



## ENVIRONMENT AND SOCIAL MANAGEMENT PLAN



### FOR THE

### PROPOSED DEVELOPMENT AND OPERATION OF A BIRD HIDE IN QUEEN ELIZABETH NATIONAL PARK AT KAZINGA CHANNEL

| Site points                  | Easting | Northing | Elevation (m) |
|------------------------------|---------|----------|---------------|
| Kazinga Channel<br>bird hide | 91753   | 176004   | 677           |

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## LIST OF ACRONYMS

|                 |  |
|-----------------|--|
| AIDS            | Acquired Immune Deficiency Syndrome            |
| AQG             | Air Quality Guideline                          |
| AQI             | Air Quality Index                              |
| Cap             | Caption  |
| CO              | Carbon dioxide                                 |
| NO <sub>x</sub> | Nitrogen Oxides                                |
| SO <sub>2</sub> | Sulphur Dioxide                                |
| COVID-19        | Corona Virus Disease                           |
| DRC             | Democratic Republic of Congo                   |
| DIZ             | Direct Impact Zone                             |
| EA              | Environmental Assessment                       |
| EHS             | Environmental, Health and Safety               |
| EHS             | Environment Health and Safety                  |
| EHSG            | Environment Health and Social Safe Guards      |
| EIA             | Environmental Impact Assessment                |
| ESIA            | Environmental Social Impact Assessment         |
| ESMP            | Environmental and Social Management Plan       |
| FGDs            | Focus Group Discussions;                       |
| GBV             | Gender Based Violence                          |
| GoU             | Government of Uganda                           |
| GPS             | Global Positioning System                      |
| H & S           | Health and Safety                              |
| HIV             | Human Immuno-deficiency Virus                  |
| hrs             | hours  |
| HSE             | Health Safety and Environment                  |
| IIZ             | Indirect Impact Zone                           |
| IPF             | Investment Project Financing                   |
| IUCN            | International Union for Conservation of Nature |
| IWRM            | Integrated Water Resources Management          |

|       |  |
|-------|--|
| KII   | Key Informant Interviews                         |
| LC    | Local Council                                    |
| LTD   | Limited  |
| MGLSD | Ministry of Gender Labour and Social Development |
| mi    | mile   |
| MLHUD | Ministry of Lands, Housing and Urban Development |
| mm    | millimeter                                       |
| MoUs  | Memorandum of Understanding                      |
| MoWE  | Ministry of Water and Environment                |
| NDP   | National Development Plan                        |
| NEA   | National Environment Act                         |
| NEMA  | National Environment Management Authority        |
| OSH   | Occupational Health and Safety                   |
| PPEs  | Personal protective equipment                    |
| PA    | Protected Area                                   |
| QENP  | Queen Elizabeth National Park                    |
| Sn    | Serial number                                    |
| STDs  | Sexually-Transmitted Diseases                    |
| ToR   | Terms of Reference                               |
| UAC   | Uganda AIDs Commission                           |
| UGP   | Uganda Gender Policy                             |
| VES   | Visual Encounter Surveys                         |
| VIP   | Ventilated Improved Pit                          |
| VOL   | Volume   |
| WCS   | World Conservation Status                        |
| ZOI   | Zone of Influence                                |

## **1 INTRODUCTION**

### **1.1 Background**

Located in Uganda's Albertine Rift Valley, Queen Elizabeth National Park sits on the equator and forms part of a vast transboundary system, adjoining Kibale National Park to the northeast and Rwenzori Mountains National Park to the northwest. This stunning park spans across the districts of Kasese, Kamwenge, Bushenyi, and Rukungiri in western Uganda, approximately 376 kilometers (234 miles) southwest of Kampala, the capital and largest city of Uganda. Adjacent to the park's northeastern border lies the town of Kasese, while the town of Bushenyi is just outside its southeastern boundaries. The geographical coordinates of the park are 00 12S, 30 00E (Latitude: 0.2000; Longitude: 30.0000).

Encompassing around 1,978 square kilometers (764 square miles), Queen Elizabeth National Park covers approximately 17% of Kasese District, 50% of Bushenyi District, and an estimated 33% of Rukungiri District. Its vast expanse stretches from Lake George in the northeast to Lake Edward in the southwest, encompassing the Kazinga Channel that connects these two lakes.

Named in honor of Queen Elizabeth II, the park was established in 1954 and is renowned for its diverse wildlife. Despite suffering losses during the Uganda-Tanzania War, the park has seen significant recovery in various species, including hippopotamuses, elephants, leopards, lions, and chimpanzees. It now boasts an impressive array of wildlife, housing 95 species of mammals and 606 species of birds. Due to its rich biodiversity, the park has become a favored destination for wildlife enthusiasts looking to experience Uganda tours, standing out as one of the prime tourist spots in East Africa.

Within the park, visitors can explore several fascinating areas, such as the remote Ishasha Sector known for its tree-climbing lions, the Kyambura Gorge, which is home to habituated chimps, the Maramagambo Forest hosting a captivating assortment of forest monkeys and birds, and the crater lakes where flocks of flamingos can be observed.

Aside from its wildlife, Queen Elizabeth National Park is also famous for its volcanic features, showcasing volcanic cones and deep craters, many of which contain crater lakes like Lake Katwe, where salt extraction takes place.

This national park shares its borders with the Maramagambo Forest and adjoins Kigezi Game Reserve, Kyambura Game Reserve, and Kibale National Park within Uganda, as well as the Virunga National Park in the Democratic Republic of Congo.

The park's ecosystem is very rich with various species of birds that can go unsighted. As part of the Integrated Bird Management Project, Kibale National Park is set to receive a bird hide equipped with binoculars and telescopes to aid in observing and studying birds. SNP is a beneficiary of the Investing in Forests and Protected Areas for Climate Smart Development (IFPA-CD) project, which is funded by the World Bank. The specific aim of the IFPA-CD project is to enhance forest and wildlife conservation for the benefit of local communities and sustenance of their livelihoods and the country's economy. The 6-year project shall be implemented primarily in 37 districts surrounding 7 National Parks, 4 Wildlife Reserves, and 28 Central Forest Reserves including the 16 Refugee host districts.

## **1.2 Bird Hide Description**

The bird hide will be located at Kazinga Channel in Queen Elizabeth National Park. A bird hide serves to minimize human presence, enabling observation of birds in their natural surroundings without causing disturbance. These structures, ranging from simple tents to more elaborate setups, incorporate features like camouflage, strategically positioned openings, and comfort-enhancing elements for prolonged observation. They are often placed near areas of high bird activity, ensuring minimal impact on the birds and their habitats. Ethical guidelines emphasize quietness and non-intrusiveness to safeguard the birds' well-being during observation.



### **1.3 Objective of the ESMP**

The objective of environmental and social monitoring plan is to identify the impacts that will be related to the development and propose mitigation measures that will ensure that the project will be implemented in a sustainable way

The ESMP will serve as a reference document for planning, implementation, monitoring and reporting. The ESMP is intended to ensure that all project activities comply and adhere to environment and social safeguard requirements.

Uganda Wildlife Authority (UWA) will require the Contractor to implement this ESMP, which will form part of the bidding documents and the works contract. The contractor to be awarded the construction contract will be responsible for the full-time monitoring and implementation of the ESMP and will be supervised and guided by UWA as the executing agency for the project.

The ESMP requires the involvement of several stakeholders and agencies, each with different roles and responsibilities including UWA and the Contractors.

## 2 PROJECT DESCRIPTION AND BASELINE

### 2.1 Project Description

The bird hide at Kazinga Channel will be constructed to provide an unobstructed view of the surrounding landscape.

It will consist of a small cabin or platform where tourists can sit or stand in order to have a clear observation of the birds without any disturbance. In addition, a toilet will be constructed adjacent to the bird hide next to the outpost, and waste bins will be installed. The source of water shall be rain harvesting which shall be used for the toilet.

The materials to be used will include reinforced concrete for the bases and steel sections for the staircase and column support. The windows will be glazed with clear glass panels and roof to the cabin will have pre-painted steel roof sheets. The bird hide will also be equipped with solar power supply installations.

The materials for the steel structure, the glazing as well as cement will be sourced from steel manufacturers and suppliers. Some other materials like aggregates sand, timber for formwork and sundries will be sourced locally.

All fabrication work and installation will be done locally on site.



