THE REPUBLIC OF UGANDA

Uganda National Roads Authority

Kampala Flyover Construction and Road Upgrading Project (KFCRUP)

Design Change Environment Impact Assessment Report

March 2020

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LIST OF ACRONYMS

ADT	Average Daily Traffic
AfDB	African Development Bank
AIDS	Acquired Immune Deficiency Syndrome
APP	Air Pollution Potential
ARAP	Abbreviated Resettlement Action Plan
BAT	Best Available Technologies
BEP	Best Environmental Practices
BOD	Biological Oxygen Demand
BRT	Bus Rapid Transit
CBD	City Business District
CBD	Convention on Biodiversity
CBR	Centre for Basic Research
CHOGM	Commonwealth Heads of Government Meeting
CSO	Civil Society Organizations
CO_2	Carbon Dioxide
DCM	Design Change Management
DD:	Detailed Design
DDC	Detailed Design Consultant
DBH	Diameter at Breast Height
DDP	District Development Plan
DESS	Department of Environment and Social Safeguards
DMM	Department of Museums and Monuments
DRC	Democratic Republic of Congo
DWRM	Directorate of Water Resources Management
EIA	Environmental Impact Assessment
EMS	Environment Management Plan
ESIA	Environmental and Social Impact Assessment
ESMMP	Environment and Social Management and Monitoring Plan
EU	European Union
GDP	Gross Domestic Product
GHG	Green House Gases
GIS	Geographic Information System
GoU	Government of Uganda
GPS	Global Positioning System
GKRIP	Greater Kampala Roads Improvement Project (GKRIP)
GKMA	Greater Kampala Metropolitan Area
HIV	Human Immune Virus
JI	Joint Implementation
JICA	Japanese International Corporation Agency
KCCA	Kampala Capital City Authority
LA	Lead Agency
LC	Local Councils
MCA	Multi – Criteria Analysis
MATA	Metropolitan Area Transport Authority
MEAs	Multilateral Environment Agreements
MTRA	Multi-Sect oral Transport Regulatory Authority (MTRA).
MLGSD	Ministry of Labour, Gender and Social Development
MoH	Ministry of Health
MoLHUD	Ministry of Lands, Housing and Urban Development
MoWE	Ministry of Water and Environment
MoWT	Ministry of Works and Transport
MoWE	Ministry of Water and Environment

NDP	National Development Plan
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NFTP	National Forest and Tree Planting
NMT	Non-Motorized Transport
NO_X	Nitrous Oxides
NOV:	Notice of Variation
NRSC	National Road Safety Council
NWSC	National Water and Sewerage Corporation
UBOS	Uganda Bureau of Statistics
UETCL	Uganda Electricity Transmission Company Limited
OHS	Occupational Health Safety
PAP	Project Affected People
PCRs	Physical Cultural Resources
PEAP	Poverty Eradication Action Plan
RAP	Resettlement Action Plan
RCC	Resident City Commissioner
RF	Road Fund
ROW	Right of Way
RSDP	Road Sector Development Plan
SAICM	Strategic Approach to International Chemicals Management
RSPM	Respirable Suspended Particulate Matter
SPM	Suspended Particulate Matter
TORs	Terms of Reference
ULC	Uganda Land Commission
UMI	Uganda management Institute
UNFCC	United nations Framework Convention on Climate Change
UNRA	Uganda National Roads Authority
UNIDO	United Nations Industrial Development Organization
URC	Uganda Railways Corporation
VES	Visual Encounter Survey
WB	World Bank
ZOI	Zone of Influence

Definition:

Green Area: - The Green Area is a vegetation-oriented area under the landscaping master plan of the project taking advantage of the existing environment around the area. The area shall be created by maintaining the existing vegetation and planting along the road.

Green Space: Space dedicated to vegetation (plants, trees and or grass)

Green belt: An area along the road edge which has been dedicated by design Consultant to trees and other vegetation

CONSULTANCY TEAM

We certify that the Design Change Environmental and Social Impact Statement was prepared under the guidance of the Team Leader. We hereby certifythat the Particulars given in this Statement are true and correct to the best of our knowledge:

EXECUTIVE SUMMARY

Introduction and Background

This report is a design change EIA for the Kampala Flyover project. The primary alignment of the Project commences at a point about 500m along Queen's Way, passes through the Clock Tower Junction and along Mukwano Road to the Kitgum House junction where it turns to the East onto Jinja Road which it follows to the end of the Project approximately 250m East of the Africana junction. Its total length is approximately 3.5km. The initial full Environment Impact Study (EIS) was concluded during the preliminary design phase in 2014. A NEMA Certificate of Approval (CoA) was obtained and the approved report was compliant with the WB and JICA Operational Procedures. This Certificate of Approval is due for renewal in August, 2019.

During the original Detailed Design (DD) of the Services, it became apparent that the harmonization with railway viaduct for the SGR (Standard Gauge Railway) Project was necessary. This inevitably required significant modifications to Package 3 design; now known as Lot 2. Packages 1 and 2 were combined as one contract package named "Lot 1".

Detailed Design of Lot 2 has been considered under a separate Contract together with Supervision Component. This report covers both Lot 1 and Lot 2. This Design Change EIA report therefore highlights the design changes to the preliminary design together with the associated Environmental and Social issues where applicable.

Detailed Design Change considerations and the Flow Process diagram

The Detailed Design takes off more land area from Public properties including the Electoral Commission and Uganda Railways Cooperation (URC) as well as the Uganda Police Force. The new design has impacted a number of PCRs including the relocation of Clock Tower to Pan African Park, relocation of one of the stones in the Byuma Bya Katwe shrine, relocation of some of the trees in Pan African park and relocation of the Centenary Monument. This was necessary in order to accommodate the Bus Rapid Transit (BRT) lines as well as the Wide Gauge Railway line and improve the traffic flow. Under LOT 2, an additional tier has been put at the Africana junction. This has led to increased land take near the Africana junction as well as a gigantic structure (up to 30 metres) to accommodate the double flyover at that very point. One of the Flyovers towards Garden City passes directly over the Centenary Monument which has led to its relocation to within the park. Moreover, the park is expected to be used as a Temporary Stockpile area.

The developer has also proposed that an additional link road to Nsambya from Mukwano road to the Nsambya – Gaba road be constructed. This would further ease the traffic congestion. However, this proposed link road goes up a steep hill and could lead to soil erosion in addition to relocating some structures.

Category of the Design Change According to JICA and WB classification;

Before the Design Change, the number of persons to be displaced was about 80. These were mostly the Flower garden attendants, residents at Railway quarters and a few other individuals.

The Design Change has brought in more people from the Nsambya Police Residential quarters. The total number of impacted Household heads in the Police quarters are 17. They are all Police Officers; a responsibility of the Uganda Police. They can be relocated to any other location with full benefits.

Update of ESIA Report

As of June 2016, the design of Package-3 (Lot 2) was still ongoing. The final design will involve incorporation of recommendations from the supplementary feasibility study and preliminary design undertaken for Package 3(Lot 2). After the final Design Change and in case there are significant changes to the Environmental footprint and potential impact, these will be brought to the attention of NEMA who may wish to review the format and terms of the CoA accordingly.

Necessary Request to Extension of the Term of Validity of EIA

The Certificate mentioned that the approval was valid for a period of 5 years from August 2014, as administrative conditions of approval which covers both the construction and operational phase of the Project. The Certificate mentioned that the Project must commence within the first 24 months (from the date of approval) of the validity period which expired in two months as of June 2016. Failure to do so would reckon cancellation, variation of the Certificate or otherwise be dealt with by this Authority. In addition, according to the current implementation schedule, the construction phase for the three packages of the Project will end in the year 2022 therefore, the certificate will have expired during the construction period. It is for this reason that the developer, by submitting this Design Review report requests for adjustment in the project commencement.

Importance of the addendum / Design change report

This addendum now called the **Design Change Report** will be one of the documents to be reviewed by NEMA before extension of the NEMA CoA is made.

General Overview of the Project Area

The Project is located within the Central Business District (CBD) of Kampala, and the outline of the general view of the Flyover (FO) project is shown in the Figures below. The Project starts from a point about 500m along Queen's Way and ends along Jinja road just beyond the Jinja road cemetery and the total length of the project is approximately 3.5km. Despite the Design Changes and additional Nsambya Link road, the general project components have not changed much. This is one of the major reasons why the environmental footprint has largely remained the same with a few additions. The major works of the Project consist of the construction of Flyovers, bridges, road improvement, road widening, major drainage improvement works, signalization of roundabouts and underpass construction among others.

Figure: Updated project layout showing Lot 1 and Lot 2

It is important to note that the design change has impacted on the PCRs which were not greatly impacted before. The National Environment Act 2019 institutes stringent measures if PCRs are to be relocated. For this reason, a more detailed assessment covering PCRs has been conducted involving many stakeholders. The consensus is that the PCRs can be relocated with conditions that were provided by the DMM, the Pan African Movement and KCCA.

Potential Impacts of Flyovers (and Links) in the urban setting

In the planning and design of flyovers within an urban area, it is important to consider not only structural and economical aspects but also the construction methods and phasing, traffic safety on existing roads and junctions, the social impacts during and after the construction as well as the aesthetic aspects. There are many

constraints within the urban environ that will have an impact on the decisions made for determining pier locations, span arrangements and clearances. In addition, the Detailed Design Consultant (DDC) incorporated a greenbelt planted along the road corridor verge beside the walkway in a bid to create the Kampala greenbelt project. Along the walkway, the green belt features the flowers, small trees and shrubs in order to create a conducive environment.

Major Changes in Design from JICA F/S

The original Detailed Design commenced in November 2014 (officially February 2015) based on the results of the JICA F/S. However, following changes were made during the detailed engineering design stage:

- A modification of the horizontal alignment of Kitgum House Flyover since the land of the Electoral Commission will be acquired for the Project.
- A modification of the horizontal alignment near Nsambya Junction where the underpass is planned as a result of the new development plan of Arena Mall.
- Replacement of the existing Asphalt layer with an In-situ recycled base course using the Cement Foamed Asphalt (CFA);
- A new Link Road connecting New Kibuli Junction and Nsambya -Gaba Road on the project map;
- The flyover, pedestrian walk-ways and footbridges will be lit for road security safety reasons as it is common knowledge that crime is more prevalent in dark areas
- Relocation of the Clock Tower to the Pan African Park; and
- Relocation of one of the stones in the Byuma Bya Katwe Shrine.

Standard Gauge Railway

One of the major reasons for the delay of the LOT 2 package was the indecision regarding the SGR which according to government had a higher priority than the Road project. After several meetings, the SGR team informed the DDC that the planning of the SGR included an embankment of about 2.5m across Access Road thereby effectively closing off the road. This decision had major impact on the traffic considerations for the road project. After a series of discussions, the SGR team decided that the SGR will cross both Access and Nsambya Roads at grade and for safety reasons automated barriers would be installed. On March 2016 the SGR team informed the DDC through UNRA that the alignment of the SGR had changed and a railway viaduct was being planned across Access Road as opposed to the previous plan (at grade crossing). According to the SGR team, the viaduct was necessary due to the elevation of the planned new railway station that is to serve as a multi-modal transportation hub.

The construction of the viaduct would lead to a redesign of the Kitgum House Flyover. Subsequently, in order to accommodate the viaduct, the headroom requirement for the flyover increased from 8.0 metres to 16.6 metres. This meant that the Phase 2 flyover would require a height of about 30 metres from the ground level in order to go above both the viaduct and the Phase 1 flyover.

Project Area of Influence

The Design Change has not significantly impacted on the project Zone of influence. The exception is the Nsambya Link road that expanded the zone of influence albeit in a minor way. Subsequently, the FO project will remain along the existing alignment save for the necessary expansions along parts of Queen's Way, Mukwano Road and Jinja Road.

Detailed Design Change Considerations

The Detailed Design has taken into account the theme of the preliminary design and subsequent adjustments to the design as a result of several consultations. This was done in part to avoid some developers who were opposed to the alignment because of its adverse impacts on their current and or future business plans. The modified design therefore has a greater impact on government or government agencies' land and property, such as the Electoral Commission, Uganda Railways Corporation (URC) and the Uganda Police Force as opposed to privately owned properties.

Changes under Lot 1 & Lot 2

Under Lot 1, there were minor changes to the general layout and alignment with minimal or insignificant additional environmental impacts. Perhaps the relocation of the Clock Tower and the Byuma bya Katwe stone are the two major concerns. Stakeholders have agreed that these relocations are necessary provided they are done following the guidelines in place.

Under Lot 2 there were a number of design changes with increased environmental impacts that have been highlighted below.

Table 0.1: Additional Environmental impacts due to DC

S/No	Consideration	Potential Impacts	Remarks
1	Widening of the road in several places	Increased land take	Covered under the revised / updated RAP
2	Allowing for flyover to be modified so as to allow the viaduct of the SGR to pass under the flyover.	Excessive height of the flyover leading to an adverse visual impact to city skyline in addition to obstructing the Centenary park Monument;	Design should incorporate measures that would minimise the impact to the visual outlook of the city skyline and visibility of the monument
3	Relocation of more flower garden attendants due to expansion (Lot 2)	Displacement and loss of livelihood of PAPs	Updated RAP to allow for livelihood restoration for flower garden attendants.
4	Taking over the Police quarters accommodation	Relocation of Police Officers	Uganda Police Force to take responsibility following compensation standards
5	Relocation of the Centenary Monument and proposed use of Centenary park as a Temporary stock piling area.	Temporary disruption of monuments and park facilities	Monuments to be restored and improved after the works.
6	Opening of the Nsambya Link road	Increased erosion and storm water	Opening only land needed for the works and rapid restoration of coverage. Provision of erosion and storm water control measures e.g. scour checks
7	The availability of the Electoral Commission land to give way to the Flyover	Waste due to demolition	Waste management strategies and procedures to be developed, implemented and enforced as considered in the earlier study;

Summary of the impacts and mitigation measures

As identified at Detailed Design before D/C

The additional impacts as stipulated in the report are related mostly to the relocation of the Clock Tower, Relocation of the Police quarters and demolition of the Electoral Commission premises. This reduces the possibility of removing the monuments within the Centenary Park which is a positive development. Demolition of the Electoral Commission Premises as well as the Police quarters would lead to debris and other waste. Such impacts had already been handled in the original report.

