the proposed intervention were also highlighted by the members. They included:

- Improved businesses especially the surrounding shops and market. Rental houses will also get tenants.
- Integration within government departments fostering national unity
- Growth and expansion of Kwale County as a wholesome county.
- Job creation since the project would seek people from within.

#### **Min 9/14/05/22: Arising Issues**

Per the World Bank every development intervention came with a chance to tackle global issues and this one also presented a chance to put forward suggestions as well as sensitization of the issues. These issues were HIV/AIDS and GBV as well as labor issues. Several suggestions were made by members. They included:

- Provision of condom dispensers so as to promote safe sex as well as curb spread of HIV/AIDS.
- Members also suggested for the erection of HIV/AIDS sensitization boards all around the construction site to pass various messages all to aid in management if the disease.
- Members also proposed sensitization of community and workers in an area of 1km radius on issues HIV/AIDS as well as GBV.
- Members also agreed that sexual exploitations and abuse cases be referred to the police for investigation and if culprits found guilty use the legal means to ensure justice is served. They asked for extra jurisprudence especially on cases that involved children.
- Members expressed a concern of the high economic conditions. In cognizant of the fact, it was imperative for labor wages to be revised so that they could be in line with the present state of the economy. Contractor therefore should be engaged so that he/she could include it in the BQ.

#### **Min 10/14/05/22: Plenary**

- Members expressed their gratitude for the consideration to construct the county fisheries as it would solve a space issue that currently exists in the county.
- Members also agreed that the contractor should involve all the relevant stakeholders for community embracement of project.
- Members asked for the proposed design to be sensitized to the community once revision is done so that final thoughts can be expressed.
- The Director of Fisheries assured members that the existing fisheries field departments were still going to be located at their current location and fully operational. This was in response to complains that the site location was far from some wards. He further reminded members that landing sites were yet to be constructed and hence all wards were included.
- The Director further urged residents to move away from ocean fishing and take advantage of KEMFSED and diversify livelihood. He asked the fisher folks to embrace

fish farming since it was the future going forward since ocean fishing had been characterized by many problems and hence not sustainable.

**Min 11/14/05/22: Closing and Remarks**

- The Director thanked everyone for turning up in good numbers especially in a weekend to complete the engagement exercise. Moreover, he thanked KEMSFED for the project and team Nairobi for being part of the discussion.
- He reminded the members of upcoming landing sites exercise that would come next and hence urged all to be alert and fast-track so that the county enjoys fully from the project.
- The ESO thanked for input and assured the members that their recommendations and suggestions would be brought forward to the design for correction.
- A member conducted a closing prayer and guest left at their own pleasure at 12:35 pm.

Minutes compiled by Micheal Kuria.....Date.....

# IV. Public Participation and Consultation Attendance List



State Department of Fisheries and the Blue Economy  
KENYA MARINE FISHERIES AND SOCIAL ECONOMIC DEVELOPMENT  
PROJECT  
(KEMFSED)

Annex 2: STAKEHOLDERS CONSULTATION FORM

Venue: ..... Kwinda .....