**Figure 1:** *Bird Hide Artistic Impression*

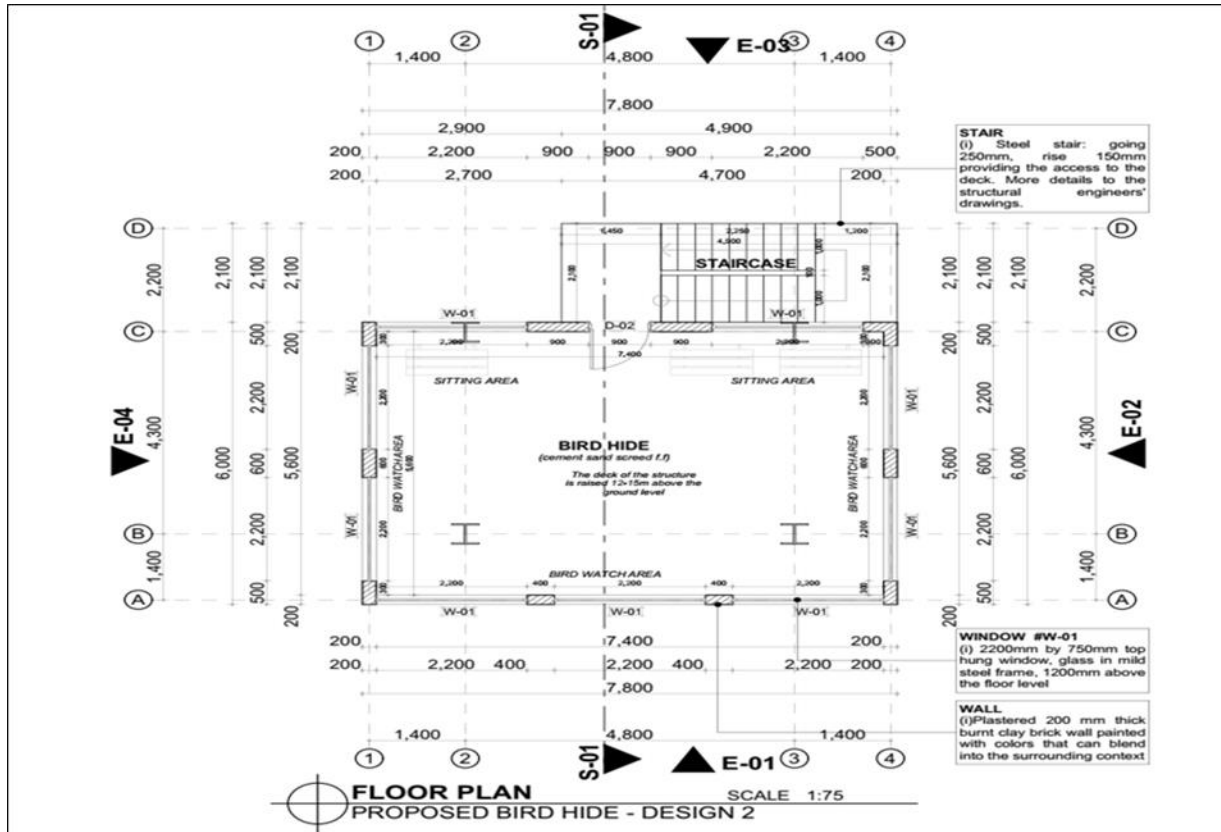


Figure 2: Bird Hide Platform Plan

## 2.2 Environmental Baseline

### 2.2.1 Location Description

This site is situated at in a UTM 36N: 154158m E and 9980375m N in Kasese District. The site is about 1km from the Mweya Safari lodge. The nearest water source is the kazinga channel at about 50m. The site is not within the national electricity grid, so solar power will be the source of power at the site.





**Figure 3:** Location of the Proposed Site

## 2.2.2 Biological Baseline Description of Queen Elizabeth National Park

### 2.2.2.1 Flora

Queen Elizabeth National Park is a savanna grassland park. Themeda triandra is the most widespread species of grass though it is non-existent in water logged areas. Other species of grass to come along include: Cymbopogon afronardus, Acacia hockii, sporobulus pyramidalis, Acacia gerradii, Euphorbia candelabrum and thickets of Capparis tomentosa. The predominant tree species include: Acacia sieberiana, Acacia gerradii, and Ficus gnaphalocarpa.

### 2.2.2.2 Fauna

Queen Elizabeth national park hosts over 95 mammals. These include the following: Spotted hyaena, Shrews, Peter's shrew, Fruit bats, Epauletted fruit bat, Rousette fruit bat, Insect eating bats, White-bellied tomb bat, Yellow-winged bat, Monkeys and

baboons, Vervet monkey, Uganda blue monkey, Red-tailed monkey. Olive baboon, Black and white colobus, red colobus, Long-haired chimpanzee, Pangolins, Temminck's lesser, Ground pangolin. African wild cat, Serval, Lion, Leopard, Aard-varks, African ant bear or aard-vark, Rock hyrax, Tree hyrax, Elephants, African elephant, Hippopotamuses, Uganda black buffalo, Common (or kavirondo,) Bush buck, Speke's sitatunga, Bush duiker, Blue duiker, Red duiker, Yellow-backed duiker, Defassa waterbuck, Uganda kob, Bohor reedbuck, Topi, Hares and rabbits, East African hare, Porcupines, East African crested porcupine, Cane rats, Langer cane rat, Squirrels, African tree squirrel, Giant squirrel. Among others.

Queen Elizabeth National Park more than 600 bird species recorded. This is mostly due to the wide variety of habitats: from savannah to forest to wetland. Many of the birds in the park are regarded as specials within East Africa, which make it a prime birding destination. The swamps in the Ishasha sector are a good place to look for the elusive shoebill stork. Migratory birds are present from November to April.

### **2.2.3 Physical Characteristics of Queen Elizabeth National Park**

#### **2.2.3.1 Climatic Patterns**

##### **2.1.3.1.1 Rainfall Patterns**

Located in western Uganda near the Rwenzori Mountains, Queen Elizabeth National Park is positioned within the Albertine Rift Valley. The park encompasses a total area of 1,978 km<sup>2</sup>, comprising hills, plains, forests, and wetlands. Together with Parc National des Virunga in Congo, it forms one of the largest protected area systems in eastern Africa, known as the Greater Virunga Landscape. The park experiences two distinct rainy seasons, occurring from March to May and from September to November, although the amount of rainfall varies considerably across different parts of the park.

The annual precipitation in the Maramagambo forest reaches approximately 1,250 mm, while the area along the Kazinga channel receives around 750 mm of rainfall per year. This variation is likely due to the influence of the Rwenzori Mountains in the north and the Kichwamba slope in the east, affecting air circulation patterns. The vicinity around

Queen Elizabeth National Park also witnesses two pronounced wet seasons due to its equatorial location and the annual movement of the Inter Tropical Convergence Zone (ITCZ). The first rains usually commence around late February at all four stations, while the second rainy season begins around mid-August.

There is little difference in the duration of the two rainy seasons at any station, and the amount of rainfall received during both seasons is generally similar at most stations, except for Kitwe, where more precipitation occurs during the second rainy season compared to the first one.

## **2.2.4 Biophysical Characteristics of the Site**

### **2.2.4.1 Flora and Fauna**

The Kazinga channel proposed bird hide is situated within 35M0822194, 9980062. The site is characterized by abundant *Dichrostachys cinerea* which is an invasive species. *Cynodon dactylon*, *Chloris gayana* and *Themeda spp* form the dominant vegetation cover, interspersed with sporadic shrubs of *Capparis sp* and trees of *acacia spp*. These shrubs and trees contribute to the overall landscape, providing additional diversity and habitat for various wildlife species.

The site consists of wallowing grounds for African buffalos and Hippopotamuses. Other animals such as elephants can be found near the site.

The site is home to a variety of bird species including yellow-billed stork (*Mycteria ibis*), Hamerkop (*Scopus umbrette*), Great White Pelicans (*Pelecanus onocrotalus*), Pink-backed Pelican (*Pelecanus rufescens*), Goliath Heron (*Ardea goliath*), Great Egrets (*Ardea alba*), Little Egret (*Egretta garzetta*), Cattle Egret (*Bubulcus ibis*), Marabou stork (*Leptoptilos crumenifer*), African fish eagle (*Haliaeetus vocifer*), African Darter (*Anhinga rufa*), Grey-headed kingfisher (*Halcyon leucocephala*), Pied kingfisher (*Ceryle rudis*), Helmeted guineafowl (*Numida meleagris*), Egyptian goose (*Alopochen aegyptiaca*), among others.