The positive impacts include Job creation and related benefits, Improved Skills for Local Communities as well as Tree Planting and enhanced landscape management.

The negative Impacts have been classified with proposed mitigation measures. These include the following: -

Table 0.2 Summary of impacts

S.N	Impact	Mitigation Measures
	During Construction	
1	Soil Erosion	• Degraded sites including construction material storage points will be restored to as close to their previous condition as possible after road construction. • All embankments especially where the underpass will be created, trenches and outfalls after construction will be strengthened to limit erosion. • Sediment basins/traps will be placed to trap sediments before they enter the Nakivubo Channel and other storm water drains / watercourses.
2	Soil Degradation and Pollution	• Construction materials to be stored in approved containers and washing areas for site equipment servicing and repair will be carried out in a defined area with a concrete pad draining to oil traps. • Provide secure stores for hazardous materials and refuse pits that will be demolished on completion. • Abandoned equipment; tyres, batteries, filters, sparkplugs etc to be removed and carefully disposed of as required by law. • Routine, systematic sprinkling of water in the work area and crushing site to reduce dust emissions.
3	Increased Storm Water	• Road drainage to discharge into existing natural water courses. • Collector systems for cut slopes to be provided to drain to the road drainage system. • Culvert outlets to be protected with reno-mattresses or similar. • Embankment slopes to be vegetated with **Bahia grass** or similar approved to control erosion. • Borrow pits and quarries to be self-draining.
4	Nakivubo Channel Water quality	• preventing siltation and chocking of the channel from construction materials. • Sedimentation basins should be created between the channel banks and areas where excavation and pitting is taking place these to be regularly checked. Continue to monitor the channel from both up and downstream points during construction taking one sample per month during times when there is no rainfall.
5	Reduction in Air quality	• Exposed parts of the service roads should be paved. • Regular monitoring of air quality in the construction area. • Parameters to be monitored: Dust (PM), CO, NO2, SO2, Oxygen. • Use low sulphur fuels including diesel fuel with a sulphur content, 15 ppm and propane with negligible sulphur content. • Meet applicable criteria with respect to emission quality on all combustion-related equipment and provide maintenance according to manufactures specifications. • Apply dust suppressant such as water spray trucks for dust suppression on unconsolidated working surfaces will mitigate dust generation from construction traffic
6	Increased Noise levels	• The construction fleet to be kept in good condition, generators well fitted with efficient silencers. Speed controls (speed humps) at specified intervals (specific to each haul road) will be installed and maintained. • House the generators if required on sites in a noise barrier structure to reduce noise levels.

S.N	Impact	Mitigation Measures
		• Workers to use ear muffs to reduce exposure to noise particularly those working at the quarry and crusher areas to reduce injury to the ears due to prolonged noise pollution. • Self-audits to check on noise level.
7	Loss of vegetation and other trees	• Clearance of vegetation will be confined to those areas where it is inevitable (within the road corridor). • Landscape and replant Bahia grass or approved similar and plant trees where suitable in disturbed areas. • All removed tree species have been marked and will be replanted alongside the new road or in other equivalent places as will be advised by the KCCA landscape expert.
8	Disturbance to fauna and avi-fauna	• Clearance of vegetation will be confined to those areas where it is inevitable (within the road corridor). • The Flyovers should be painted with easily visible colors to aid vision of the flying birds. • Employ a delayed approach to removing of trees to enable birds to hatch their eggs in case the season is one of laying eggs in those trees
9	Loss of flower gardens and agricultural crops	• All flowers to be valued and compensated for. • Ornamental trees will be valued and compensated for, while their number will be included in the trees to be replanted along the road to intensify the planted area and enhance the scenery. • Where there is some additional space, flower gardens will be encouraged to shift a step backwards to allow for road construction.
10	Land take	• Land acquired will be fully compensated for in accordance with the law. • In cases of land away from the FO project (say for Borrow pits etc), agreements for land compensation or land take between the land lord and the Contractor will be made and "copies of all land agreements are to be shared with to UNRA". • For land take for the purposes of BPs, all removed topsoil will be used to restore the BPs after construction. The BPs will be reshaped and re-vegetated by the Contractor. • The Contractor will negotiate with the landlord at BP or quarry areas and will pay him directly for the materials acquired. • Vegetation will be done using the indigenous existing grasses whose seeds are naturally occurring in the stockpiled top soil. Otherwise other suitable species include *Cynodon dactylon, Panicum fulgens, Panicum repens* etc.).
11	Disruption of services and Utilities	• When working with Utilities (communications, Power lines, Water mains, sewer lines), it will be done in collaboration with the service provider and a due notice of at least one month is to be given. The same will be done for the relocation of major sign posts and road furniture where they exist. • The Contractor will design ways of working around the utilities so that relocation is minimized. • Light equipment will be used (as well as manual methods) in the initial stages of excavations taking care to see that utilities underground are not disrupted without warning as is always the practice within Cities and Urban Centres. • Due notice to the community will be given (by the service provider) to the public in case disruptions are envisaged. • Appropriate PPE will be provided to the workers during the activities in proximity with utilities for their safety • Lockout/Tag out procedures at the UMEME substation will be implemented to avoid eventualities • Relevant signage will be displayed along hazardous areas for Public safety
12	Waste management	• Demolished road structures to be carefully removed and recycled where possible. • Contractor to balance cut and fill where possible. • Workshop storage facilities to be licensed by NEMA. • Bitumen tanks will be placed on an impermeable surface and surrounded with a bund made from impermeable materials and placed away from any drainage. • Hazardous waste to be disposed of in accordance with the manufacture's specifications and stored in sealed drums before transporting to designated disposal points.

S.N	Impact	Mitigation Measures
		• waste segregation to be aided by labelling bins to enable appropriate collection and recycling of waste. • Mobile toilets will be provided at site and garbage bins to be provided at strategic locations. • Bins for solid waste collection to be placed at the Contractor's camp and worksites to ensure that any hazardous waste (Torch and Radio Batteries, Oils, and polythene papers and plastic bottles etc.) are separately collected and disposed of in accordance with the law; take note that there are recycling plants for plastics and polythene materials.
13	Relocation of people	• The design has tried to avoid structures and buildings so as to minimize relocation of PAPs. • The commissioned Resettlement Action Plan should be implemented to provide resettlement assistance to any other who might be impacted. • Should the RAP identify any vulnerable people, they treated separately (in line with their vulnerability) from the rest who are not vulnerable.
14	Relocation of Clock Tower	• instead of relocating the Clock tower, it should be lifted to being dwarfed by the FO. • Clock tower may be relocated to a site where it will be visible from afar such as at the Shoprite pedestrian bridge and such relocation must be done with the involvement of relevant officials from the Department of Museums and Monuments.
15	Other PCRs	• No ancillary works, borrow areas within 2km of an identified cultural site of importance. • The Cemetery off Jinja Road and other Worship places will not be trespassed by the road project. • Awareness creation among the Contractor's worker force on identification of archaeological/Paleontological resource materials must be promoted. • In line with the General Specification for Road and Bridge and WB Physical Cultural Resource Safeguard Policy Guidebook, the Contractor must stop work immediately upon discovery of evidence of possible scientific, historical, prehistoric, or archaeological data and notify the Resident Engineer giving the location and nature of the finds. • The Contractor through the Resident Engineer must notify DMM of such findings for verification and salvage in line with the Historical Monument Act 1967, Section 11(1 &4) and section 12b).
16	Occupational Safety and health	• The Contractor must prepare and make available at site on request, a Safety and Health Policy and Management plan. • The Contractor must undertake a risk assessment and Safety measures. • Prior to commencement of work, the Contractor must register with the Department of Occupational Health and Safety. • The Contractor must make an inspection requisition of the Commissioner for site plant and equipment to be certified. • There should be a PPE programme in place such that the following should be recorded: — Type of equipment — The date and time supplied — The person to whom it is given (he/she will sign for it) — Date of next PPE inspection — Replacement schedule for plant and components. • First-Aid kits to be provided at every active working site in offices, at site camps and any other location determined by the Project Manager. A clinic supplied and staffed by the Contractor in accordance with UNRA guidelines to be provided at the Contractor's camp. A list of supplies must be kept and displayed at all times in the clinic. • Working areas should be contained to limit access by unauthorized persons and children. • Explosives will be handled by a qualified person, transported under Police escort in accordance with the Explosives Act, and, stored at a designated place. • Contractor not to *use community water sources* for road use. • Trucks transporting any granular material to be covered. • Provision of fire hazard management procedures and equipment including emergency drills, exits and fire extinguishers • Training program for the work force.
17	Public health	• To protect the Contractor and local communities in case of disease outbreaks among the workforce, a premedical examination for workers should be conducted, followed by routine medical examination during the works and a final post medical examination.

S.N	Impact	Mitigation Measures
		• Ensure procurement of a Nominated Service Provider to undertake a project-specific HIV/AIDS awareness/prevention programme as specified in the contract documents. • Adequate sanitation facilities to be provided at site.
18	Land scape	• To improve aesthetics and reduce noise pollution, it is recommended that trees are planted along the Road project at places along the FO and, visibility permitting, on road Islands. • The colour of the bridges and flyovers chosen will blend with the environment or the sky to enhance aesthetics. In this case, light blue was recommended as it easily harmonizes with the landscape and trees and sky blue gives a more urban image. • The steel and concrete joints of the FO especially at Kitgum House will be blended in such a way as to provide a continuous joint from the outside. • Walkovers or pedestrian Bridges to be constructed following an appealing shape which will first attract pedestrians, be pleasing to the eye and at the same time ensure safety and protection. • Quarries and borrow areas must be restored in accordance with an approved restoration plan as provided for in the appropriate management plan/project brief approved by NEMA.
19	Sanitation	• Gender considerations in allocation of sanitation facilities (Toilets and bathrooms) will be undertaken. • Separate male and female toilets and washrooms facilities to be provided with adequate privacy for each gender • Female office facilities will be provided with sanitary bins to aid proper disposal of the sanitary towels/pads • Mobile / portable plastic toilets will be provided for workers along the project road (FO) and other working areas that are not permanent.
	Operational Phase	
1.	Soil Erosion	• Regular and frequent inspection and maintenance is required to ensure roadsides soils are not exposed or removed and that any repairs required are carried out promptly. The following are essential; Cleaning of drainage channels. Replanting (in case of roadside works) with approved grass seed must be carried out as soon as possible to protect the exposed soils
2.	Storm Water	• Exposed areas to be vegetated with appropriate grass. • Drain storm water to natural drainage channels to reduce erosion during road side maintenance or related works. • Ensure self-drainage of borrow areas and quarries used for road maintenance.
3.	Climatic change Impacts	• Ensure that Roadside drains continue to discharge to existing natural water courses or existing culverts. • Make use of the seasonal Forecast that is produced by the Department of meteorology to know when to clear the drains and prepare for severe weather events. • Drains to be cleaned regularly especially before the onset of the rains.
4.	Air and Noise pollution	• Provide noise barriers along Flyovers. • Regular monitoring of the environmental impacts • Regular inspection of Noise barriers to ensure functionality. • Ensuring use of approved fuels in motor vehicles. • Provide appropriate PPE to the workers • Water sprinkling and placement of humps to mitigate the impacts of pollution • Plant road side trees to reduce both air and noise pollution due to motor vehicles.
5.	Flora and fauna	• Care to be taken during maintenance to ensure that asphalt/Bitumen is not spilled into Nakivubo Channel and other sensitive areas. • The Flyovers should be painted with attractive colours so that they can be more visible to flying birds. • All burrow areas and quarries used for road maintenance to be self-draining.
6.	Urban waste	• Provide awareness rising to inform the community about keeping drainage channels clear and protecting road infrastructure. • Use radio broadcasts and public meetings to conduct sensitization. • KCCA should reduce waste at source and encourage reuse and recycling of waste. • Drains should be regularly cleaned and inspected before rain seasons.

S.N	Impact	Mitigation Measures
7.	Safety	• Road furniture must be cleaned and inspected regularly to check its condition. • The traffic code must be enforced by the police. • It is recommended that the FO and the entire road is well litincluding in the bypass. • There should be measures to enforce the use of NMT and pedestrian lanes by those supposed to use them.
8.	Aesthetic beauty	• Noise barriers should be maintained along the Flyover to mitigate noise impact within the surrounding community. This will be in addition to the existing trees on the roadsides. • Paint the FO as well as the underpass as often as it fades to maintain the beauty of the structures. • The tunnel and the entire road structure will be well lit to enhance the aesthetic values. • Measures to discourage people from writing graffiti on the pillars as well as in the underpass will be put in place.
	Cumulative Impacts	
1		• Most of the planned project activities will commence after the FO project apart from the BRT which is expected to commence before. The BRT will coincide with the FO project along Queen's Way and at Hotel Africana Junction along Jinja Road where the impacts could be increased. Fortunately, the BRT is much smaller in width and passes through the middle of the road project hence minimizing the cumulative impacts. Mitigation measures taken in this FO Project will also address the resultant cumulative impacts due to the BRT. • Meanwhile future proposed project activities will be required to take into account the existing activities while conducting their specific project environmental assessment.