Date: ...14<sup>th</sup> May 2022

S.N	Name	ID No.	Telephone No.	Designation/From	Signature
1.	Hamisi Kassim Chiduyaya	27972608	0706236112	Tsimba Golini	[Signature]
2.	MARIHA NLIIMA BARAZA	9460318	0717024599	Tsimba Golini	[Signature]
3.	EDITH KUTENDA KIAMU	11244124	0728449653	Tsimba Golini	[Signature]
4.	William A. Mwangi	23480974	0727290486	Kwinda	[Signature]
5.	Patrick Ndiku	28824139	0720861546	Tsimba Golini	[Signature]
6.	MWANARUSI HAMISI AMANI	28937750	0722475018	CD-O Tsimba	[Signature]
7.	MWANARUSI SALIM MANGO	22415067	0721653507	VADMIN	[Signature]
8.	HEZRON NGETI MWAKIJELE	21875300	0720047082	N/A	[Signature]
9.	Nelly Ndomasi	28768553	0701910715	Ukunda	[Signature]
10.	Caroline Ekiy	200607270	0721654472	PAO	[Signature]
11.	Atsumani Tundi	5973416	0703805458	V M Lt.	[Signature]
12.	OSIVE LEWA MWAKIJELE	11243002	0719551141	UMAR	[Signature]
13.	SAID MWINYIKAI TOMAS	8412649	0723932651	ACS CHAIR B-MU	[Signature]
14.	MWAFUINA J. BAKARI	13628114	0716781777	B M U	[Signature]
15.	RASHID OMAR BACU	11244832	0792371376	B-m-u	[Signature]
16.	Hamid Kenya	2617711	072240065	W/ADMIN	[Signature]
17.	SALOME MORA	13896218	0710233457	RUO	[Signature]
18.	MOHAMMED ALI SIAMINI	35144292	0769270534	Tsimba Golini "Ust"	[Signature]
19.	NASIRI M. ALMASI	1168207	0721451611	FOR AREA CHIEF	[Signature]
20.	KASSIM S RITA	26013501	075833690	Youth Representative	[Signature]
21.	MWANAISHA MWINYIAMIRI	33443028	0700926754	Youth Representative	[Signature]
22.	MWANAISHA HUSSEINI	21124721	0714157115	Youth Representative	[Signature]
23.	Dominic Gadi	32906472	0721743450	Fisheries Mscumbani	[Signature]
24.	JAZARUS KUBASU	21908612	0724881280	Social Subgroups NPCU	[Signature]



25.	DENNIS MUNGIAJ	33112491	0717855866	KEMSTED NPCU-NRB	<del>Handwritten</del>
26.	MILITAREL KURWA	27118867	0728356943	ESIS-Kurwa	Handwritten
27.	Phares James	23576557	0712619337	Chik	Handwritten
28.	HAMISI SAID	23137182	0710248230	CGK	Handwritten
29.	Latijeh Khamisi Nwactelu	34682302	0720644824	Kurwa	Handwritten
30.	DANIEL XUKARE	278337876	0925863431	Arch	Handwritten
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## 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 as part of the Bid and agreed as part of the Contract.
2. This 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 this Code of Conduct may subject a worker to disciplinary action by the contractor, up to and including termination. Furthermore, violation of this Code may also be violation of the law and due result in civil and /or criminal penalties for you, your supervisors and/or the firm. The Contractor employees, Managers and Directors shall take all responsible steps to prevent a violation of this Code, to identify and raise potential issues, and to seek additional guidance when necessary, if you have any question's regarding the best course of action in a particular situation on this Code you should therefore promptly contact the project proponent for assistance
3. The County Environmental Officer (EO) will be responsible for organizing the environmental training of all the Engineer's and Contractor's staff. It is suggested 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 suitable briefing sessions arranged by the EO on the environmental mitigation measures that are to be in place on the site. The Contractor shall provide the EO with a suitable room for the briefing and such administrative support and facilities as shall be ordered by the EO.
4. The Contractor shall exercise care to conserve the natural landscape and shall conduct his construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the works. Except where clearing is required for permanent works, diversions or excavation operations, all trees, native shrubbery and vegetation shall be preserved and shall be protected from damage by the contractor's construction operation and equipment. The edges of clearing and cuts through trees, shrubbery, and vegetation shall be irregularly shaped to soften the undesirable visual impact of straight lines. Movement of labour and equipment within the right-of-way and over routes provided for access to the work shall be performed in a manner to prevent damage to grazing land, crops or property.
5. All trees and shrubbery which are not specifically required to be cleared or removed for construction purposes shall be protected from any damage that may be caused by the

construction operations and equipment. Special care shall be exercised where trees or shrubs are exposed to injuries by construction equipment, excavating, dumping, chemical damage or other operations; and the Contractor shall adequately protect such trees by use of protective barriers or other methods approved by the Project Engineer. The removal of trees or shrubs will only be permitted after prior approval by the Project Engineer. The layout of the Contractor's construction facilities such as workshops, warehouse storage areas and parking areas; location of access and haul routes; and operation in borrow and spoil areas shall be planned and conducted in such a manner that all trees and shrubbery not approved for removal by the Project Engineer shall be preserved and adequately protected from either direct or indirect damage by the Contractor's operations.