Overall, the Kazinga channel bird hide offers a unique vantage point within the open grassland, allowing visitors to observe and appreciate the diverse avian species that inhabit Kazinga channel and the surrounding ecosystem.

#### **2.2.4.2 Soils and Geology**

The soils in the Kazinga Channel and Queen Elizabeth National Park area exhibit diversity due to the varied geological and ecological conditions, stemming from the park's diverse landscapes including grasslands, forests, wetlands, and water bodies. These landscapes give rise to different soil types: clay soils prevalent in wetlands, offering good water retention for aquatic plants; sandy soils in well-drained areas with lower water-holding capacity; loam soils, a fertile mix of sand, silt, and clay supporting various vegetation; and nutrient-rich volcanic soils from regional volcanic activity. The geology is closely tied to the formation of the Great Rift Valley, driven by African tectonic plate movements, leading to features like faults, valleys, and lakes including Lake Edward and Lake George connected by the Kazinga Channel within this rift system.

#### **2.2.4.3 Noise Assessment**

During the assessment noise meters were used to record noise at the site. The site is located away from the traffic and therefore the noise from the workers and the likely receptors will be the workers during construction and the animals.

Noise levels were recorded at the site where the bird hide will be constructed. The bird hide site had noise levels below the recommended permissible limits as shown in the table below.

**Table 1: Baseline Noise Results for Bird Hide Site**

| Project activity | GPS Coordinates (UTM 36N) | Noise results |         |          | Noise source   | Noise receptor |
|------------------|---------------------------|---------------|---------|----------|--|----------------|
|                  |                           | Min (db)      | Av (db) | Max (db) |  |                |
| Kazinga Channel  | 154158 m E<br>9980375m N  | 28            | 41      | 81       | <ul style="list-style-type: none"> <li>Sound from the birds on the proposed site.</li> <li>Hippos</li> </ul> | Wildlife       |

#### **2.2.4.4 Air Quality**

The baseline ambient air quality parameters of the site were obtained using a MX 60 multi – gas and the results are as shown in the table below. The results indicate that the quality of the air at the site is good and favorable for the wildlife ecosystem.

***Table 2: The Air Baseline Results for the Bird Hide***

| <b>Site name</b> | <b>AQI</b> | <b>PM 2.5<br/>µm</b> | <b>PM10<br/>µm</b> | <b>Source</b> | <b>Receptor</b> |
|------------------|------------|----------------------|--------------------|---------------|-----------------|
| Kazinga Channel  | 42         | 10                   | 15                 | Dusty road    | Wildlife        |



### **3 POLICY, LEGAL AND REGULATORY FRAMEWORK**

#### **3.1 National Policy**

##### **3.1.1 The National Environment Management Policy, 1994**

The overall Goal of the National Environment Management Policy (NEMP) is sustainable social and economic development which maintains or enhances environmental quality and resource productivity on a long term-basis that meets the needs of the present generations without compromising the ability of future generations to meet their own needs.

This ESMP has been prepared to ensure sustainable development, as the sub-project is likely to result in environmental impacts and risks.

##### **3.1.2 Uganda Wildlife Policy, 2014**

The Wildlife Policy states the intention and the strategic direction of the Government of Uganda regarding wildlife conservation.

Subsection (h) mandates the relevant institution to establish standards, guidelines and mitigation measures to be followed for any development activities that may have a significant impact on wildlife.

UWA should restrict excavation works to areas that will be required for construction of the sub-project so as to minimize on the impacts on wildlife.

##### **3.1.3 Uganda Land Policy, 2013**

The Uganda National Land Policy was put in place by the Government in 2013 to streamline land management issues in the country. Its major goal is to ensure efficient, equitable and optimal utilization and management of Uganda's land resources for poverty reduction, wealth creation and overall socio-economic development.

It contains sections about Natural resource management and emphasizes the public trust doctrine that mandates the state to manage and protect these resources for the common good of all the citizens of Uganda. The policy articulates strategies to ensure

that natural resources are optimally used and sustainably managed for the benefit of the present and future generations and to restore, maintain and enhance their integrity.

The policy also reorganizes the need for special protection of fragile eco-systems and to ensure that deliberate actions are taken to restore the environment and to minimize the health risks associated with industrial activities.

UWA is developing this ESMP to ensure the ecosystem under its jurisdiction is not deteriorated due to the implementation of the project, by ensuring mechanisms are put in place to manage any potential impacts.

#### **3.1.4 The National Land Use Policy, 2007**

The overall goal for the national land use policy is "To achieve sustainable and equitable socio-economic development through optimal land management and utilization in Uganda". The client bases on some of the specific goals of this policy among others. To promote land use activities that ensure sustainable utilization and management of environmental, natural and cultural resources for national socio-economic development.

The above principles that govern the National Land Use Policy as a reflection of the fact that sustainable, equitable and integrated natural resources utilization like the proposed land for recreational activity is essential for natural social and economic development.

The policy emphasizes among others, environmentally friendly practices during the construction with community based participatory planning prior to the establishment and operation focusing land ownership.

This assessment is aimed at ensuring sustainable operation of the proposed project activities through implementation of the proposed mitigation measures in order to conform to this policy while effectively utilizing land resources.

### **3.1.5 The National Gender Policy, 2007**

The policy provides a legitimate point of reference for addressing gender inequalities at all levels of government and by all stakeholders. The major aspects of this policy provisions include among others;

- Increased awareness on gender as a development concern among policy makers and implementers at all levels;
- Influencing national, sectoral and local government programmes to address gender issues;
- Strengthened partnerships for the advancement of gender equality and women's empowerment and increased impetus in gender activism.

Based on this policy, UWA and/or the contractor shall take gender issues into account during the construction and most particularly, through equitable access to the job opportunities available.

### **3.1.6 The Child Labour Policy, 2006**

This policy prohibits employment of children since they are more prone to accidents at workplaces such as construction sites. The policy defines child labour as;

- Work that is mentally, physically, socially and/or morally dangerous and harmful to children. In addition, child labour is perceived as work or activities that interfere with children's school attendance.
- Hazardous work, which by its nature or the circumstances under which it is performed jeopardizes the health, safety and morals of a child.

UWA will ensure strictly no employment of children at the sub-project in accordance with this policy.

## **3.2 Legal Framework**

### **3.2.1 The Constitution of the Republic of Uganda, 1995**

The constitution in its National Objectives and Directive principle of state policy, objective XIII provides for the protection of natural resources.

Under Article 237 (2) (b) of the Constitution, the Government or Local government is mandated to hold in trust for the people and protect, natural lakes, rivers, wetlands, forest reserves, game reserves, national parks and any land, to be reserved for ecological and touristic purposes for the common good of all citizens.

In observance of the above provision, all developments in protected areas must take into consideration environmental concerns and ensure that the natural resources, wildlife in this case, are not adversely affected.

### **3.2.2 The National Environment Act No.5 of 2019**

The National Environment Act is the framework piece of legislation in the field of environmental management in Uganda. This act provides for various strategies and tools for environment management, which also includes the Environmental and Social Impact Assessment (ESIA) (Section 113) for projects likely to have significant environmental impacts, and audit (Section 126) for ongoing projects/activities which may significantly affect the environment.

The ESMP has been developed to identify, assess and manage environmental and social risks and impacts as the implementation of the sub-project is likely to have associated negative environmental and social impacts and risks.

### **3.2.3 The Land Act, 1998**

Section 43, provides for management and utilization of land in line with the Wildlife Act 2019 and other laws. Section 44 (i) mandates the government or local governments to hold in trust for the people and protect national parks, wetlands, forest reserves among others for ecological and touristic purposes for the common good of the citizens of Uganda.

UWA shall ensure the contractor minimizes as much as possible the land-take of their developments not to compromise the purpose for which the protected areas were gazetted for.

### **3.2.4 The Uganda Wildlife Act, 2019**

This Act was enacted to provide for the conservation and sustainable management of wildlife; to strengthen wildlife conservation and management; to continue the existence of the Uganda Wildlife Authority. Under the Act (section 6), UWA has the legal mandate to conserve and manage wildlife in the country and enforce wildlife laws and regulations. Section 6(h) specifically mandates UWA to establish and implement management plans for wildlife conservation areas and for wildlife populations outside wildlife conservation areas; Section 23 requires that for any project that shall be set up within designated conservation areas, environmental assessments shall be carried out to mitigate any potential impacts.