Additional Impacts Identified under DC

The additional Impacts at design change included the following

Table 0.3 Summary of impacts

S. N	Impact	Mitigation Measures
1	Relocation of Clock tower	• Involve the DMM in relocation and follow the specifications as provided by them; • Continued consultation with key stake holders
2	Soil Erosion due to Nsambya Link road	• Minimise exposure of land and excavate only the necessary areas; • Provide adequate drainage to allow storm water cross at Mukwano road • Place scour checks to reduce speed of storm water thus mitigation of erosion.
3	Relocation of the Police Quarters along Mukwano road	• The Police to relocate their staff in line with Police procedures
4	Relocation of PCRs	• Follow the guidelines given by the DMM, KCCA and the recommendations of the stakeholders while relocating Clock Tower; • Relocate the stone at Byuma Bya Katwe into the main shrine grounds; • Involve KCCA and DMM during the removal and storage of the Centenary Monument;
5	Increased height of the flyover up to 30 metres leading to more risk and dwarfing of monument.	• The height of the monument to be raised in turn; • Involve the original designers while designing the new stand for the monument;

ESMMP

A management plan has been proposed and is part of this report. It considered the total impacts from the original study and took into account the design change. The following were considered;

- Land acquisition and loss of road side trees and ornamental crops;

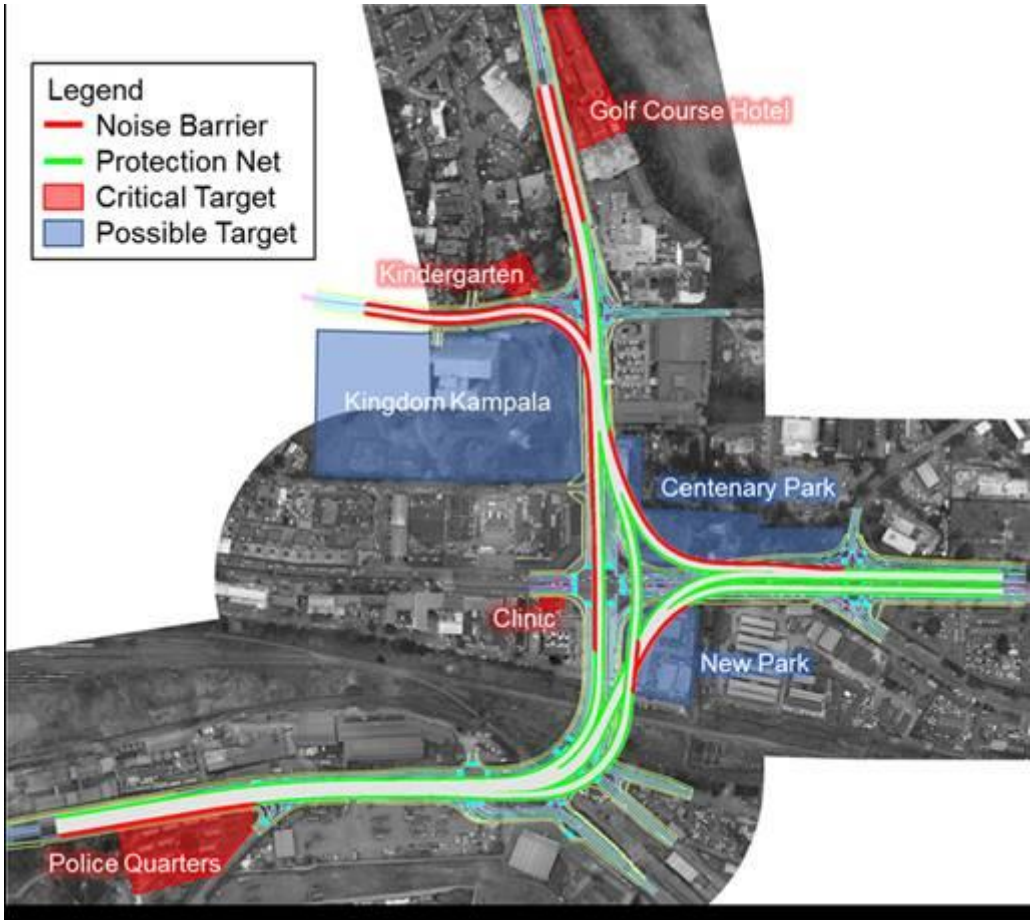
- Involuntary Resettlement;
- Soil erosion, Slope failure (soil erosion control measures);
- Haulage routes and Diversions;
- Excavation for the Tunnel / Underpass;
- Storm Water Disposal
- Soil Degradation and Pollution;
- Air Quality (Increased dust and air pollution);
- Waste Disposal and management;
- Disruption of Flora, Fauna and Avi-Fauna;
- Increased noise levels and vibrations;
- Road safety during the operation of the road / FO;
- Traffic management and Pedestrian Safety
- Workers' Occupational Safety and Health;
- Public Safety;
- Relocation of infrastructure and utilities;
- Contractor's and Consultants Obligations regarding OSH activities;
- Contractor's requirements regarding HRM;
- Relocation of historical monument (Clock Tower);
- Management of Monuments (Centenary Monument);
- Other Impacts on Physical Cultural resources;
- Impacts on landscaping and Aesthetics;

Forecast Results of Noise for Future Traffic

Recommendation

Noise barriers: - Regarding noise levels based on the noise forecast, the impact from flyover is not expected to be so high due to the height and distance. Hence installation of noise barriers may not be effective.

On the other hand, in the case of the building at the same height as the new flyover, the noise impact from the flyover is expected to be significant. This scenario will be likely in areas near or surrounding the Golf Course Hotel, the Kindergarten near the Junction, and around the Police Quarters as shown in the figure below.



Source: The DDC

Figure: Proposed Location for Installing Noise barrier

Regular Noise Monitoring: Secondly, real monitoring study during the operational phase to monitor the noise environment is recommended.

Monuments

There are three monuments in the project area which require specific procedures for relocate. These are shown in table below: -

S/No	Monument	Course of action
1	Clock Tower Monument under Lot 1	The Key stakeholders (DMM, KCCA, The pan African Movement and the stakeholders) approved the relocation with stringent conditions
2	Centenary Park	The Park to be restored after the works. It is to be used as a temporary stock piling area. The monument to be relocated within the park
3	Centenary Park Monument	Involve KCCA and the original designers when relocating.

Conclusions and Recommendations

The purpose of the Environmental and Social Impact Assessment (ESIA) was to assess the potential impacts that the proposed road construction / upgrading Project will have on both the bio–physical and social environments.

After the preliminary design, there was a Design Change. The Design Change increased the cost of land acquisition due to the extra land area it took. Minimal encroachment has been proposed along the edges apart from the additional Nsambya road Link.

After the design Change however, the detailed study to assess the impacts on the PCRs (Clock Tower, Byuma Bya Katwe, Pan African park and the Centenary Park was conducted. Key stakeholders agreed with the relocation and provided conditions to be followed while relocating. Among others the following are to be observed: -

An archaeological study was be conducted at the new place of Clock Tower relocation before the process takes place in line with the DMM recommendations;

An architect must be procured before the relocation process to prepare details of the design of the replica concrete support structure, associated support structures and surrounding landscapes which will be submitted to the DMM;

Documentation at all phases before and during relocation will have to be considered.

The team conducting the documentation exercise will comprise of at least one conservator from the DMM.

Before the commencement of the relocation process, the Minister responsible for Tourism and Antiquities will make a public pronouncement of the Clock Tower relocation.

Regarding the Pan African Park, Stakeholders agreed that the trees can be removed. While replanting, at least three saplings for each tree should be replanted. The KCCA has given guidelines regarding the planting of trees.

The stone in the RoW at the shrine can be removed and relocated within the main shrine.

Regarding the Centenary Park Monument, the following are relevant: -

The Centenary Park monument should be removed, kept safely during construction and relocated within the park after construction;

During removal and packaging, KCCA and DMM will be involved;

Visibility of the monument will need to be improved.

To design the appropriate platform, the Contractor will engage the original architects

The restoration committee should include (if possible) the Artist who designed this monument [redacted]) and [redacted]

However the noise forecast results show that the noise environment of the Project area will not be changed drastically. This is because the project will reduce traffic congestion which is a major source of noise.

Solving traffic congestion by the Project will lead to a positive impact on noise environment around the Project area. Nonetheless, the noise barrier wall at Golf course, Kindergarten and Police quarters will need to be installed.

Regarding the Centenary Park, the land ownership needs to be harmonized so that the progress of the project is not impeded.monuments are rightly under the DMM.

While the noise forecast did not indicate a lot of future negative impacts, it is recommended that periodical monitoring of noise environment be conducted during the operational phase and constructional phases of the project. Depending on the results of the monitoring study, adequate mitigation measures for the Project area can be developed and implemented by the Project teams.

Otherwise all baseline biophysical and socio-environmental conditions have been documented giving an indication of a largely urban environment with huge built up areas and few green spaces., the predominant land use within the project area is institutional with very few settlements.

The critical environmental aspects that were identified included the following:

- Water quality
- Biodiversity
- Air and Noise
- Vibrations
- Infrastructure and utilities
- Traffic
- Economic Activities amongst others.
- Physical Cultural Resources

Through field assessments and stakeholder consultations a number of environmental and social considerations were integrated into the design thereby reducing the project's footprint considerably. The design change did not increase the foot print appreciably. The considerations to reduce impacts have included the following:

- ***Avoiding of buildings, staff quarters for most of the police and major structures like Kitgum House in order to reduce the impacts of involuntary relocation and compensation;***

All these actions were undertaken with close reference to Uganda's applicable National Environmental and Social Legal and Policy Requirements as well as those of the Multilateral Lenders especially the JICA Guidelines for Environmental and Social Considerations (as translated) - April 2010 JICA.

Following the design change and integration of environmental and social considerations, the impacts discussed in this EIS did not present a very high risk since they will be managed during construction, operation and maintenance as already presented through mitigation and enhancement.

1 INTRODUCTION AND BACKGROUND

1.1 Introduction

This project was originally known as the "The Greater Kampala Roads Improvement Project" (GKRIP) – covering the urban road segment from the Port Bell Junction, the beginning point of the Kampala - Jinja Highway to the Kibuye Roundabout which is the beginning point of the proposed Mpigi-Busega-Kibuye Expressway. It has since been renamed as the Kampala Flyover Construction and Road Upgrading Project (KFCRUP). Presently it is known as the Kampala Flyover (KFO) Project. The primary alignment of the Project commences at a point about 500m along Queen's Way, passes through the Clock Tower Junction and along Mukwano Road to the Kitgum House Junction where it turns to the East onto Jinja Road which it follows to the end of the Project approximately 250 m East of the Hotel Africana Junction. Its total length is approximately 3.5km. The initial full Environment Impact Study (EIS) was concluded during the preliminary design phase in 2014. A NEMA Certificate of Approval (CoA) was obtained and the approved report was compliant with the WB and JICA Operational Procedures. This certificate of approval is due for renewal in August 2019 (Attached as Annex 3).

The Project was originally subdivided into three (3) packages namely, package 1, 2 and 3 according to the JICA Field Study (F/S). During the original Detailed Design (DD) of the Services, it became apparent that the harmonization with railway viaduct for the SGR (Standard Gauge Railway) project was necessary, which inevitably required significant modifications to Package 3 design. Consequently, UNRA decided to proceed with procurement of the Contractor for Package 1 and 2 that had no impacts from SGR project. Furthermore, Package 1 and 2 were combined as one contract package namely "Lot 1". In the same manner of naming, the Package 3 was renamed as "Lot 2". The project components are summarized in Table 1.1.1.

UNRA meanwhile proposed an additional flyover at Kitgum House junction since the land of Electoral Commission became available and would accommodate the additional route to increase the junction capacity and traffic through. In addition, the Flyover towards Garden city has been designed to pass over the present Centenary Park Monument. This marks a significant change from the earlier design, which had left the Monument intact.

From the above, it was decided that commencement of Lot 2 be delayed. In addition, it became necessary to undertake supplementary F/S and preliminary design of Lot 2 (the study) considering the modification due to the effect of SGR and acquisition of the Electoral Commission land as well as the proposed additional flyover. UNRA decided to undertake the study under the original contract of Services while Detailed Design of Lot 2 would be considered under a separate Contract together with Supervision Component.

Packaging and the Components of the Project

Package	Package 1	Package 2	Package 3
Lot	Lot 1		Lot 2
Component	– Counstruction of Clock Tower Flyover – Widening of Nsambya Road – Improvemeent of Queen's Way – Improvement of Clock Tower Junction, Shoprite Junction – Construction of Clock Tower Junction Pedestrian Bridge and Shoprite Junction Pedestrian Bridge	– Counstruction of Underpass for Nsambya Junction – Expansion of Nsambya and Mukwano Road – Improvement Nsambya Junction – Signalization of Kibuli Junction and Hospital Junction – Kibuli Junction Pedestrian Bridge – New Link Road	– Construction of Kitgum House Flyover – Expansion of Mukwano Road and Access Road – Improvement of Jinja Road, Yusuf Lule Road and Nile Avenue – Improvement of Kitgum House Junction – Signalization of Mukwano Roundabout, Press House Junction, Africana Roundabout, and Garden City Roundabout

Source: Study Team

This Design Change EIA report therefore highlights the design changes to the preliminary design together with the associated environmental and social issues where applicable.