6. 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.
7. 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.
8. 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.
9. 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 at camps, housing and on the site at all times 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.
10. Burning of materials resulting from clearing of trees and bush, combustible construction materials, and rubbish will be permitted only when atmospheric conditions for burning are considered favorable and when authorized by the Project Engineer. In lieu of burning, such combustible materials may be disposed of by other. Where open burning is permitted, the burn piles shall be properly constructed to minimize smoke, and in no case shall unapproved materials such as tires, plastic rubber products, asphalt products, or other materials, that create heavy black smoke or nuisance odors, be burned.
11. Dust abatement: During the performance of the work required by this specifications or any other appurtenant thereto, whether on right-of-way provided by the Employer or elsewhere, the Contractor shall furnish all the labor, equipment, materials, and means required, and shall carry out proper and efficient measures wherever and as often as necessary to reduce the dust nuisance and to prevent dust which has originated from his operations from damaging crops, orchards, cultivated fields and dwellings or causing nuisance to obtain adequate control.

12. The Contractor shall comply with applicable National laws, orders and regulations concerning the prevention, control and abatement of excessive noise. Blasting, the use of jackhammers, pile driving, rock crushing or other operations producing high-intensity impact noise may be not be performed during the night
13. The Contractor's workshops office and yard area shall be located and arranged in a manner to preserve trees and vegetation to the maximum practicable extent. On completion of the project all temporary buildings including concrete footings and slabs, and all construction materials and debris shall be removed from the site. The area shall be regarded, as required, so that all surfaces drain naturally, blend with natural terrain, and are left in a condition that will facilitate natural re-vegetation, provide for proper drainage and prevent erosion.
14. 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, lakes, 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, lake shorelines or other watercourse perimeters where they can be washed away by high water or storm runoff or can in any way encroach upon watercourse itself.
15. The Contractor shall comply with applicable laws and regulations and water quality standards concerning the control and abatement of water pollution
16. 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.
17. 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.
18. 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.

19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. The contractor shall be required to give fair and reasonable opportunity to sub-contractors from the county where such opportunities arise.
25. 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)
26. 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.
27. 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.
28. The contractor to provide appropriately or reasonably long-term contracts to workers and avoid as much as possible using casual laborers.
29. At the completion of operations the Contractor shall rehabilitate used, exhausted and obsolete pits and quarries. The sides and floors of pits shall be formed to a flowing finish with side slopes not steeper than 1 vertical to 6 horizontal. During pit reshaping any material carried to the pit shall be spread uniformly over the entire shaped surface. The Contractor shall ensure that non – biodegradable and inert waste is removed and disposed of in licenced sites. The same will apply to toxic waste. Topsoil shall be spread over the shaped batters, filled areas and bare areas of the pits to a reasonable depth. Following the spreading of topsoil, the entire pit shall be ripped along the contours to a depth of 500mm and at not more than 500mm spacing.
30. 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.