The ESMP for the project is being carried out in line with this Act and therefore in line with UWA's mandate of protecting conservation areas from degradation.

### **3.2.5 Employment Act, 2006**

The Employment Act is the governing legal statutory instrument for the recruitment, contracting, deployment, remuneration, management and compensation of workers. The Act also provides for the freedom of association of workers permitting workers to join labour organizations.

Section 32 states that children under the age of 12 years shall not be employed in any business, undertaking or workplace (32(1)). Subsection 32(2) provides restrictions under which a child under the age of fourteen (14) years may be employed; including for light work under the supervision of an adult aged over eighteen (18) years and the work shall not interfere with the child's education.

This development will require the recruitment, contracting, deployment especially during preparation and construction phases, thus this Act will be an important pillar on which the project will be conducted.

### **3.2.6 The Workers' Compensation Act, 2000**

The Workers Compensation Act, Cap 225The Act emphasizes the provision of personal protective equipment (PPE) to employees to minimize accidents and injuries.

*All workers at the sub-project should be provided with adequate PPE that is appropriate to the task they are involved in and ensure that workers use them. A workers' compensation policy should be implemented as stipulated.*

### **3.2.7 The Penal Code Act (as amended), 2007**

The Act criminalizes acts of prostitution, defilement and rape, corruption and abuse of office, among other offences.

*The Act will regulate the contractor's workers from interactions with the communities within the project area.*

### **3.2.8 The Water Act, Cap 152**

The Water Act, Cap 152 of 1995 provides for the management of water in Uganda under the mandate of the Directorate of Water Resources Management (DWRM) in the Ministry of Water and Environment. Section 31, subsection (1) of the Water Act deals with prohibition of pollution to water.

*UWA will ensure that appropriate measures to prevent pollution of underground and surface water sources in the site neighborhood are implemented.*

### **3.2.9 The Occupational Safety and Health Act, 2006**

The Occupational Safety and Health Act of 2006 consolidates, harmonizes and updates the law relating to occupational safety and health and repeals the Factories Act of 1964. It makes provisions for the health, safety, welfare and appropriate training of persons employed in work places. The Act provides for safe access to the workplaces and safe work practices which applies to this project as well.

*The Act is applicable in relation to protection of the construction workers against secondary injuries and hazards during execution of their duties or work. UWA and the*

*Contractor will provide for the protection of workers from adverse weather, provision of a clean and healthy work environment, sanitary conveniences, washing facilities, first Aid and facilities for safe drinking water and meals. In summary, this act should be used as a guideline to ensure health and safety of workers is guaranteed. UWA and Contractor should provide PPE to its entire staff.*

### **3.3 Regulations and Standards**

#### **3.3.1 The National Environment (Waste Management) Regulations, 2020**

These regulations apply to all types of waste (non-hazardous and hazardous) and its storage and eventual disposal. Regulation 12 prohibits the disposal of waste into the environment without adequate treatment at a treatment facility approved by the Lead agency. Regulation 5 emphasizes waste minimization measures by making Cleaner Production a requirement for owners or operators of facilities that generate waste. Production process improvement; product cycle monitoring; and incorporation of environmental concerns in the product lifecycle, are some of the requirements.

UWA will ensure that wastes are managed in a way to avoid environmental pollution and public health impact and that wastes are managed and disposed of in an environmentally friendly manner.

#### **3.3.2 The National Environment (Noise Standards and Control) Regulations, 2013**

The purpose of these Regulations is to provide for the maintenance of a healthy environment for people and wildlife in Uganda, the tranquility of their surroundings and psychological well-being by regulating noise and vibration levels, and generally, to elevate the standard of living of the people and the safety of wildlife by;

- prescribing the maximum noise and vibration levels from a facility or activity to which the person may be exposed;
- providing for the control of noise and for mitigating measures for the reduction of noise and vibration;

UWA will ensure the contractor carries out work with in permissible noise limits especially during construction phase.

### **3.4 International Treaties and Conventions**

#### **3.4.1 Convention on Biological Diversity, 1992**

Under the Convention, each contracting party is expected to develop national strategies, plans or programs for conservation and sustainable use of biological diversity.

The convention was signed by Uganda in 1992 and ratified in 1993. This treaty obliges member states to establish a mechanism of engaging local communities, to share issues arising out of conservation of biological resources and use of indigenous knowledge in the management and conservation of protected areas.

The ESMP has been carried out as a measure to protect biodiversity within the Park during construction and operation.

### **3.5 World Bank Environment and Social Safeguards**

**Table 3: World Bank Environment and Social Safeguards**

|   |  |                          |
|---|--|--------------------------|
| ESS1:<br>Assessment and Management of Environmental and Social Risks and Impact | ESS1 provides for carrying out an environmental and social assessment of the project to assess the environmental and social risks and impacts of the project throughout the project life cycle. Given that the scale of the project (bird hide) and associated environmental and social risks are minimal, an ESMP was prepared to ensure the risks are mitigated during implementation of the project | Triggered/<br>applicable |
| ESS2: Labor and Working   | Recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions  | Triggered/<br>applicable |



|   |  |                                     |
|---|--|-------------------------------------|
| ESS3: Resource Efficiency and Pollution Prevention and Management                                   | <p>Recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. This ESS3 sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life-cycle.</p> <p>ESS3 is applicable to the project and the subproject will implement measures to avoid pollution and ensure efficient resource utilization</p>  | Triggered/<br>applicable            |
| ESS4: Community Health and Safety   | <p>ESS4 recognizes that project activities, project equipment and infrastructure increase the exposure of project stakeholder communities to various health, safety and security risks and impacts and thus recommends that projects implement measures that avoid or limit the occurrence of such risks. It provides further requirements or guidelines on managing safety, including the need for projects to undertake safety assessment for each phase of the project, monitor incidents and accidents and preparing regular reports on such monitoring. ESS4 also provides guidance on emergency preparedness and response. ESS4 is applicable to the project and occupational health and safety protocols as detailed in the Occupational Health and Safety Act 2006, will guide in addressing the issues related to community health and safety in accordance with ESS4</p> | Triggered/<br>applicable            |
| ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement                       | <p>ESS5 promotes consideration of feasible alternative project designs to avoid or minimize land acquisition or restrictions on land use, especially where this would result in physical or economic displacement, while balancing environmental, social, and financial costs and benefits, and paying particular attention to gender impacts and impacts on the poor and vulnerable. ESS5 does not apply to this project since the land where the bird hide will be located is within the protected area.</p>   | Not<br>Triggered/<br>not applicable |
| ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources              | <p>ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development and it recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. Some of the mitigation measures mentioned in this ESMP are aimed at addressing issues under ESS6</p>  | Triggered/<br>applicable            |
| ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities | <p>This ensures that the development process fosters full respect for the human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of Indigenous Peoples ESS7 is also meant to avoid adverse impacts of projects on Indigenous Peoples</p>  | Not<br>Triggered/not<br>applicable  |

|  |  |                              |
|--|--|------------------------------|
| ESS8: Cultural Heritage                                  | This standard sets out general provisions on cultural heritage preservation and recommends protecting cultural heritage from the adverse impacts of project activities. ESS8 is applicable to the project and although there are no known cultural heritage sites in the vicinity, any chance finds will follow the chance finds protocol as in annex.....   | Triggered/ applicable        |
| ESS9: Financial Intermediaries (FI)                      | This recognizes that strong domestic capital and financial markets and access to finance are important for economic development, growth and poverty reduction. FIs are required to monitor and manage the environmental and social risks and impacts of their portfolio and FI subprojects, and monitor portfolio risk, as appropriate to the nature of intermediated financing. The way in which the FI will manage its portfolio will take various forms, depending on a number of considerations, including the capacity of the FI and the nature and scope of the funding to be provided by the FI. ESS9 is not applicable to this project   | Not Triggered/not applicable |
| ESS10: Stakeholder Engagement and Information Disclosure | ESS10. The standard establishes a systematic approach to stakeholder engagement and helps to identify stakeholders and build and maintain a constructive relationship with them, as well as disclose information on the environmental and social risks and impacts to stakeholders in a timely, understandable, accessible and appropriate manner and format. It recommends that stakeholder engagements are commenced as early as possible in the project development process and continued throughout the lifecycle of the Project. This allows for stakeholders' views to be considered in the project design and environmental and social performance.<br>ESS10 also provides for establishment and implementation of a grievance mechanism to receive and facilitate resolution of concerns and grievances. Various stakeholders were consulted as part of the overall project and the IFPA-CD project has established a Grievance Redress Mechanism (GRM). | Triggered/ applicable        |

## **4 METHODOLOGY**

The methodology section highlights the methods that were used in the development of this ESMP.