1.2 Detailed Design Change considerations and the Flow Process diagram

The Detailed Design (DD) and subsequent Design Change (DC) took into account the theme of the Preliminary Design. Secondly, following further consultations leading to DC, several adjustments were made to the design. This was done to avoid some of the developers who were opposed to the alignment because it was disrupting their business plans. Instead, the Detailed Design acquired more land from Public properties including the Electoral Commission and Uganda Railways Cooperation (URC) as well as Police. The new design also relocates the Clock Tower into the Pan African Park in order to accommodate the Bus Rapid Transit (BRT) lines as well as the Wide Gauge Railway line. Under LOT2, an additional tier has been put at the Hotel Africana Junction. This has led to increased land take near the Hotel Africana Junction and a gigantic structure (up to 30 metres) to accommodate the double flyover at that very point. In addition, the Flyover towards garden City passes over the Monument within the Centenary Park, which will lead to the relocation of the Monument. It is also planned to use part of the Centenary Park as a Temporary Stock piling area.

The developer has also proposed that an additional Link road to Nsambya from Mukwano road via Mestil Hotel road ending into Gaba Road be constructed to further ease the traffic congestion. However, this proposed link road goes up a steep hill and can lead to soil erosion.

While the original study had elaborate TORs that were subsequently approved by NEMA, the design change brought in a new thinking mainly because of the changes that were introduced. Table 1.1.2 below provides the screening matrix that was considered to upgrade the ESIS in light of the design change.

Table 1.1.2: Screening Matrix for finalization of Design Change (DC) ESIA Review

Question that were considered	Identified impacts	Level of Significance of the Impact	
		Major/ Moderate	Minor
Is the scale of DC large enough to cause impacts that may not have been identified in approved ESIA?	Shift to take over Electoral Commission Offices leading to a lot of demolition waste and relocation of the office, dust and noise emission	Yes, but moderate, and disposal of demolition waste had been discussed at design stage hence covered	Minor
Is the DC likely to affect people in a manner not captured in approved ESIA?	Relocation of a few more PAPs was indicated. These constitute residents of the police quarters (Four blocks whose total population is 90). The others are mostly office premises.	Moderate for the Police quarters, but the Police is willing to relocate their staff.	Minor to moderate since the relocated premises are mostly offices without residential accommodation.
Is DC likely to result in use of new materials or methods that result in contamination or change in physical environment not identified in approved ESIA?	In the new design it is proposed to use the Cement Foamed Asphalt (CFA) as opposed to preliminary design. This however is a better alternative. And reduces waste.	Reduction in waste	N/A
Is design change likely to impact on utilities which can require decommissioning?	The decision of the DC team was to use manual methods to relocate utility lines thereby minimising damage and undesirable impacts	Minimal impact because of the selected methodology to remove debris and or hazardous waste	Minor
Is the DC likely to affect important, sensitive or protected physical or biological resources?	The Clock Tower, an important monument will be relocated.	Moderate since the key stakeholders have been consulted and a relocation strategy agreed on.	No
Will the Design Change lead to increased demolition and higher safety risks?	Additional demolition is anticipated at electoral commission buildings. Increased safety risk will be due to high FO at about 30Metres	Moderate to minor due to the mitigation measures already adapted in original report.	Minor
Is the DC likely to lead to new interactions with existing or planned activities leading to cumulative, additive or interactive impacts?	No	No	No

Question that were considered	Identified impacts	Level of Significance of the Impact	
		Major/ Moderate	Minor
Is the DC likely to result in trans boundary impacts?	No	No	No
Will there be impacts to the PCRs?	Yes, the Clock Tower will be relocated to the nearby Pan African Park, which was not the case before, Part of the Byuma Bya Katwe Shrine falls into the RoW while the Centenary Monument falls under the Flyover.	Yes, but with involvement of the Department of Museums and Monuments, impacts will be manageable. The key stakeholders following intensive consultations and a stakeholder's workshop have agreed on a relocation strategy.	Minor
According to the original EIS, are there new studies to be considered?	Yes, studies were conducted to ascertain the noise and air pollution levels as well as detailed studies of impacts on the affected trees. Also in line with the National Environment Act 2019, in-depth assessment of the impacted PCRs has been done.	More trees have been impacted due to the slight expansion. In addition, the Shrine and Centenary Monument, which had not been impacted, have now been impacted.	N/a

In addition to the above screening matrix, a process flow considering environmental and social requirements in DC has been followed. This is indicated in Fig 1.2.1 below which is in line with the UNRA's Environment and Social management.

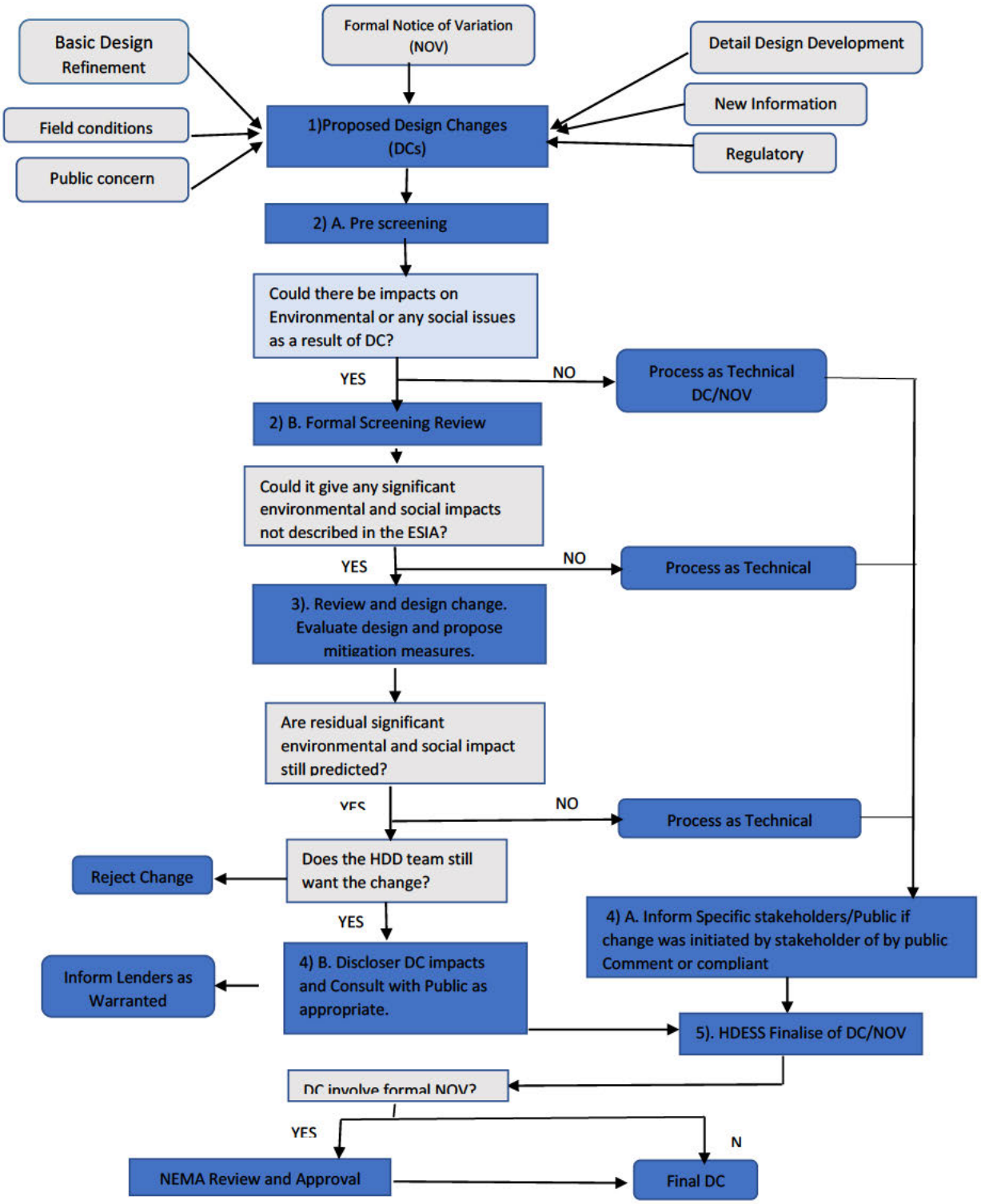


Figure 1.2-1 An overview of Flow process for considering environmental and social requirements in DC

1.3 Process Flow Discussions

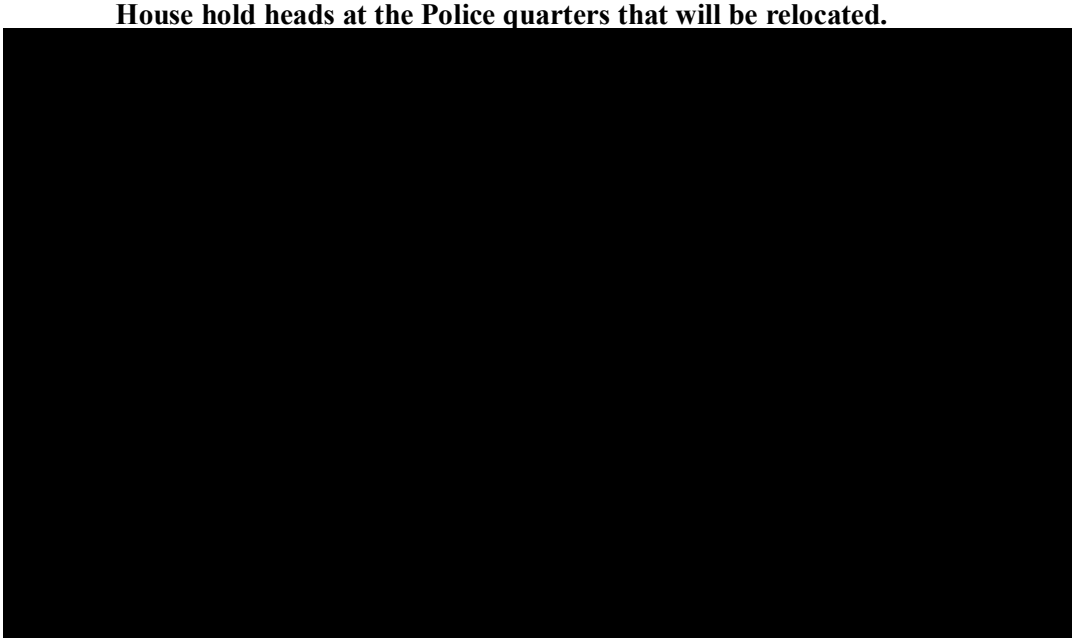
S/No	Overarching Question	Outcome	Remarks
1	Both client requested change and Basic design refinement as response to field conditions in particular with respect to response to Standard Gauge Railway (SGR) design	Some additional social and cultural impacts were anticipated	Main changes are the addition of the road Link, shifting of the clock tower and raising of the flyover at Kitgum house – Hotel Africana section. These may impact the aesthetic outlook as well as impact on the Centenary Park Monument
2	Could it give any significant environmental and social impacts	Yes, there will be sensitive albeit moderate environmental impacts	The main cause will be the potential impacts on the monuments as well as potential erosion at the newly introduced Link road.
3	Are there regulatory changes to impact on design change?	Yes, the NEA 1995 has been replaced by the National Environment Act, 2019	It does not have a major impact on the design change
4	Are residual Environmental Impacts still predicted?	No residual environmental impacts predicted.	Appropriate mitigation measures to address any additional impact are in place
5	Have additional consultations been done on design change impacts?	Yes,	Key stakeholders' consultations especially for the Monuments and the police have been conducted;
6	Does the NEMA certificate of approval require a design change report	Yes	Design change report shall be shared with NEMA concurrently with the application for renewal of NEMA Certificate of Approval
7	Is ESIA for design change needed	Yes	To accommodate the additional mitigation measures and inform the stakeholders
8	Has the ESMMP changed	Yes	Only for those aspects where the original study had left out aspects on WASH and covering additional mitigation especially with respect to PCRs.

1.4 Category of the Design Change According to JICA and WB classification;

Before the Design Change, the number of persons to be displaced was about 80. These were mostly the Flower garden attendants, residents at Railway quarters and a few other individuals. The rest were institutions. Following Design Change, four blocks belonging to Uganda Police have been impacted in addition to four other smaller buildings that will be affected at the corner of Press House Road.

The total Number of Household heads in these quarters is 17. They are all Police Officers who are the responsibility of the Uganda Police. They can be posted to any other location with full benefits; respectively therefore, , they are not displaced people. Otherwise the dependants of the Police Officers will move as directed by the Police headquarters. In accordance with the JICA Guidelines for Environmental and Social Considerations and based on the number of actually displaced persons which is less than 200,it is confirmed that while the main ESIA was classified as category B, with the Design Change, the project maintains the status classification of Category B though the Design Change Impacts may be classified as Category C. Under the JICA categorisation of Projects, Category C projects lead to minimal or little adverse impacts on environment and society.

House hold heads at the Police quarters that will be relocated.