31. 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.
32. 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 ( <i>accidents and Injuries</i> )	<ul style="list-style-type: none"> <li>▪ Site safety action plan</li> <li>▪ Trained workers on safety and first aid skills</li> <li>▪ First aid facility and injury reporting mechanism put in place</li> <li>▪ Appropriate use of personal protective equipment (PPE) (<i>Reflective jackets, helmets, face masks, ear plugs gloves, safety boots, etc.</i>)</li> <li>▪ Trained workers on appropriate use of PPE.</li> <li>▪ Sanitation facilities provided on site for human waste disposal</li> <li>▪ Incident register and training of how to use it</li> <li>▪ Updated contractor WIBA insurance policy</li> <li>▪ Watering points for worker on site with clean water</li> <li>▪ Memorandum of Understanding with nearby health centre.</li> <li>▪ Covid-19 management rules/guidelines on site</li> <li>▪ Adequate covid-19 PPE and use by all persons on site.</li> <li>▪ Trained workers on covid-19 rules and requirements.</li> </ul>
2.	Public health and safety ( <i>accidents and Injuries</i> )	<ul style="list-style-type: none"> <li>▪ Use of safety signs at strategic places with high risks to public.</li> <li>▪ Hording off working sites</li> <li>▪ Speed limit measures in place</li> <li>▪ Awareness creation and sensitization activities for the public</li> </ul>
3.	Visual/ aesthetic Impacts	<ul style="list-style-type: none"> <li>• Backfilling of soil cuttings</li> <li>• Landscaping of the project site</li> </ul>
4.	Leakages and spills	<ul style="list-style-type: none"> <li>▪ Recorded incidents of hazardous waste leakage or spills.</li> <li>▪ Site-specific incident management or response plan.</li> <li>▪ Oil trap measures at contractors yard</li> </ul>
5.	Excessive Noise	<ul style="list-style-type: none"> <li>• Noise regulation measures on construction equipments.</li> <li>• Construction equipment and Machine servicing records</li> <li>• Records of public notices for high noise level activities</li> <li>• Appropriate use of noise PPE by workers</li> <li>• Measures in place to reduce unnecessary hooting and speeding.</li> <li>• Records of regular measurement of noise levels</li> </ul>
6.	Air pollution	<ul style="list-style-type: none"> <li>• Identified potential sources of air pollution on site</li> <li>• Measures put in place to control effect of wind on material being transported</li> </ul>
7.	Solid Waste generation	<ul style="list-style-type: none"> <li>• Site-specific waste management plan</li> <li>• Measures of waste avoidance, reduction, reuse and recycle put in place.</li> <li>• Designated waste transfer station on site.</li> <li>• Records of approvals from NEMA and County Government on waste management and disposal</li> </ul>
8.	Increased Water consumption for	<ul style="list-style-type: none"> <li>• No. of sensitization and awareness creation among construction workers</li> </ul>

NO.	ASPECT	LIST OF POTENTIAL INDICATORS TO BE MONITORED
	construction	<ul style="list-style-type: none"> <li>• Measures to conserve water during structure curing.</li> <li>• Records of response to leakage in the water system.</li> <li>• Alternative water sources</li> </ul>
9.	Risk of Spread of HIV/AIDS	<ul style="list-style-type: none"> <li>• No. of HIV/AIDS prevention messaging</li> <li>• No. of workers having access to safe sex (condoms-Male and female)</li> <li>• Installed HIV testing services or an MoU with an existing government health facility in the area.</li> <li>• No. of supported infected workers with ARVs</li> <li>• Peer counseling services put in place</li> </ul>
10.	Grievances	<ul style="list-style-type: none"> <li>• Grievance redress committees put in place</li> <li>• Contractor staff grievance structures put in place</li> <li>• Sensitization and awareness creation</li> <li>• No. of grievance log</li> </ul>
11.	Effects of Immigrant workers	<ul style="list-style-type: none"> <li>▪ No of local workforce</li> <li>▪ Community engagement plan in place</li> <li>▪ Signed Code of Conduct by all workers</li> <li>▪ Sensitization meeting on local social and cultural practices on acceptable behavior</li> <li>▪ Sexual Harassment and Non-Discrimination Policy</li> <li>▪ Labour Management Plan (LMP )</li> </ul>
12.	Child Labour and Protection	<ul style="list-style-type: none"> <li>▪ Records of employees including copies identification cards</li> <li>▪ Records of child sexual relations offenses reported to the police.</li> <li>▪ Recruitment policy prohibiting child labour put in place</li> <li>▪ Review of employee records</li> </ul>
13.	Gender Equity, Sexual Harassment and abuse amongst workers in the workplace	<ul style="list-style-type: none"> <li>▪ Sexual Harassment and Non-Discrimination Policy</li> <li>▪ No of women and men employed</li> <li>▪ No of sanitation facilities per sex</li> <li>▪ Records of reported harassment cases</li> <li>▪ Trained and sensitized employees on appropriate behavior</li> <li>▪ Signed code of conduct against SH</li> <li>▪ Gender action plan</li> </ul>
14.	Gender-based violence at community level	<ul style="list-style-type: none"> <li>▪ Implemented measures to prevent GBV at community level</li> <li>▪ No. of community engagement and consultation with women and girls;</li> <li>▪ No. of sub-project activities identified to be of high GBV risk at community level.</li> <li>▪ Referral mechanisms are in place in the event of GBV at Community level</li> </ul>
15.	Sexual exploitation and abuse (SEA)	<ul style="list-style-type: none"> <li>▪ SEA management action plan</li> <li>▪ Signed code of conduct (CoC) by all workers and sub-contractors</li> <li>▪ Workers trained on CoCs and responsibilities</li> <li>▪ Project-level IEC materials put in place</li> <li>▪ Survivor-centred mechanisms put in place</li> </ul>