### **4.1 Environmental and Social Screening**

Environmental and social screening are important processes used to identify, assess, and manage the potential environmental and social risks and impacts associated with activities.

The sub-project was subjected to the project screening checklist and it was determined that the potential adverse risks and impacts on human populations and/or the environment are not likely to be significant. The likely impacts are mostly predictable and expected to be low in magnitude, temporary and/or reversible, site-specific, without likelihood of impacts beyond the actual project. It was after the environmental screening that it was determined that an ESMP would be adequate to mitigate the likely environmental and social impacts and risks.

### **4.2 Document Review**

To gain a clear insight on baseline parameters and project characterization, various planning, regulatory documents and reports were analyzed. Reviewed documents include those on policy and regulatory provisions.

1. Queen Elizabeth National Park General Management Plan (2022)
2. World Bank Environmental and Social Framework
3. National Legal and Regulatory Framework

### **4.3 Site Reconnaissance**

The proposed sub-project area was examined during the site visit. The observation and assessment of the physical characteristics of the proposed site, the immediate surrounding and other environmental and social attributes likely to affect or be affected

by the implementation of the sub-project was undertaken. The site characteristics are detailed in section 2.24 of this ESMP.

The site visit assisted in identifying and assessing the likely impacts as a result of the project implementation. The site visits also assisted in establishing baselines (i.e., biological and physical) to be used in monitoring compliance of the project to the proposed mitigation measures.



**Figure 4:** Bird scenery next to the Site



**Figure 5:** Engagement with UWA Rangers



**Figure 6:** Site location

#### **4.4 Stakeholder Consultations**

Stakeholder consultations allow those most affected by proposed developments to make an input at both planning and operation stages.

The aim of the consultations was to identify and take note of environment and social concerns and views of stakeholders so that appropriate mitigations are incorporated.

Consultations were carried out with key staff at Queen Elizabeth National Park to obtain their comments on the proposed project with respect to the potential environmental and socio-economic issues and impacts. Given that there are no communities close to the project site nearest community is about 15 km consultations were limited to UWA staff within the park.

Key comments by the stakeholders UWA field team.

1. Consider installing tripod mounts or stable surfaces for visitors' equipment.
2. The contractor to be sensitized about the working hours in the protected area.
3. Contractor to maintain proper waste management since it's near a water body.
4. Control Damage to vegetation and disturbances to fauna
5. Seating and Comfort should be comfortable
6. Noise Reduction that is design the hide to minimize noise.

## **5 ANTICIPATED IMPACTS AND MITIGATION MEASURES**

This chapter lays out a discussion of the most pertinent environmental and social impacts of the proposed bird hide project. In addition, the possible mitigation measures to manage the impacts are also proposed.

### **5.1 Positive Impacts**

#### **5.1.1 Wildlife Conservation**

Bird hides provide a safe and unobtrusive way for people to observe birds and other wildlife in their natural habitats. By minimizing human disturbance, bird hides contribute to the conservation of these species by preventing stress and habitat disruption.

#### **5.1.2 Education and Awareness**

Bird hides serve as educational tools, offering people the opportunity to learn about various bird species, their behaviors, and their ecosystems. This increased understanding can foster greater appreciation and awareness of the importance of biodiversity and environmental conservation.

#### **5.1.3 Employment Opportunities**

Construction of the bird hide will require both skilled and unskilled labour to ensure the project is in place. This shall provide opportunity for employment of locals around the park especially in regard to manual labour, and hence improving their standards of living.

#### **5.1.4 Market for Construction Materials**

Construction materials such as bricks, sand, aggregates, and cement shall be required to ensure the bird hide is set up. These will be acquired from the neighbouring trading centres and hence increasing income for the business operators around the park.

### **5.1.5 Habitat Restoration**

The construction of bird hides can be part of habitat restoration efforts. Bird hides can be strategically placed in areas where habitat degradation has occurred, helping to protect and rehabilitate those areas.

## **5.2 Negative Impacts**

### **5.2.1 Construction Phase Impacts**

#### **5.2.1.1 Vegetation Loss**

Some of the vegetation around the site will be cleared to pave way for the establishment of the bird hide. The vegetation to be cleared is however not of ecological sensitivity and the scale of the project is quite small to have a significant impact on the entire Park.

##### **5.2.1.1.1 Mitigation Measures**

- Vegetation clearance shall be restricted to only project area footprint and hence minimising extent of vegetation cleared.
- Selective removal of tree that could be habitat to some species shall be done to ensure minimal habitat distortion.
- Selective clearing shall be prioritized rather than indiscriminate vegetation removal by conduction thorough surveys to identify and protect areas of high biodiversity and rare plant species.
- Re-vegetation of the cleared areas shall be done after the bird hide has been set up to compensate for the loss of vegetation.

##### **5.2.1.2 Wildlife Disturbance**

Construction activities such as haulage of construction materials, excavation, welding activities and the existence of more people in the park is likely to cause disturbances to the wildlife. This can cause retaliation if provoked and hence causing dangers to the workers and in some cases causing migration of species away from the construction area.



#### **5.2.1.2.1 Mitigation Measures**

- Sensitisation of workers on the dos and don'ts while working in Queen Elizabeth National Park shall be carried out by UWA rangers before and during the construction of the bird hide.
- UWA rangers shall be provided to move and be with construction team at all times to ensure construction activities cause minimal disturbances to the wildlife.
- Working hours shall be restricted to day time work and this will ensure less disturbance to the park wildlife.

#### **5.2.1.3 Poaching**

Construction activities will come with access to the park by the contractor's worker. This can be used by the poachers as a chance of entry into the Park and hence carrying out poaching activities in disguise. In addition, workers can unknowingly carry out poaching activities by hunting small wild animals like squirrels, bush rats among others, which is illegal.

##### **5.2.1.3.1 Mitigation Measures**

- Sensitisation of construction workers on illegal activities in the park shall be done to ensure no poaching is done while the bird hide is being set up.
- UWA rangers shall be assigned to the contractor's team to supervise their movements while in the park and hence minimise risks of poaching.
- All workers shall be offered with identification tags for recognition as they enter and carry out the construction activities in the park.
- Contractors shall be monitored and encouraged to avoid redundant labourers at the site.

#### **5.2.1.4 Noise**

Noise is expected to come from construction activities such as generators running the welding equipment as well as human interactions. Noise can attract animals which can be dangerous to the workers. In the same manner, noise can cause interference in



communication of some animals and birds' species. These can be forced to leave their habitat and look for alternative favourable places.

#### **5.2.1.4.1 Mitigation Measures**

- Noise generating activities shall be restricted to day time only.
- Personal Protective Equipment such as earbuds shall be provided to workers to minimize impact of noise to their health.
- Sound harnessers such as muffler shall be used in generators and drilling equipment to minimize the noise generated.
- Scheduling of delivery of material in specific times shall be done so as to minimize impact of noise due to vehicular movements.
- Maintenance and servicing of equipment shall be carried out to ensure they are in good operating conditions.

#### **5.2.1.5 Poor Waste Management**

This is expected in terms of poor management of domestic waste, hazardous waste and human excreta. This can affect the aesthetics of the area by making the area untidy, contamination of land and water resources due to poor handling of hazardous waste and human excreta. This should therefore be managed to ensure minimal impacts due to indiscriminate waste management practices.

##### **5.2.1.5.1 Mitigation Measures**

- Sensitisation of workers on proper waste management practices shall be done to ensure proper implementation of waste management strategies.
- Coded waste bins shall be provided and placed around the construction site to ensure waste segregation and onsite collection.
- All waste collected shall be disposed of outside the protected area in an environmentally sound manner.
- Contractors shall be encouraged to prepare and implement a detailed site-specific waste management plan for the bird hide.

- Mobile toilets shall be provided to ensure that sanitation is observed at the construction site and hence prevent diseases related to poor sanitation.

#### **5.2.1.6 Air and Dust Emission**

Drilling activities, vehicle traffic, concrete mixing and drilling activities at the site are expected to generate dust. In addition, traffic and other equipment using fossil fuels that release hydrocarbons and other gases including carbon dioxide, nitrous oxides, sulphur oxides, and particulate matters will also pollute the air at the site. These can cause eye irritations and respiratory tract diseases among others.