2 UPDATE OF THE ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) REPORT

2.1 Background and Approval of ESIA Report

The Project's ESIA Report was approved by NEMA on 28th August 2014 and Certificate of Approval of Environmental Impact Assessment was issued.. The Certificate is attached in Annex 3. The approval included seven major categories as following;

- Administrative conditions of approval (Three items)
- Specific conditions of approval (Six items)
- General conditions of approval (Sixteen items)
- Construction phase conditions of approval (Six items)
- Operational phase conditions of approval (Two items)
- Notification conditions of approval (Three items)
- Restoration and decommissioning phase of approval (Four items)
- Suspension/Withdrawal/Cancellation approval (one item)

For purposes of design change, the Certificate of approval is emphatic ***under Section 22(4).*** It requires that the developer takes any other reasonable measures and mitigates any other undesirable impacts that were not contemplated during the original ESIA by the time of issuing the approval. These measures are to be reported to the relevant lead agencies and NEMA. These conditions should be followed up throughout all the Project phases from construction to operation and maintenance phases. If significant changes to the original design are inevitable and may cause different environment impacts, the project teams areexpected to inform NEMA about the changes. ***However for this design change, there are no significant additional environmental impacts as the environmental foot print remains the same.*** Nevertheless, this report informs NEMA of the level of impacts due to the design change.

2.2 Way Forward

2.2.1 Update of ESIA Report

As at June 2016, the design of Package-3 was still ongoing. The final design will involve incorporation of recommendations from the supplementary feasibility study and preliminary design undertaken for Package 3 (Lot 2). After the final design changes and in case there are significant changes to the Environmental footprint and potential impact, the changes will be brought to the attention of NEMA who may wish to review the format and terms of the CoA accordingly.

2.2.2 Official Letter for Reset Deadline to Submission Environmental Audit Report

According to the above-mentioned EIA Certificate of Approval, NEMA requested UNRA to carry out Annual Environmental Audits in accordance with the provisions of the National Environment (Audit) Regulations 2006. The EIA certificate mentioned that UNRA should submit the first Environmental Audit Report to NEMA by September 2015. However, there were no environmental impacts by the Project yet because the Project is still at the design phase. For this reason, the developer is required to update the ESIA or create an addendum to inform NEMA of the changes to aid setting of new terms for future audits based on the actual project progress.

2.2.3 Necessary Request to Extension of the Term of Validity of EIA

The Certificate mentions that the approval is valid for a period of 5 years from August 2014 -the period as administrative conditions of approval which cover both the construction and operational phase of the Project. The Certificate also mentions that the Project must commence within the first 24 months (from the date of approval) of the validity period which will expire in two months that is to say, June 2016. Failure of which, the Certificate may be varied, cancelled or otherwise dealt with by this Authority. In addition, according to the current

implementation schedule, the construction phase for the three packages of the Project will end in the year 2022 therefore, the certificate will have expired during the construction period. It is for this reason that the developer, by submitting this Design Review report requests for adjustment in the project commencement.

2.2.4 Importance of the addendum / Design change report

This addendum now called the **Design Change Report** will be one of the documents to be reviewed by NEMA before the renewal of the NEMA CoA.

3 KFO COMMUNICATIONS STRATEGY

3.1.1 Introduction

This Communication Strategy is cognizant of the need to support the implementation of the Kampala Flyover (KFO) Construction and Road Upgrading Project (KFCRUP). It is part of introducing strategic Communications in infrastructure projects in Uganda intended to communicate credible information/message, through the right channels, and measured against specific Communications goals, objectives, activities and principles. The Overall KFO project has developed a comprehensive Communication strategy, to which both the Engineer and Contractor must adhere.

3.1.2 Strategy

- This Communications Strategy covers the following: -
- Present information on project profile;
- situation analysis results that informed the formulation of the Communications strategy;
- components of the CS;
- implementation modalities;
- Communications work-plan;
- promotion of Communications channels;
- Monitoring and Evaluation of the CS;
- Project Affected Person Segmentation and engagement schedule;
- Crisis Communications Management Plan; and
- The Budget.

3.1.3 Current UNRA approaches to Communication

At present, UNRA uses various mass media channels to communicate a range of messages, namely

- Print media (i.e. newspapers, magazines, etc.) and electronic media (TV, Radio, digital channels) to communicate project activities and project events and serve notices and adverts to the Project Affected People (PAPs) and/or the general public
- Use of public meetings/Group Discussion/seminars to provide verbal information intended to sensitize stakeholders (PAPs and general public) on project activities/events and making consultations
- Use of Information and Education Communications Literature to disseminate project information
- Use of **Client Care Centres (CCC) to** disseminate project information, RAP activities, grievance handling, etc.

3.1.4 Targeted Sectors

The above methods are improved in the KFO CS by enhancing the channels further to cover the following stakeholder concerns: -

- Extent of encroachment on PAP's property
- Timely valuation and compensation

- Methodology of handling contentious compensation
- Health and safety of workers and road users
- Impact on Boda and Non-Motorized Traffic
- Impact on Utility company infrastructure
- Impact on proposed Standard Gauge Railway Line
- Project timelines
- Possibility of employment opportunities for locals
- Risk of health hazards and re-settlement of street children
- Relocation of the Clock Tower
- Provision of pedestrian walkways.
- Delayed compensation affecting property values in the long run
- Injurious affection such as loss of access to main road, loss of livelihood
- Anti-social behaviour by some road construction employees

3.1.5 Objectives of the Communications Strategy (CS)

The goal of the KFO Communications Strategy is to support efficient implementation and timely completion of KFO, including land acquisition and resettlement services. The specific Objectives include the following: -

- To increase stakeholders understanding/awareness and positive attitude and practice towards the project (KFCRUP) purpose and activities (Behavioural change)
- To create/attract a supportive/conducive environment for implementing Communications activities and KFCRUP project activities (advocacy)

3.1.6 Communications Principles

In developing the CS the following principles were adapted: -

- Flexibility and cost-effectiveness in selecting and using Communications methods
- Clear and relevant two-way Communications channels
- Credible and timely information accessible to all stakeholders
- Communicating clearly, openly, accurately and regularly within the project and among project stakeholders to promote mutual understanding

3.1.7 Target Audiences/Stakeholders

The target audience will mainly be those people, groups, and organizations that will affect or be affected by the project policies, objectives, activities and actions and thus require credible information, using the appropriate Communications channels. These audiences have different information needs during the different project cycle. In this CS there are three broad categories of audience as outlined in the Table below:

Table 3.1: **Key Audiences and Users**

Category	Types	Potential Benefits
Primary audience	**Project Affected People** - Land owners and tenants - Shopping mall owners - Uganda Railways - Uganda Police - Manufacturers - Roadside vendors - Property developers,	**Communication and information availability** - Project objectives and activities - Valuation and compensation principles, procedures, & grievance redress mechanism - Vacant Possession of land
	- Road Users and Transporters	- Potential benefits of KFCRUP - Effect of construction activities on traffic flow, utilities, and livelihood activity
Secondary Audience	**Project Partners** - Project owner (KCCA) - Project Implementer (UNRA) - Ministry of Finance, Planning and Economic Development - Ministry of Works & Transport - Ministry of Lands Housing and Urban Development - Local Government administration - District Land Office - Utility Providers - Uganda Police - Project Funders	- Project objectives and activities, and project progress - Stakeholder roles/mandate and participation project cycle
Tertiary audience	- General public - Media - Civil Society Organizations	- Economic benefits from providing Communications services - Contributing to project acceptance, collaboration, and compliance - Partnership in information disclosure, public relations, and public image and corporate image

3.1.8 Key messages and Communications Channels

The project will use several Communications channels (transmission medium) to ensure effective dissemination of information. The selection of the Communications channels will depend on the nature of project activities, content of the messages being transmitted, the targeted audience, expected outcomes (response/feedback/action), urgency of action/response, and the Communications costs. Nonetheless, combining media channels with interpersonal Communications will be a more effective Communications strategy; primarily because interactive sessions with audience reinforce the messages. Even in terms of sequencing and timing, mass media will be effective in informing and mobilising upcoming events and subsequently inter-personal Communications methods with the audience.

Table 3.2: **Key Messages and Communications Channels**

Project Activity	Audience	Key Message	Priority Communications Channel(s)
Technical Design Phase	• Property Owners in the form of land owners and tenants.	• Project profile and parameters	• Inter-personal Communications to engage stakeholders
Stakeholder consultations and engagement	• Property Owners in the form of land owners and tenants. • Local government leadership	• Project profile • RAP activities • Compensation issues	• Inter-personal Communications to engage stakeholders • Verbal Communications to LC to mobilize PAPs • Group meetings to sensitize the general public • Media notices • CCC
Grievance Handling	• Property Owners in the form of land owners and tenants. • Local government leadership	• Land acquisition • Resettlement queries • Compensation issues	• Inter-personal Communications to engage stakeholders • Verbal Communications to LC to mobilize PAPs • Group meetings to sensitize the general public • CCC
Cadastral Surveys	• Property Owners in the form of land owners and tenants. • Local government leadership • General Public, Media	• Land acquisition • Resettlement guidelines • Compensation issues	• Inter-personal Communications to engage stakeholders • Verbal Communications to LC to mobilize PAPs • Group meetings to sensitize the general public • Media notices • CCC
Gazetting	• Property Owners in the form of land owners and tenants. • General Public, Media	• Land acquisition • Resettlement guidelines • Compensation issues	• Print media Q&A • Print/Radio Adverts • Radio/TV talkshows • CCC
Valuation Survey and social impact assessment	• Property Owners in the form of land owners and tenants. • General Public, Media	• Land acquisition • Resettlement guidelines • Compensation issues	• Inter-personal Communications to engage stakeholders • Print media Q&A • Print/Radio Adverts • Radio/TV talkshows • CCC
Disclosure of Compensation payment	• Property Owners in the form of land owners and tenants. • Local government leadership	• Compensation guidelines • Disbursement and Timing	• Inter-personal Communications to engage stakeholders • Print media • CCC

Project Activity	Audience	Key Message	Priority Communications Channel(s)
Compensation Payment	• Property Owners in the form of land owners and tenants.	• Compensation guidelines • Disbursement and Timing	• CCC
Title sub-division	• Property Owners in the form of land owners and tenants. • Local government leadership	• Land acquisition guidelines • Process updates	• Inter-personal Communications to engage stakeholders • Verbal Communications to LC's to mobilize PAPs • Group meetings to sensitize the general public • CCC
Construction Phase	• Property Owners in the form of land owners and tenants. • Local government leadership • General Public, Media	• Land acquisition guidelines • Vacant possession issues	• Print media Q&A • Print/Radio Adverts • Radio/TV talkshows • CCC

3.1.9 Communications Activities

The implementation of CS will entail five (5) main Communications activities, but each comprising of sub-activities, and these are:

Table 9.10.3: **Communication Activities**

Activities	Tasks
1. Situation Analysis	- Conduct relevant research - Consult with various stakeholders - Summarise findings
2. Formulation of the Communications Strategy	- Conduct relevant research - Compile draft - Consult with various stakeholders - Finalise CS
3. Approval of the Communications Strategy	- Submit CS for approval
4. Implementing Communications Strategy	- Set up CCC - Launch/Promote CCC - Design key messages - Conduct stakeholder/media networking - Handle Public and Media Relations of the Project
5. Monitoring and Evaluation of the	- Compile key measurement indicators

Activities	Tasks
Communications Strategy	- Maintain records of all CCC and key communication activities - Make regular reports - Conduct regular surveys and questionnaires

3.1.10 Launch and promotion of the Communications Strategy and Activities

The launch aims at popularizing and publicizing the availability of the Communications services, including the Client Care Centre if established, the project will implement a set of Activities. As Part of Implementing The CS Including: -

- What is the project objectives, components, activities, and staffing?
- What activities does the Communications Office offer?
- Where, when, and how to access the Communication services?
- How to give feedback opinion and feedback on different project policies, activities, and decisions?
- Where to go if we cannot help?
- What are the planned project/Communication events and activities, and how can one participate in such activities?
- How to contact the project/Communication staff?

3.1.11 Crisis communications management plan

In the event of a crisis, the KFO has put in place a crisis Communications Management Plan. In this case, a crisis can best be described as any situation that is threatening or could threaten to harm people or property, seriously interrupt business, significantly damage reputation and/or negatively impact the bottom line1. Crisis management is a situation-based management system that includes clear roles and responsibilities and processes related to organizational response to such a crisis. The response should include action in the following areas: crisis prevention, crisis assessment, crisis handling and crisis termination. The aim of a crisis management plan is to be well prepared for crisis, ensure a rapid and adequate response to the crisis, maintaining clear lines of reporting and Communications in the event of crisis and agreeing on rules for crisis termination. It is therefore vital that a crisis management plan is in place for KFCRUP so that any crisis situation is effectively handled in liaison with UNRA. DDC has come up with various Communications initiatives to address any unanticipated and negative occurrences on the Project that might have negative consequences.

In the event of such a scenario, the project management must refer to the Communications manual already prepared for the KFO.

4 KFO GRIEVANCE REDRESS PROCEDURES

The KFO has already in place a grievance redress mechanism and procedure. It is important to note that the grievances could arise either out of resettlement concerns, or out of actions by the contractor which may not be well accepted by the project stakeholders especially the Project Impacted People. The paragraphs below provide a framework to address such concerns.