NO.	ASPECT	LIST OF POTENTIAL INDICATORS TO BE MONITORED
		<ul style="list-style-type: none"> <li>▪ Multi-sectoral referral and assistance plan put in place</li> <li>▪ Disciplinary procedures at the project put in place</li> <li>▪ Confidential community-based complaints mechanisms in place</li> <li>▪ PSEA awareness-raising done</li> <li>▪ community-level IEC materials put in place</li> <li>▪ No of community outreach to women and girls about social risks and their PSEA-related rights;</li> <li>▪ Integration of SEA in job descriptions, employments contracts, performance appraisal systems,</li> <li>▪ Whistle-blower protection and investigation and disciplinary procedures put in place</li> <li>▪ No. of training of project staff on SEA conducted</li> </ul>
16.	Spread of COVID-19 amongst community members during consultation processes	<ul style="list-style-type: none"> <li>• electronic channels adopted for engagement of stakeholders</li> <li>• Measures to observe social distance put in place</li> <li>• Covid-19 PPE use on site</li> <li>• Use of Covid-19 PPE during community engagement</li> <li>• Traditional Communication channels adopted</li> <li>• No. of stakeholders per meeting,</li> <li>• No of digital platform adopted</li> <li>• Online services of community engagement put in place</li> <li>• feedback and suggestion platforms for participants,</li> <li>• size of groups attending meetings</li> </ul>
17.	Spread of COVID-19. During construction at work sites	<ul style="list-style-type: none"> <li>• Approved SOPs in line with World Bank and ministry of health guidelines in place,</li> <li>• No of routine fumigation of shared area and shared tools,</li> <li>• Sanitizing and hand washing area and facilities put in place</li> <li>• Isolation area,</li> <li>• proper use of covid-19 PPE,</li> <li>• visual inspection of social distance and</li> <li>• rapid covid-19 screening measures put in place</li> </ul>
18.	Spread of invasive species	<ul style="list-style-type: none"> <li>• Ensuring cleanliness of the project construction vehicles accessing or leaving the site to reduce spread of <i>Prosopis Juliflora</i> currently on site.</li> <li>• Create awareness among the workers</li> </ul>

## VIII. GRIEVANCE LOG FORMS

**GRIEVANCE LOG FORM:**

**GRIEVANCE NO:**.....

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

**IX: SIGNED OFF SCREENING FORMS**

**Annex 9: ESMF Screening Checklist and Review Form**

**A) ESMF Screening Check List <sup>3</sup>**  
*[This checklist is to be used by CIGs/CBOs and to be submitted to the CPIU]*