##### **5.2.1.6.1 Mitigation Measures**

- PPEs shall be provided to all workers at the construction site to minimise air pollution impacts on their health.
- Vehicles shall be limited to a prescribed speed to minimise dust raising on the murram roads.
- Haulage trucks will be covered with tarpaulins to ensure dust is not released as vehicles are transporting both construction and spoils material to and from the site.
- Regular maintenance of vehicles shall be carried out to minimise the emission of hydrocarbons from their exhaust.

#### **5.2.1.7 Occupational Health and Safety Risks to Workers**

Construction sites come with different risks while executing the activities. While establishing the bird hide, accidents, injuries, cuts, falls from heights, disease outbreak due poor sanitary conditions among others are some of the anticipated risks at the site. These can cause pain to the workers and hence need to manage these impacts and avoid their occurrences during project implementation.

#### **5.2.1.7.1 Mitigation Measures**

- Sensitisation of workers on likely risks at the site shall be carried out routinely including toolbox talks at commencement of new tasks.
- PPEs that are specific to each worker's roles shall be issued out to ensure minimum risks to human health during operation of the site.
- First Aid kit shall be provided at the site to offer aid to injured workers.
- A trained first aider shall be available at the site to ensure that all first aid cases are adequately handled while at the site.
- Emergency response procedures shall be prepared, displayed and workers trained on such so as to be ready in case of any emergency.
- Warning signage shall be provided on site and along the traffic routed to remind all workers, staff and site visitors on the health and safety aspects in the project area.
- A MoU with a nearby health facility shall be set up to ensure medical cases are handled at the facility in cases where first aid is not sufficient.

#### **5.2.1.8 Sexual Harassment and Risks of HIV**

Construction of the bird hide can involve sexual harassments at the site and off the site, to fellow workers. This can cause uncomfortable working conditions which can lead to poor performance while at work. In addition, HIV/AIDS can easily spread around construction sites where sexual relations are likely to occur among workers of different sex or back in the community where the workers stay after work.

##### **5.2.1.8.1 Mitigation Measures**

- Sensitisation of workers on sexual harassment and HIV shall be carried out prior to deployment to the site and continuous engagements shall also be carried out to remind the workers.
- Condoms shall be provided to workers for usage in case they cannot abstain from sex while still on the project.

- Access to primary health care such as availability of ARVs for HIV positive workers shall be prioritized to ensure work does not affect their health needs.

## **5.2.2 Operation Phase**

### **5.2.2.1 Poor Waste Management**

During operation of the bird hide, waste is expected to be generated by the rangers who will be using the bird hide as required. Since no food is allowed within the park, the main waste streams expected will include plastic material such as water bottles and human waste. Plastic wastes degrade the aesthetics of the park hence making the Park unappealing, while poor human waste management can cause diseases due to poor sanitation practices such as cholera.

#### **5.2.2.1.1 Mitigation Measures**

- Sensitisation of rangers on proper waste management practices shall be done to ensure proper implementation of waste management strategies during the operational phase.
- Coded waste bins shall be provided and placed around the bird hide to ensure waste segregation and onsite collection.
- All waste collected shall be disposed of outside the protected area in an environmentally sound manner.
- Sanitary facilities should be routinely cleaned to minimise risks of diseases.

#### **5.2.2.2 Occupational Health and Safety**

During operation of the bird hide, there are risks involved such as falls from heights from the staircase and the platform, attack by wild animals, among others. Although the magnitude of these impacts is high, the probability of occurrence is low since the rangers that are will be operating the bird hide are well trained individuals.

**5.2.2.2.1 Mitigation Measures**

- Rangers will be sensitized on the health and safety risks that are associated with operation of the bird hide, so as to minimise the occurrence.
- First Aid kit shall be provided at the rangers' house to ensure easy access services to first aid in case of any injuries at the workplace.
- Emergency response procedures for the operation of the bird hide shall be set up to ensure effective operation and management of the project.

**5.2.2.3 Visual Impacts**

Establishment of the bird hide affects the visual aesthetics of the wildlife Park and hence reducing the naturalness of the park. Furthermore, the bird hide may be an obstruction to flying vessels which may knock it and hence causing accidents in the park.

**5.2.2.3.1 Mitigation Measures**

- The bird hide shall be painted with green colour that blends into the natural setting of the park and hence reducing on the visual impacts.

## 6 ENVIRONMENTAL AND SOCIAL MONITORING PLAN

The purpose of environmental and social monitoring is to evaluate the effectiveness of implementation of **Environmental and Social Management Plan (ESMP)** by periodically monitoring the important environmental parameters within the impact area, so that any adverse effects are detected and timely action can be taken.

The environmental management and monitoring plan has been developed to ensure implementation of mitigation measures identified. The monitoring will begin during the construction and must continue throughout all the phases of the project.

The ESMPs outlined in tables hereafter address the potential negative impacts and mitigation measures as well as roles, and monitorable indicators that can help to determine the effectiveness of actions to upgrade the quality of environment; as regards the proposed project.

### 6.1 Monitoring Team

The implementation of the project shall be monitored by UWA staff both at HQ and field level. Below are the specific roles for the team personnel.

#### 6.1.1 EIA Unit

- Helping UWA incorporate ESMP into the detailed technical designs and civil works bidding and contractual documents;
- Providing relevant inputs to the contractor selection process and the procurement process.
- Reviewing reports submitted by the contractor on the implementation of the mitigation measures proposed;
- Conducting periodic site checks to assess compliance with the proposals made in this ESMP

**Table 4: Environmental Social Management and Monitoring Plan**

| Environmental/<br>social impact | Proposed mitigation and Enhancement<br>measures   | Monitoring<br>Indicators                    | Implementing<br>Agency | Recommended<br>Frequency of<br>Monitoring | Monitoring<br>Agency                                   | Cost Estimates<br>(Ugx) |
|---------------------------------|---|---|------------------------|---|--|-------------------------|
| <b>Construction Phase</b>       |   |   |                        |   |  |                         |
| <b>Biological Environment</b>   |   |   |                        |   |  |                         |
| Vegetation Loss                 | <ul style="list-style-type: none"> <li>Vegetation clearance shall be restricted to only project area footprint and hence minimising extent of vegetation cleared.</li> <li>Selective removal of tree that could be habitat to some species shall be done to ensure minimal habitat distortion.</li> <li>Prioritize selective clearing rather than indiscriminate vegetation removal shall be prioritized by conduction thorough surveys to identify and protect areas of high biodiversity and rare plant species.</li> <li>Re-vegetation of the cleared areas shall be done after the bird hide has been set up to compensate for the loss of vegetation.</li> </ul> | Area cleared<br><br>Restoration Plan        | Contractor             | Throughout the construction phase         | UWA Ecological Monitoring team, Supervising consultant | 1,000,000               |
| Wildlife Disturbance            | <ul style="list-style-type: none"> <li>Sensitisation of workers on the dos and don'ts while working in Queen Elizabeth National Park shall be carried out by UWA rangers before and during the</li> </ul>   | Record of sensitization.<br><br>Presence of | UWA Contractor         | Throughout the construction phase         | UWA Ecological Monitoring team,                        | 3,000,000               |



| Environmental/<br>social impact | Proposed mitigation and Enhancement<br>measures   | Monitoring<br>Indicators                               | Implementing<br>Agency | Recommended<br>Frequency of<br>Monitoring | Monitoring<br>Agency            | Cost Estimates<br>(Ugx) |
|---------------------------------|---|--|------------------------|---|---------------------------------|-------------------------|
|                                 | <p>construction of bird hide.</p> <ul style="list-style-type: none"><li>• UWA rangers shall be required to move with construction team at all times to ensure construction activities cause minimal disturbances to the wildlife.</li><li>• Working hours shall be restricted to day time work and this will ensure less disturbance to the Park wildlife</li></ul>   | UWA rangers on site                                    |                        |   |                                 |                         |
| Poaching                        | <ul style="list-style-type: none"><li>• Sensitisation of construction workers on illegal activities in the Park shall be done to ensure no poaching is done while the bird hide is being set up.</li><li>• UWA rangers shall be assigned to the contractor's team to supervise their movements while in the Park and hence minimise risks of poaching.</li><li>• All workers shall be offered with identification tags for recognition as they enter and carryout the construction activities in the Park.</li><li>• Contractors shall be monitored and encouraged to avoid redundant labourers at the site</li></ul> | Identification for workers<br><br>UWA Rangers presence | UWA<br><br>Contractor  | Throughout the construction phase         | UWA Ecological Monitoring team, | 2,000,000               |