[1] Bernstein Jonathan: The Ten Steps of Crisis Communications: source: http://www.bernsteincrisismanagement.com/the-10-steps-of-crisis-Communicationss/ Date 16thFebruary 2016

4.1 Likely Types of Grievances and Disputes

This Project is located in the most affluent and well-informed communities in Uganda. The Project Affected People are likely to know their rights and how to address them. Most have capacity to hire lawyers and would not mind going to court provided they think they can benefit. However, from the project point of view, the focus must be to minimise grievances, and if they come, they need to be resolved quickly to the benefit of both the project and the complainant. This can only happen if there is room for discussion and understanding. In practice, grievances and disputes that are most likely to be encountered during the implementation of the project include the following: -

4.1.1 Compensation and Resettlement Concerns

- False identification of assets or mistakes in valuing them;
- Disagreement over asset valuation: either the unit rate applied or the count;
- Disputed ownership of property: for instance, where the owner and occupant are different persons, which gives rise to conflicts over the compensation sharing arrangements;
- Dispute over ownership of an asset (For example, when two individuals claim to be owners of same asset);
- Disputes over land boundaries, either between the affected person and the project, or between two neighbours; and
- Successions, divorces and other family issues, resulting in disputes between heirs and other family members, over ownership for a given asset.

4.1.2 Environment and Social Concerns

- Blockage of access and unacceptable diversions
- Excessive noise or Vibrations;
- Damage to property due to actions by the contractor or construction traffic / equipment;
- Harassment of workers especially gender-based Violence and discrimination;
- Corrupt tendencies by the contractor or supervisors;
- Disagreement on Human Resources Procedures and Health Issues, and among others
- Successions, divorces and other family issues, resulting in disputes between heirs and other family members, over ownership for a given asset.

4.2 Management Mechanism

It often appears that many grievances derive from misunderstandings of the project policy, or result from neighbour conflicts, which can usually be solved through adequate mediation using customary rules or local administration at the lowest level (LCs). Most grievances can be settled with additional explanation efforts and some mediation using customary disputes settlement mechanisms.

Although the traditional wisdom has been advocating for the use of land committees at local levels (LCI, Parish, District / Division Land Committee); it has been found that these committees usually lack facilitation/ resources to operate well. They are not yet in place. The viable alternative is now through the use of the Local Government Administrative (in this case the KCCA) structure which also doubles as the grievance committee. It will be comprised of the following members:

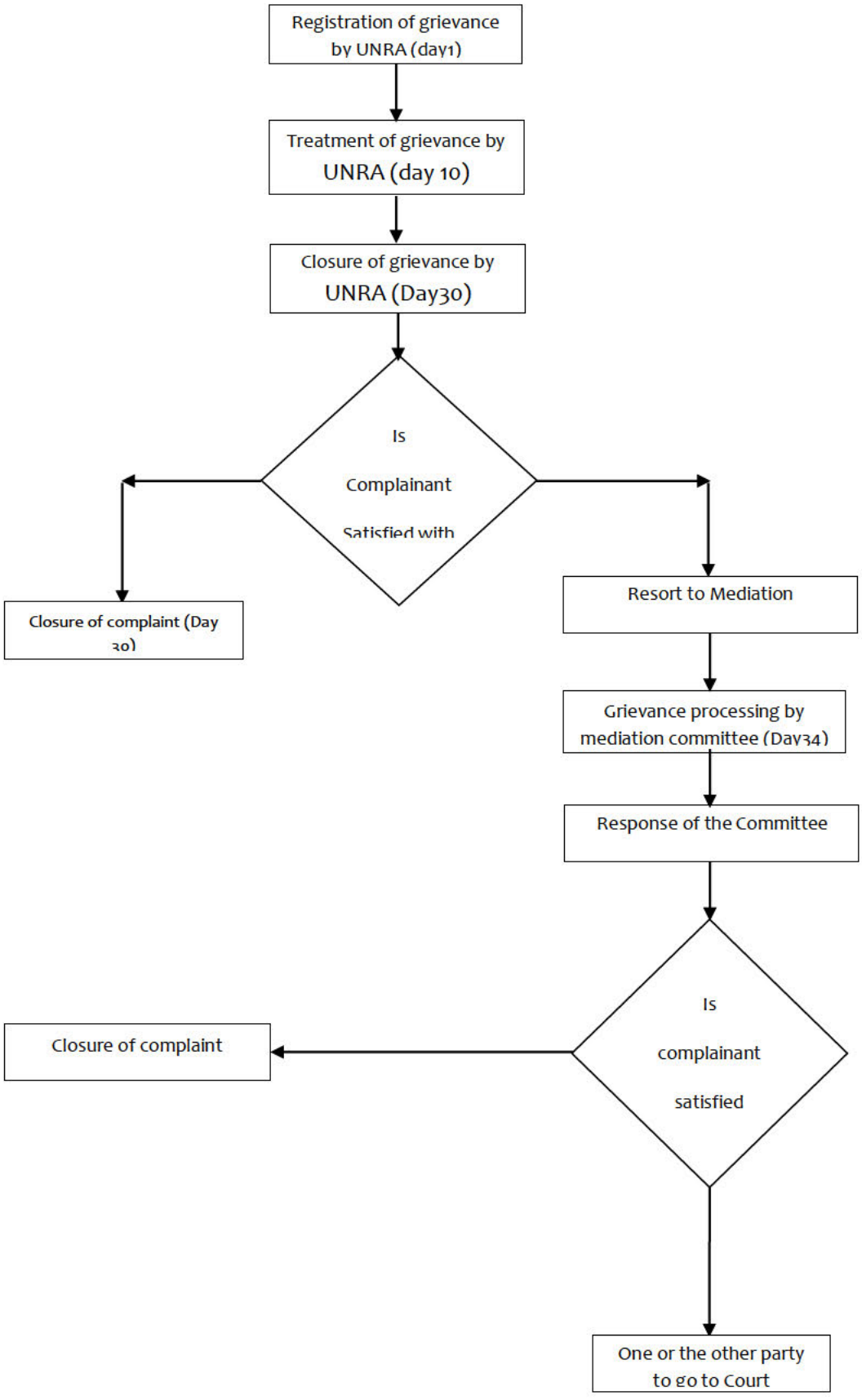
- The Sub County Chief / Representative of the Town Clerk from KCCA;
- LC 3 Chairperson;
- LC1 Chairperson for the affected area;
- Local opinion leader/ Cultural leader where they exist;
- Representative of UNRA (Usually a sociologist from the supervising team)

In contrast, resorting to the judicial system often results in long delays before a case is processed. This could result in significant expenses to the complainant and might require a complex mechanism, involving lawyers. While most of the potential complainants within Kampala Region can afford the lawyers there are many who will find the legal system intimidating and even beyond the complainant's control. Also, courts may declare themselves incompetent

for matters related to informally owned property, which is likely to be the case for flower bed attendants and squatters.

UNRA should therefore put in place an extra judicial mechanism (see **Error! Reference source not found.**) for m anaging grievances and disputes based on explanation and mediation by a third party, preferably a committee comprising local leaders, trusted citizens and independent of the project. PAPs should be represented on this committee.

Figure 4.2-1: Grievance Management Mechanism



Every aggrieved person shall be able to trigger this mechanism, while still being able to resort to the judicial system. Procedures relevant to this amicable mechanism are detailed below, and will include three different levels:

- Registration by UNRA, or its agent, of the complaint, grievance or dispute;
- Processing by UNRA, or its agent, of the grievance or dispute until closure is established based on evidence that acceptable action was taken; and
- In the event where the complainant is not satisfied with action taken by the Valuer or UNRA (or its agent) as a result of the complaint, an amicable mediation can be triggered involving a mediation committee independent of the project.

Regarding payment of compensation, it is expected that while UNRA is responsible for providing the funds to compensate, it will hire an independent consultant/entity who will conduct the actual compensation exercise. In this way, the conflict of interest will be minimized.
The grievance committee will be comprised of at least the following members:

- Town Clerk;
- LC 3Chairperson;
- LC1 chairperson for the affected Zones;
- LC 1 Secretary for women for the affected Zone;
- Local opinion leader/ Cultural leader where they exist;
- Representative of UNRA (Usually a sociologist from the supervising team).

The sociologist is charged with initiating the commencement of the grievance committee. In practice, the resettlement committee is replaced by the hired executing agency/consultant. The grievance committee will then work closely with the executing agency/consultant. Secondly, the sociologist representing UNRA would help to receive some of the complaints, give information and clarifications to PAPs – as some grievances might simply be due to inadequate information.

The consultant hired by UNRA will establish an accessible customer care office, whose location and address will be made known to PAPs. The office will receive grievances; provide information on compensation and progress of resolution of issues among others.

5 GENERAL OVERVIEW OF THE PROJECT AREA

5.1 General

The Project is located within the Central Business District (CBD) of Kampala and the outline of the general view of the Flyover (FO) project is shown in Figures 5.2.1 to 5.2.3 below. The Project starts from a point about 500m along Queen's Way and ends along Jinja road just beyond the Jinja road cemetery and the total length of the project is approximately 3.5km.

5.2 Project Components

Despite the design changes, the general project components have not changed much apart from the additional Nsambya Link road and changes, which have tended to impact on the PCRs. This is one of the major reasons why the environmental footprint has largely remained the same.

The major works of the Project consist of the construction of Flyovers, bridges, road improvement, road widening, major drainage improvement works, signalization of roundabouts and underpass construction among others.

The Project components are divided into three contract packages as earlier mentioned in the introductory chapter. The summary of the project components for Lot 1 (Package 1 and 2) and Lot 2 (Package 3) are summarised the tables below.

Table 5.2-1 Lot 1 Components (Packages 1 & 2)

Package-1	
Components	**Description (the F/S)**
i) Flyover	• Clock Tower Flyover, Total L=584m (Bridge L=366m), 2-lane
ii) Road expansion/Improvement (including footways and drainage)	• Queen's Way Expansion L=500 m, 4-lane (existing: 2-lane) • Entebbe Rd. Improvement L=200 m, 6-lane • Nsambya Rd. Expansion L=420 m, 6-lane (existing: 4-lane)
iii) Pedestrian Bridge	• Clock Tower Pedestrian Bridge, L=220 m • Shoprite Pedestrian Bridge, L=72 m
iv) Junction Improvement (with NMT* provisions)	• Shoprite Junction • Clock Tower Junction
Package 2	
Components	**Description (the F/S)**
i) Underpass	• Nsambya Underpass, Total L=430m (Tunnel L=130m), 4-lane
ii) Road Widening/Improvement (including footways and drainage)	• Mukwano Rd. Expansion L=1,330m, 4-lane (existing: 2-lane) • Gaba Rd. Expansion L=500m, 4-lane (existing: 2-lane)
iii) Junction Improvement (with NMT* provisions)	• Nsambya Junction • Hospital Junction • New Kibuli Junction
v) Nsambya Link road	• This is the road from Mukwano via Mestil Hotel and comes out at Nsambya

Table 5.2-2: Package-3 (Lot 2) Components

Component	Description	
Flyover	Kitgum House Flyover	Total Bridge Length: 2,964 m Approach Embankment: 132 m (via Mukwano Rd) 77 m (Jinja Rd Side); 108 m (Yusuf Lule Rd Side) 90 m (Nile Ave Side)
Road Upgrading and Junction Improvement	Expansion and improvement of Mukwano and Access Road	L=1,011.5 m
	Improvement of Kitgum House Junction	-
	Improvement of Jinja Road	L=758.0 m
	Improvement of Yusuf Lule Road	L=740.7 m
	Improvement of Nile Avenue	L=380.8 m
Signalization and Junction Improvement	Signalization of Mukwano Roundabout	
	Signalization of Press House Junction	
	Signalization of Africana Junction	
	Signalization of Garden City Junction	

Source: Study Team

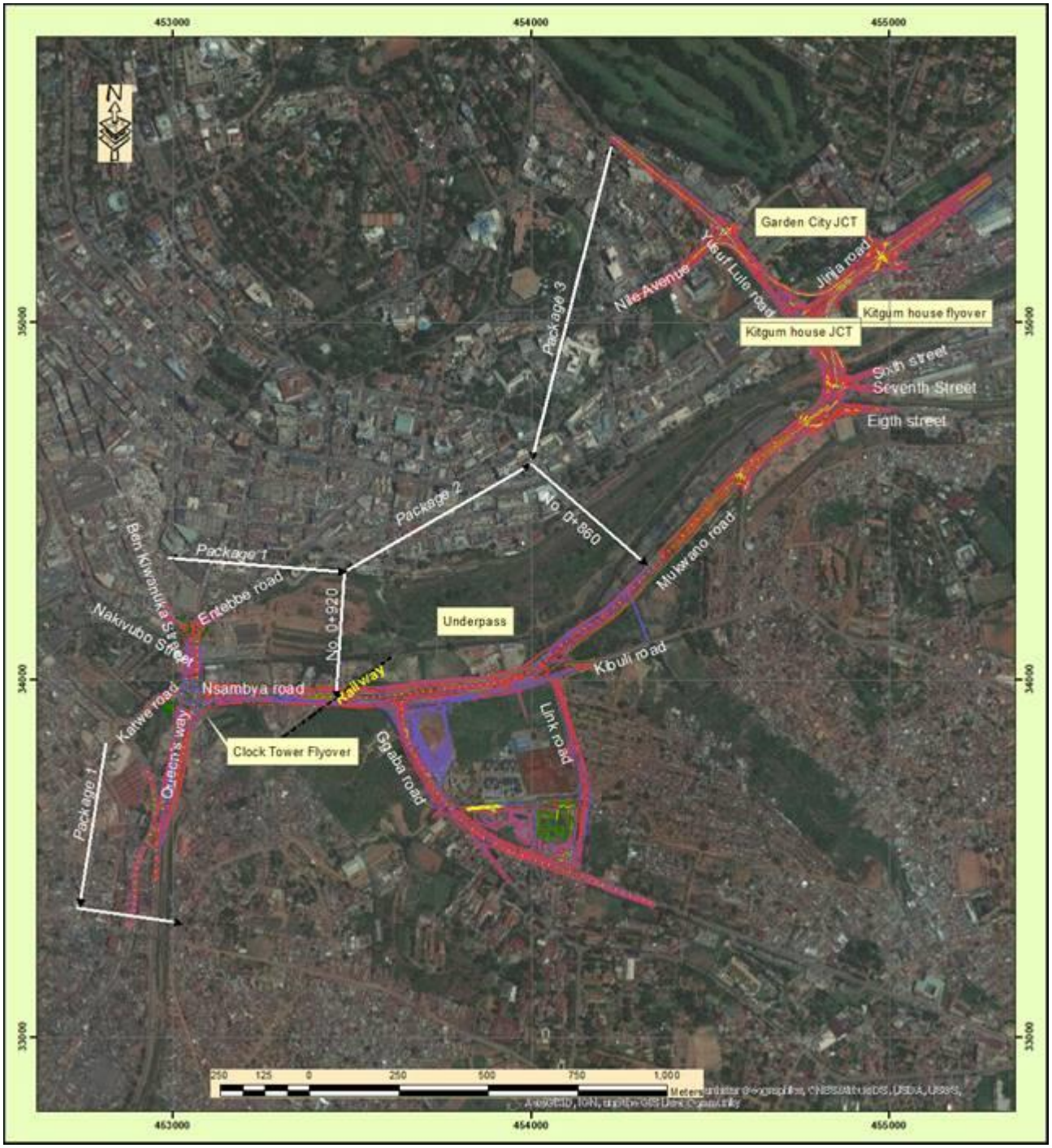


Figure 5.2-1: Updated project layout showing Lot 1 and Lot 2

Figure 5.2-2: Entire Stretch of the Project Area and proposed road alignment after the Detailed Design stage