KEMFSED Project: \_\_\_\_\_

Sub-project name [type here] CONSTRUCTION OF NIAMBWE NIANKI CPIU

Location [type here] \_\_\_\_\_

Executing entity [type here] NIAMBWE FISHERIES OFFICE

Estimated cost (KES) [type here] ]

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**TYPE OF PROJECT OR ACTIVITY**

**CATEGORY A**

- Policy, legal or strategy document
- Dam project greater than 15m in height
- Medium-scale irrigation scheme
- Medium- scale water storage Structure
- Rehabilitation of water storage structure
- Forestry concession with the private sector
- Construction of roads, bridges
- Activities affecting protected areas or wildlife habitats

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**CATEGORY B**

- Farm forestry or agro-forestry, small-scale woodlots and tree nurseries
- Small-scale irrigation scheme
- Small-scale water storage facility
- Spring capping or rural water supply scheme
- Small-scale dam (less than 10 m in height)
- Check- dam
- Forest infrastructure
- Participatory forest management or reforestation
- Dykes
- Riverbank Stabilization
- Terracing of farmland
- Fisheries/Mariculture Interventions
- Livestock Interventions
- Agricultural interventions
- Support to Income generating initiatives

Please give more details: [type here] ]

Please give more details: [type here] ]

Please give more details: [type here] ]

---

<sup>3</sup> Category A type sub-projects will not be funded under the KEMFSED Project

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Please give more details: [type here ]

~~Other~~

Please give more details: [type here ]

SUPPORT TO KWALE FISHERIES  
INFRASTRUCTURE

**CATEGORY B PROJECTS**

Please describe how the project complies with the most relevant planning document, for example the District Development plan or the Sub Catchment Plan:

Will the Project:	Yes	No
Adversely affect natural habitats nearby, including forests, rivers or wetlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Require large volumes of construction materials (e.g. gravel, stone, water, timber, firewood)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use water during or after construction, which will reduce the local availability of groundwater and surface water	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lead to soil degradation, soil erosion salinity in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Create waste that could adversely affect local soils, vegetation, rivers and streams or groundwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Create pools of water that provide breeding grounds for disease vectors (for example malaria or bilharzia)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Involve significant excavations, demolition, movement of earth, flooding, or other environmental changes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Affect historically-important or culturally-important site nearby?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Require land for its development, and therefore displace individuals, families or businesses from land that is currently occupied, or restrict people's access to crops, pasture, fisheries, forests or cultural resources, whether on a permanent or temporary basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in human health or safety risks during construction or later?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Involve inward migration of people from outside the area for employment or other purposes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in conflict or disputes among communities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Affect indigenous people, or be located in an area occupied by indigenous people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Involve the construction of a dam or weir, depend on water supplied from an existing dam?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in a significant change/loss in livelihood of individuals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Adversely affect the livelihoods and /or the rights of women?	Yes, <input type="checkbox"/>	No <input checked="" type="checkbox"/>

If you have answered Yes to any of the above,

[type here ]

please describe the measures that the project will take to avoid or mitigate environmental and social impacts  
What measures will the project take to ensure that it is technically and financially sustainable?

[type here ]

**CONCLUSION**

Which course of action do you recommend?

PSMP     ESIA     RAP

- Community to be given full responsibility to mitigate environmental risks
- SCAs to provide detailed guidance on mitigation of risks to the community
- Specific advice is required from County Officer in the following area (s):

Type here

People will be physically or economically displaced, and therefore a RAP is required (work with CPIU to develop and implement the report).

There are no environmental or social risks

Completed by: [type here]

Name: [type here]

Position/ Community: [type here]

Date: [type here]

SITI SALIM  
CDO

Assisted by: [type here]

Name of officer: [type here]

Position: [type here]

Date: [type here]

MICHAEL KURIA  
PROJECT SAFEGUARD OFFICER