| Environmental/<br>social impact | Proposed mitigation and Enhancement<br>measures  | Monitoring<br>Indicators                                     | Implementing<br>Agency | Recommended<br>Frequency of<br>Monitoring | Monitoring<br>Agency | Cost Estimates<br>(Ugx) |
|---------------------------------|--|--|------------------------|---|----------------------|-------------------------|
| <b>Physical Environment</b>     |  |  |                        |   |                      |                         |
| Noise                           | <ul style="list-style-type: none"><li>Noise generating activities shall be restricted to day time only.</li><li>Personal Protective Equipment such as earbuds shall be provided to workers to minimise impact of noise to their health.</li><li>Sound harnessers such as muffler shall be used in generators and drilling equipment to minimise the noise generated.</li><li>Scheduling of delivery of material in specific times shall be done so as to minimise impact of noise due to vehicular movements.</li><li>Maintenance and servicing of equipment shall be carried out to ensure they are in good operating conditions.</li></ul> | Daily noise monitoring in place<br><br>Workers with earmuffs | Contractor             | Daily monitoring                          | UWA                  | 2,000,000               |
| Poor Waste Management           | <ul style="list-style-type: none"><li>Sensitization of workers on proper waste management practices shall be done to ensure proper implementation of waste management strategies.</li><li>Coded waste bins shall be provided and placed around the construction site to</li></ul>  | Waste bins in place.<br><br>Record of wastes taken off site. | Contractor             | Throughout the construction phase         | UWA                  | 2,000,000               |



| Environmental/<br>social impact | Proposed mitigation and Enhancement<br>measures  | Monitoring<br>Indicators   | Implementing<br>Agency | Recommended<br>Frequency of<br>Monitoring | Monitoring<br>Agency | Cost Estimates<br>(Ugx) |
|---------------------------------|--|--|------------------------|---|----------------------|-------------------------|
|                                 | <p>ensure waste segregation and onsite collection.</p> <ul style="list-style-type: none"><li>• All waste collected shall be disposed of outside the protected area in an environmentally sound manner.</li><li>• Contractors shall be encouraged to prepare and implement a detailed site-specific waste management plan for the bird hide.</li><li>• Mobile toilets shall be provided to ensure that sanitation is observed at the construction site and hence prevent diseases related to poor sanitation.</li></ul> | Contractor's Waste Management Plan   |                        |   |                      |                         |
| Air and dust emissions          | <ul style="list-style-type: none"><li>• PPEs shall be provided to all workers at the construction site to minimise air pollution impacts on their health.</li><li>• Vehicles shall be limited to a prescribed speed to minimise dust raising on the murram roads.</li><li>• Haulage trucks will be covered with tarpaulins to ensure dust is not released as vehicles are transporting both construction and spoils material to and from the site.</li></ul>   | <p>Air quality monitoring measures in place.</p> <p>Workers with PPEs such as masks.</p> | Contractor             | Daily, weekly & quarterly monitoring      | UWA,                 | 4,000,000               |



| Environmental/<br>social impact                         | Proposed mitigation and Enhancement<br>measures  | Monitoring<br>Indicators  | Implementing<br>Agency | Recommended<br>Frequency of<br>Monitoring | Monitoring<br>Agency | Cost Estimates<br>(Ugx) |
|---|--|---|------------------------|---|----------------------|-------------------------|
|   | <ul style="list-style-type: none"><li>Regular maintenance of vehicles shall be carried out to minimise the emission of hydrocarbons from their exhaust.</li></ul>  |   |                        |   |                      |                         |
| <b>Socio-Economic Environment</b>                       |  |   |                        |   |                      |                         |
| Occupational<br>health & safety<br>risks for<br>workers | <ul style="list-style-type: none"><li>Sensitisation of workers on likely risks at the site shall be carried out routinely including toolbox talks at commencement of new tasks.</li><li>PPEs that are specific to each worker's roles shall be issued out to ensure minimum risks to human health during operation of the site.</li><li>First Aid kit shall be provided at the site to offer aid to injured workers.</li><li>A trained first aider shall be available at the site to ensure that all first aid cases are adequately handled while at the site.</li><li>Emergency response procedures shall be prepared, displayed and workers trained on such so as to be ready in case of any emergency.</li><li>Warning signage shall be provided on</li></ul> | First Aid Kit available at the site<br><br>Safety awareness programs<br><br>Workers dressed up in full PPEs | Contractor             | Random inspections                        | UWA,                 | 3,000,000               |



| Environmental/<br>social impact    | Proposed mitigation and Enhancement<br>measures  | Monitoring<br>Indicators   | Implementing<br>Agency | Recommended<br>Frequency of<br>Monitoring | Monitoring<br>Agency | Cost Estimates<br>(Ugx) |
|------------------------------------|--|--|------------------------|---|----------------------|-------------------------|
|                                    | site and along the traffic routed to remind all workers, staff and site visitors on the health and safety aspects in the project area. <ul style="list-style-type: none"><li>An MoU with a nearby health facility shall be set up to ensure medical cases are handled at the facility in cases where first aid is not sufficient.</li></ul>  |  |                        |   |                      |                         |
| Sexual Harassment and Risks of HIV | <ul style="list-style-type: none"><li>Sensitisation of workers on sexual harassment and HIV shall be carried out prior to deployment to the site and continuous engagements shall also be carried out to remind the workers.</li><li>Condoms shall be provided to workers for usage in case they cannot abstain from sex while still on the project.</li><li>Access to primary health care such as availability of ARVs for HIV positive workers shall be prioritized to ensure work does not affect their health needs.</li></ul> | Record of sensitization on Sexual harassment.<br><br>Condom dispensers | Contractor             | Weekly                                    | UWA                  | 3,000,000               |
| <b>Operational Phase</b>           |  |  |                        |   |                      |                         |
| <b>Physical Environment</b>        |  |  |                        |   |                      |                         |
| Poor waste                         | <ul style="list-style-type: none"><li>Sensitization of rangers on proper waste</li></ul>   | Waste Bins in  | UWA Rangers            | Random                                    | UWA                  | 3,000,000               |



| Environmental/<br>social impact      | Proposed mitigation and Enhancement<br>measures   | Monitoring<br>Indicators   | Implementing<br>Agency | Recommended<br>Frequency of<br>Monitoring | Monitoring<br>Agency | Cost Estimates<br>(Ugx) |
|--------------------------------------|---|--|------------------------|---|----------------------|-------------------------|
| management                           | <p>management practices shall be done to ensure proper implementation of waste management strategies during the operational phase.</p> <ul style="list-style-type: none"><li>• Coded waste bins shall be provided and placed around the bird hide to ensure waste segregation and onsite collection.</li><li>• All waste collected shall be disposed of outside the protected area in an environmentally sound manner.</li><li>• Sanitary facilities should be routinely cleaned to minimise risks of diseases.</li></ul> | <p>place.</p> <p>Status of<br/>sanitary<br/>facilities</p>                                   |                        | inspections                               | HQ team              |                         |
| <b>Socio-economic Environment</b>    |   |  |                        |   |                      |                         |
| Occupational<br>Health and<br>Safety | <ul style="list-style-type: none"><li>• Rangers will be sensitized on the health and safety risks that are associated with operation of the bird hide, so as to minimise the occurrence.</li><li>• First Aid kit shall be provided at the rangers' house to ensure easy access services to first aid in case of any injuries at the workplace.</li><li>• Emergency response procedures for the operation of the bird hide shall be set up</li></ul>   | <p>First Aid kit on<br/>site.</p> <p>Emergency<br/>response<br/>procedures<br/>displayed</p> | UWA                    | Daily monitoring                          | UWA<br>HQ team.      | 5,000,000               |



| <b>Environmental/<br/>social impact</b> | <b>Proposed mitigation and Enhancement<br/>measures</b>   | <b>Monitoring<br/>Indicators</b> | <b>Implementing<br/>Agency</b> | <b>Recommended<br/>Frequency of<br/>Monitoring</b> | <b>Monitoring<br/>Agency</b> | <b>Cost Estimates<br/>(Ugx)</b> |
|---|---|----------------------------------|--------------------------------|--|------------------------------|---------------------------------|
|   | to ensure effective operation and management of the project.  |                                  |                                |  |                              |                                 |
| Visual Impacts                          | <ul style="list-style-type: none"><li>The bird hide shall be painted with green colour that blends into the natural setting of the Park and hence reducing on the visual impacts.</li></ul> | Colour of the bird hide          | UWA HQ team                    | Bi-annually  | UWA field team, HQ team      | 10,000,000                      |

## **7 CONCLUSIONS AND RECOMMENDATIONS**

### **7.1 CONCLUSIONS**

From the assessment undertaken during this study, it can be concluded that the implementation of this project will have low risk environmental and social impacts. Mitigation measures have been identified to address the anticipated impacts.