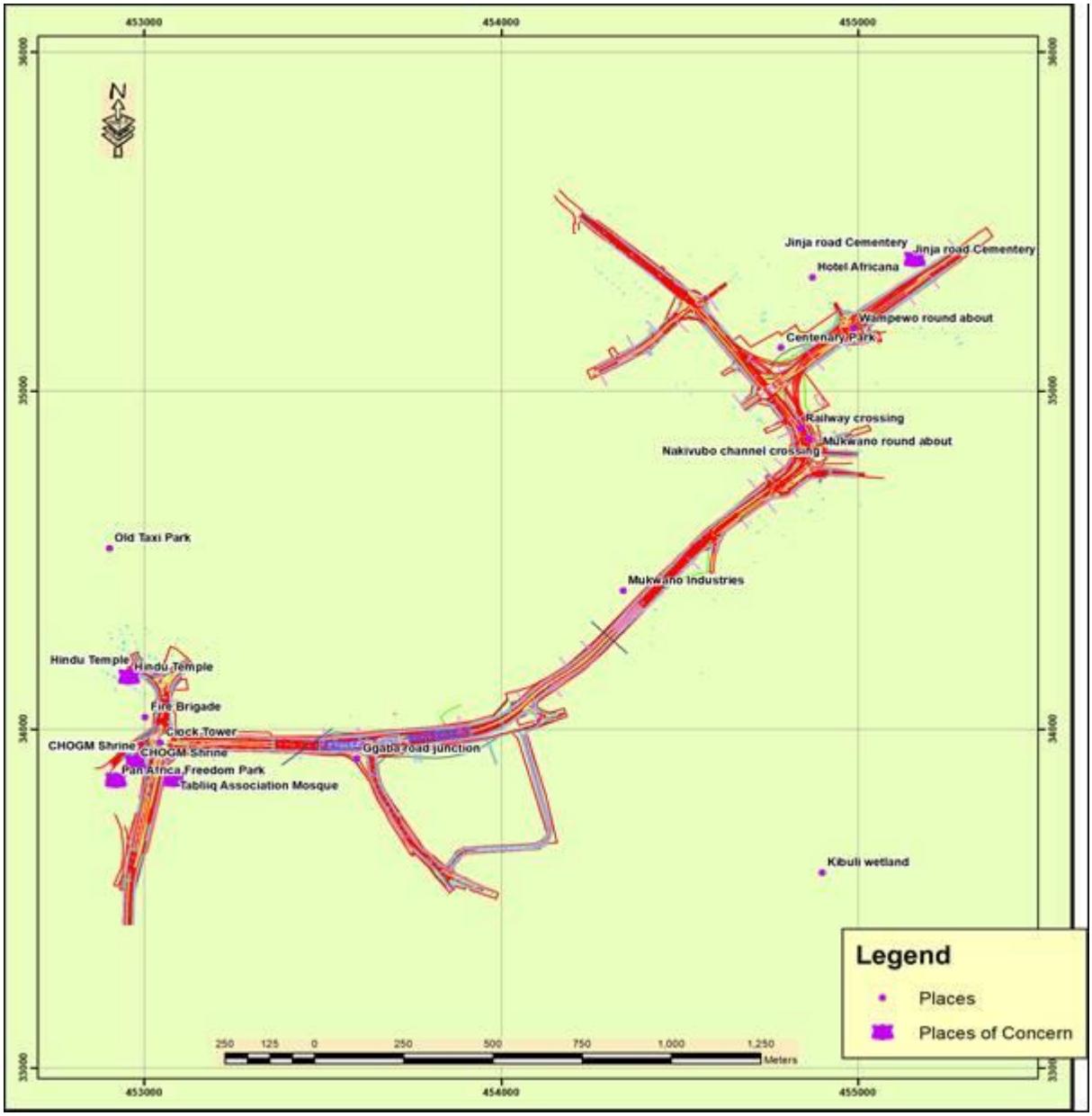


Figure 5.2-3: Location Map of the updated alignment following the Detailed Design showing significant social places

In the Detailed Design, there was more expansion and consequently, additional land take. Under Lot 1, the main changes are the relocation of the Clock Tower to Pan African Park as well as general expansion of the road alignment. The Shrine along Queensway (Byuma Bya Katwe shrine) has also been impacted in the latest design change. An additional road linking Mukwano road to Nsambya was proposed as part of the design change. On the other hand, under Lot 2 the revised preliminary design involved more land and among others some of the Police Residential houses will be affected. The proposed design took more land from the Electoral Commission in order to meet the requirements of the SGR and the additional flyover with enhanced changes in the skyline and aesthetics.

It was proposed that part of the Centenary Park will also be affected and will lead to temporal removal of the Park Monument as well as other fixtures. The Flyover to the Garden City passes directly over the monument. This monument will be returned and relocated within the Park after the construction under Lot 2.

5.3 NEMA Key Component for Classification of Project

5.3.1 Nature and scope of Services

5.3.1.1 *Nature of Services*

This is a road construction project and is consistent with the description of the projects under Section 1 of the Fifth Schedule of the National Environment Act 2019 (formally the Third Schedule of the National Environment Act, Cap 153). Projects listed in this Schedule are required to undertake mandatory Environmental Impact Assessment. Among the remedies required for redress of Project Affected People (PAP) is the presence of a RAP to settle or provide resettlement assistance for all those impacted. During the Preliminary design, a RAP was conducted and it has since been updated accordingly to incorporate design changes. The latest change has impacted the Uganda Police quarters that are yet to be valued. They will be valued and appropriate resettlement assistance will be provided.

5.3.1.2 *Scope of Services*

The original scope of services entailed the review of the feasibility study, JICA-F/S, update of the preliminary design report, Detailed Design and tender assistance for all three packages. However, due to the continuous design changes of the SGR project and the late decision on relocation of Electoral Commission Offices, Package 3 was delayed and only Packages 1 and 2 were advanced to Detailed Design under Lot 1.

It was decided that commencement of Package 3 (Lot 2) be delayed and a supplementary feasibility study and preliminary design be undertaken under the original Contract while Detailed Design would be considered under a separate Contract together with the Supervision Component. At the time of this Report, the final design for Lot 2 was due for completion.

5.3.2 Scope of the Road project in light of Design Change

5.3.2.1 *Background to design Change*

As stated in the main Environment Impact Statement, the JICA conducted the Preparatory Survey on the Greater Kampala Roads Improvement Project (the JICA F/S) in 2013 and 2014. This consisted of a review and update of JICA'S Pre-Feasibility Study (Pre-F/S) of 2010 to prepare a comprehensive feasibility study. The JICA F/S concluded that the construction of two flyovers at Kitgum House and Clock Tower Junctions respectively, expansion of Mukwano Road and improvements of interfacing roads and junctions would be effective and feasible to achieve the traffic congestion mitigation objective.

Based on the JICA F/S results, UNRA put in place arrangements to carry out the Detailed Design and tender assistance of the Kampala Flyover Construction and Road Upgrading Project (hereinafter referred to as "the Project") to ensure that the Detailed Design was prepared in time for the anticipated loan from JICA to finance the construction of the Project. The contract for the consulting services of Detailed Design ("the DD") and tender assistance for the Project was signed on 4 February 2015 however, the actual consultancy services were commenced on 4 November 2014 prior to the signing of the contract in due consideration of the urgency of the Project.

During the DD, the Standard Gauge Railway (SGR) project proposed railway viaduct under Kitgum House Flyover. The design of Kitgum House Flyover had already advanced to its detailed engineering design stage as the alignment and physical structures had already been designed at that point.

A series of discussions on harmonization of these two projects were conducted between UNRA, SGR and Japanese Government for more than a year and as a result, it was agreed that the flyover will be modified to allow the viaduct of the SGR to pass under the flyover. On the other hand, a decision made by the GoU on relocation of the Electoral Commission at Kitgum House Junction provided land for planning the additional flyover and allowed modification of the alignment of the flyover for Lot 2 of the Project.

It is these considerations among others that led to design review and subsequent changes. In general, these changes did not impact greatly on the environmental footprint of the project since the area covered by the changes was small and most of these impacts had been anticipated and covered under the provisional study.

5.3.2.2 *Potential Impacts of Flyovers (and Links) in the urban setting*

In the planning and design of flyovers within an urban area, it is important to consider not only structural and economical aspects but also the construction methods and phasing, traffic safety of existing roads and junctions, the social impacts during and after the construction as well as the aesthetic aspects. There are many constraints within the urban environ that will have an impact on the decisions made for determining pier locations, span arrangements and clearances. Some of the pertinent factors that have been considered during the planning of the form and layout of the project structures include:

- Potential locations of substructures and resulting span lengths considering required horizontal and vertical clearances
- The geometric standards to be applied
- The durability and stability of the proposed structure
- The cost of construction
- The possible construction methods taking into consideration the existing site conditions
- Traffic safety and comfortable manoeuvrability
- Ease of maintenance
- Visual impact of the structure considering the surrounding landscape; and
- Traffic management especially during construction

5.3.2.3 *Planting along the Road*

The Detailed Design Consultant (DDC) incorporated a greenbelt planted along the road corridor edge beside the walkway in a bid to create the Kampala greenbelt project. Along the walkway, the green belt features the flowers, small trees and shrubs in a bid to create a conducive environment. For median strips, the DDC planned to plant organic patterns by using a variety of flower shrubs. This was to be in line with the Landscaping and Environmental Master Plans described in subsequent chapters. It also responded to the findings of the tree geo-referencing study that had been conducted to ascertain the nature and type of trees that would be destroyed due to the project. The tree geo-referencing study was conducted during the final Detailed Design phase. Because of the requirement to relocate the CT into the Pan African Park, more trees have been earmarked for removal. Hence, the project will plant more trees to replace the carbon that would have been removed,

5.3.3 Project Equipment, Personnel, Activities, Facilities and Installations

These aspects have not been affected by the design change and remain largely the same as in the previous report. Further details on this are available in the main report (original EIS).

5.3.4 Construction Phasing

Package 1 and Package 2 were combined into what is now known as Lot 1, while Package 3 is now called Lot 2. The construction of Lot 2 will also be supported through JICA.

Since the preliminary design and following the Design Change, a number of changes were introduced. While the changes under Lot 1 were mostly expansion of the right of way, as discussed above, in addition to the introduction of the Nsambya Link Road, more changes were realised under Lot 2. This led to changes in the implementation timeline especially for Lot 2. The revised implementation timelines are as summarised in Table 3.3.1 below.

Table 5.3-1: Kampala Flyover Project Timelines

Contract	Key Scope Activities	Duration in Months	Date of Commencement
Lot 1 (Clock Tower Flyover, Mukwano road widening and Nsambya Underpass (Tunnel)	Detailed Design Review	4	April 2019
	Construction Period starting with Utilities Relocation	28	
	Defects Notification Period	12	
Lot 2 (Kitgum Flyover)	Detailed Design	9	February 2019 with Detailed Design. Construction to start after Government has secured additional funding from JICA.
	Tender assistance	13	
	Construction Period	37	
	Defects Notification Period	12	

5.3.5 Detailed Design Change Considerations

As discussed above, the Detailed Design took into account the theme of the preliminary design. Several adjustments were made to the design following further consultations. This was done in part to avoid some of the developers who opposed the alignment citing that the alignment would disrupt their business plans. as a result, the Detailed Design acquired more land from public properties including the Electoral Commission, Uganda Police and Uganda Railways Cooperation (URC). Subsequently as discussed above, the Detailed Design divides the road project into three sub sections or Packages (Package 1, 2 and 3). Presently, Packages 1 and 2 have been combined to be called LOT 1 and Package 3, LOT 2.