Therefore, it's imperative to ensure that the mitigation measures suggested are implemented during the execution of the project.



## REFERENCES

UWA (2022): Queen Elizabeth National Park General Management Plan Kampala, Uganda.

Howard, P. C. and Davenport, T. R. B. (1996) Forest biodiversity reports. Volumes 1–33.

Kampala: Uganda Forest Department.

The constitution of the Republic of Uganda 1995, Kampala-Uganda

The Employment Act, 2006, Kampala Uganda

The Land Act, Cap 227, Kampala Uganda

The National Environment (Waste Management) Regulations, No.49 of 2020

The National Environment Act, No.5 of 2019

The National Environment Management policy, 1994, Ministry of Natural Resources, Kampala-Uganda.

## APPENDICES

### APPENDIX 1: SUMMARY OF PLANS TO BE INCLUDED IN THE CONTRACTOR'S CSEMP

The following plans shall constitute the Contractor's Social and Environmental Management Plan.

| S/N | Plan                                |
|-----|-------------------------------------|
| 1.  | Waste Management Plan               |
| 2.  | Occupational Health and Safety Plan |
| 3.  | Emergency Response Procedures       |
| 4.  | Decommissioning plan                |

## APPENDIX 2: CODE OF CONDUCT

The Contractor is expected to be committed to ensuring that the project is implemented to minimize any negative impacts on the local environment, communities, and its workers. This will be done by respecting the Environmental, Social, Health and Safety (ESHS) standards, and ensuring appropriate Occupational Health and Safety (OHS) standards are met. The Contractor should also be committed to creating and maintaining an environment where children under the age of 18 will be protected, and where Sexual Exploitation and Abuse (SEA) and sexual harassment have no place. Improper actions towards children, SEA and sexual harassment are acts of Gender Based Violence (GBV) and Violence Against Children and as such will not be tolerated by any employee, supplier, associate, or representative of the Contractor.

Therefore, to ensure that all those engaged in the project are aware of this commitment, the Contractor will be required to commit to the following core principles and minimum standards of behavior that will apply to all Contractor employees, associates, and representatives, including Managers and suppliers, without exception:

### General

- The Contractor – and therefore all employees, associates, representatives, Managers and suppliers – shall commit to complying with all relevant national laws, rules and regulations.
- The Contractor shall commit to fully implementing the Environmental and Social Management Plan ESMP as approved by the Project.
- The Contractor shall commit to treating women, children (persons under the age of 18), and men with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. Acts of GBV and VAC are in violation of this commitment.
- The Contractor shall ensure that interactions with local community members are done with respect and non-discrimination.
- Demeaning, threatening, harassing, abusive, culturally inappropriate, or sexually provocative language and behavior are prohibited among all

Contractor employees, associates, and its representatives, including sub-Managers and suppliers.

- The Contractor will follow all reasonable work instructions (including regarding environmental and social norms).
- The Contractor will protect and ensure proper use of property (for example, to prohibit theft, carelessness or waste).

#### ❖ Health and Safety

- The Contractor will ensure that the project's OHS Measures are effectively implemented by Contractor's staff, as well as Managers and suppliers.
- The Contractor will ensure that all persons on-site wear prescribed and appropriate personal protective equipment, preventing avoidable accidents, and reporting conditions or practices that pose a safety hazard or threaten the environment.

#### The Contractor will:

- Prohibit the use of alcohol during work activities.
- Prohibit the use of narcotics or other substances which can impair faculties at all times.
- The Contractor will ensure that adequate sanitation facilities are available on site
- The Contractor will not hire children under the age of 18 for construction work, or allow them on the work site, due to the hazardous nature of construction sites.

#### Gender Based Violence and Violence Against Children

- Acts of GBV and VAC constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment and, if appropriate, referral to the Police for further action.
- All forms of GBV and VAC, are unacceptable, regardless of whether they take place on the work site, the work site surroundings, or within the local community.
- Sexual harassment of work personnel and staff (e.g. making unwelcome sexual advances, requests for sexual favours, and other verbal or physical conduct of a sexual nature) are acts of GBV and are prohibited.

- Sexual favors (e.g., making promises of favorable treatment such as promotions, threats of unfavorable treatment such as losing a job, payments in kind or in cash dependent on sexual acts) and any form of humiliating, degrading or exploitative behavior are prohibited.
- The use of prostitution in any form at any time is strictly prohibited.
- Sexual contact or activity with children under 18—including through digital media—is prohibited. Mistaken belief regarding the age of a child is not a defence. Consent from the child is also not a defence or excuse.
- Unless there is full consent by all parties involved in the sexual act, sexual interactions between the Contractor's employees (at any level) and members of the communities surrounding the work place are prohibited. This includes relationships involving the withholding/promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex (including prostitution). Such sexual activity is considered “non-consensual” within the scope of this Code.
- In addition to Contractor sanctions, legal prosecution of those who commit acts of GBV and VAC will be pursued if appropriate.
- All employees, including volunteers and sub-contractors are highly encouraged to report suspected or actual acts of GBV and VAC by a fellow worker.

## Implementation

To ensure that the above principles are implemented effectively, the Contractor commits to:

- ✚ Ensuring that all employees sign the ‘Individual Code of Conduct’ confirming their agreement to comply with ESHS and OHS standards, and not to engage in activities resulting in GBV and VAC, child endangerment or abuse, or sexual harassment.
- ✚ Displaying the Contractor and Individual Codes of Conduct prominently and in clear view, in offices, and in in public areas of the work space.
- ✚ Ensuring that all employees attend an induction training course prior to commencing work on site to ensure they are familiar with the Contractor's commitments to ESHS and OHS standards, and the project's GBV and VAC Codes of Conduct.

- ✚ Ensuring that all employees attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the project's ESHS and OHS standards and the GBV and VAC Codes of Conduct.

I do hereby acknowledge that I have read the foregoing Contractor's Code of Conduct, and on behalf of the Contractor agree to comply with the standards contained therein. I understand my role and responsibilities to support the project's OHS and ESHS standards, and to prevent and respond to GBV and VAC.

I understand that any action inconsistent with this Contractor Code of Conduct or failure to act mandated by this Contractor Code of Conduct may result in disciplinary action.

|                  |            |
|------------------|------------|
| Contractor Name: | Signature: |
| Name:            | Title:     |

Date: \_\_\_\_\_

### APPENDIX 3: CHANCE FIND PROCEDURE

Chance find procedures will be used as follows:

- a) Stop the project activities in the area of the chance find;
- b) Delineate the discovered site or area;
- c) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be deployed until the responsible local authorities and the DoMM take over;
- d) Notify the project supervisor who in turn will notify the responsible local authorities and the National Museum immediately (within 24 hours or less);
- e) The local authorities and the National Museum will take charge of protecting and preserving the site in case the finds are of interest to the Department
  - i. This would require a preliminary evaluation of the findings to be performed by the archaeologists of the National Museum (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
  - ii. Decisions on how to handle the finding shall be taken by the responsible authorities and the National Museum. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration and salvage;
  - iii. The local authority/ National Museum decision concerning the management of the finding shall be communicated in writing by the National Museum; and
  - iv. Findings will be recorded in World Bank Implementation Supervision Reports (ISRs), and Implementation Completion Reports (ICRs) will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as appropriate.
  - v. Project works could resume after permission is given from the responsible local authorities and the National Museum concerning safeguard of the heritage;
- f) The above procedure when applicable must be referred to as standard provisions during the project activities and therefore site supervisors shall monitor the procedure for any chance find encountered during project activities
- g) If the finds are not of interest to the Department of Museums and Monuments, they should be reburied on a site set aside for such purpose and project works continue

In case of Chance finds, the Implementing partners for the project will ensure that the chance finds procedure is adequately utilized and monitored.