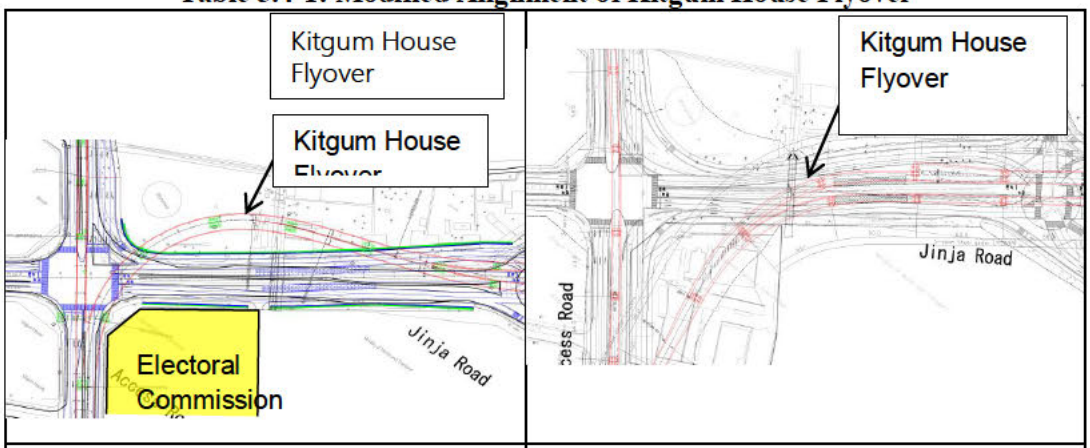
5.4 Major Changes in Design from JICA F/S

The original Detailed Design commenced in November 2014 (officially February 2015) based on the results of the JICA F/S. However, following changes were made during the detailed engineering design stage:

5.4.1 Horizontal Alignment of Kitgum House Flyover

A horizontal alignment of Kitgum House Flyover was modified since acquisition of the Electoral Commission land was made possible.

Table 5.4-1: Modified Alignment of Kitgum House Flyover

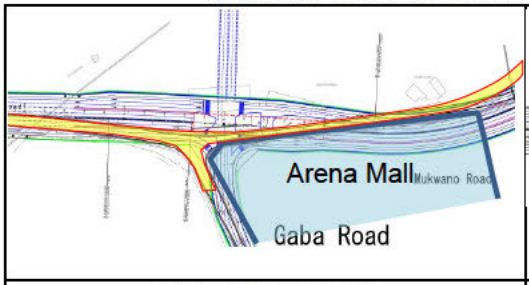
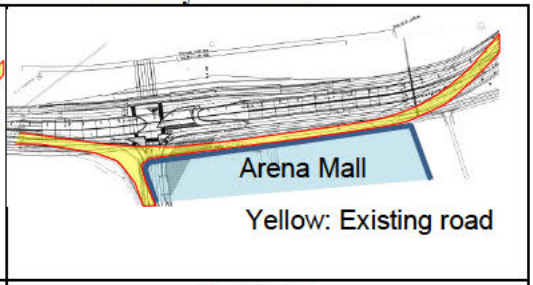


Source: The DDC

5.4.2 Alignment at Nsambya Junction and Location of the Underpass

A modification of the horizontal alignment near Nsambya Junction where the underpass is planned as a result of the new development plan of Arena Mall. In relation to this modification, the horizontal alignment of Gaba road was also revised.

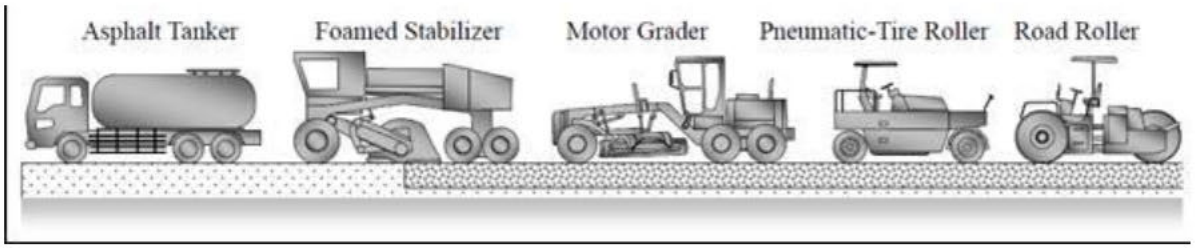
Table 5.4-2: Modified Plan near Nsambya Junction

Original Plan in the F/S	Modified Plan
	

Source: The DDC

5.4.3 Application of CFA (Cement Foamed Asphalt) Method

In-situ recycled base course using the Cement Foamed Asphalt (CFA) method was proposed to replace the existing asphalt layer effectively. The CFA method is a construction method of crushing existing asphalt concrete and mixing it at the same time with a stabilizer such as cement and foamed asphalt and existing base course materials eventually grading and compacting to construct a stabilized base. ***The recycling approach reduces the waste component hence commendable.*** Figure 3.4 shows the sequence of the in-situ recycling method.



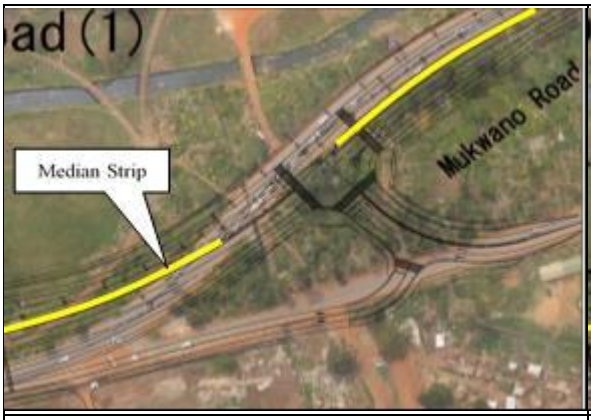
Source: The DDC

Figure 5.4-1: Execution of CFA In-situ Pavement Recycling Method

5.4.4 New Kibuli Junction

In order to avoid interruption of traffic flow by the traffic signals, UNRA requested to remove the traffic signal planned for New Kibuli Junction. As a result of this, this modification, -a through traffic-between Jinja Road and Queen's Way will not be interrupted by red signals.

Table 5.4-3: New Kibuli Junction

	
Signalized junction in the F/S	Left turn only junction with pedestrian bridge

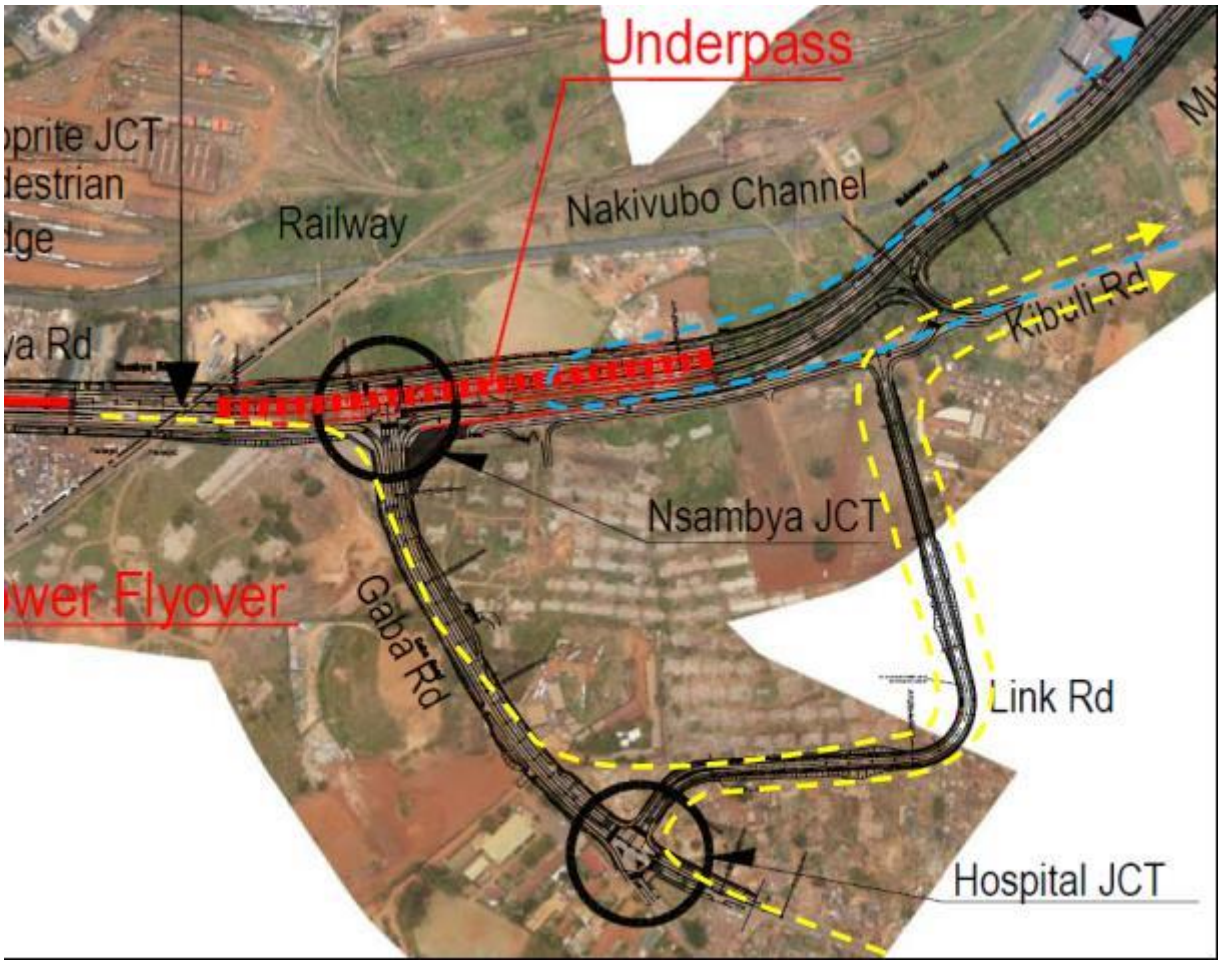
Source: The DDC

5.4.5 New Link Road

5.4.5.1 *Design Change Considerations*

Due to the above-mentioned modification of the Kibuli Junction, traffic from West side (from Clock Tower and Ggaba Road) will not be able to enter Kibuli Road. In order to provide an additional access for such demand, a new Link Road which connects the New Kibuli Junction and Nsambya – Gaba road was provided as shown in the figure below.

For the traffic from Kibuli Road, a U-turn lane will be provided for traffic towards Kitgum House Junction.



Source: The DDC

Figure 5.4-2: New Link Road

5.4.5.2 *Environmental consideration Risks for the Link Road*

The Link road starts from Mukwano road and goes uphill via a moderately steep slope towards the Nsambya hill directly joining the Nsambya – Gaba road. This is a new place that had not been studied before. The following considerations have been made.

Table 5.4-4: New Link Road potential impacts

S/No	Feature	Potential Impact /Risk
1	Slope	The road starts from Mukwano road and goes up a steep incline ending at the Nsambya – Gaba road. Originally, it had been a planned road that was expected to go beyond Mestil Hotel. Due to a number of reasons the road could not pass the Hotel hence it goes straight up hill ending into the Gaba Road. The steep slope along this road has potential to lead to soil erosion especially during construction phase (see Figure 5.4.5).
2	Flora / Fauna	The area has been urban and all indigenous vegetation has been removed. Some decorative bushes (bamboos) have been put to align the entire stretch of the road up to Mestil Hotel (see Figure 5.4.3 to 5.4.5). Subsequently there is no flora / fauna of conservation status.

3	Obstructions	The proposed road is constrained by Mestil Hotel and (Marriot Hotel) Capital shoppers who are developing a hotel opposite Mestil. There seems to be limited space for the road. Consequently, another design change to try and avoid these buildings has been proposed. The new design will lead the road directly into the Nsambya – Gaba road. This road will take out some of the Uganda police buildings (See Fig 5.4.6). It means that a RAP must be conducted after sensitising the two impacted people with a view to compensate or adjust the developments.
4	Drainage	It is likely that with the widening of the Link with the associated pavements, the storm water will increase greatly. Presently, the drainage channel at the bottom is quite small (see Figure 5.4.6). This will require that it is made much wider taking into account the climate change impacts for the area.
5	Accesses	At the corner towards Mestil Hotel, there are some illegal accesses which the community beyond use to join the road. During road construction, these will not be tenable. The Contractor will have to obtain and provide a safe and reasonable access to these communities. Although the path looks quite hazardous at the moment, it seems to carry a large number of people who have to jump over a large drain. Mitigation measures will be implemented to reduce risk of eventualities.
6	Flower bed attendants	The original study was followed by a RAP where by all the flower attendants had been compensated. It appears that some of those compensated on the Right-Hand Side RHS moved to the LHS well after the cut-off date (see Figure 5.4.5). Their chairperson agrees that there are many cases of that nature but a few have not been compensated. UNRA enforcement team will engage all the flower vendors who have not relocated from the Right of way and give them a final eviction notice.

Figure 5.4-3:: A steep Slope along the Link road ending into Mukwano road

Figure 5.4-4: Steep slope along part of the proposed Link road ending into Nsambya – Gaba road

Figure 5.4-5:Part of the side along the proposed Link road

Figure 5.4-6: The proposed |Link road will impact this Uganda Police Building

Figure 5.4-7: Some flower attendants on the RHS of the road

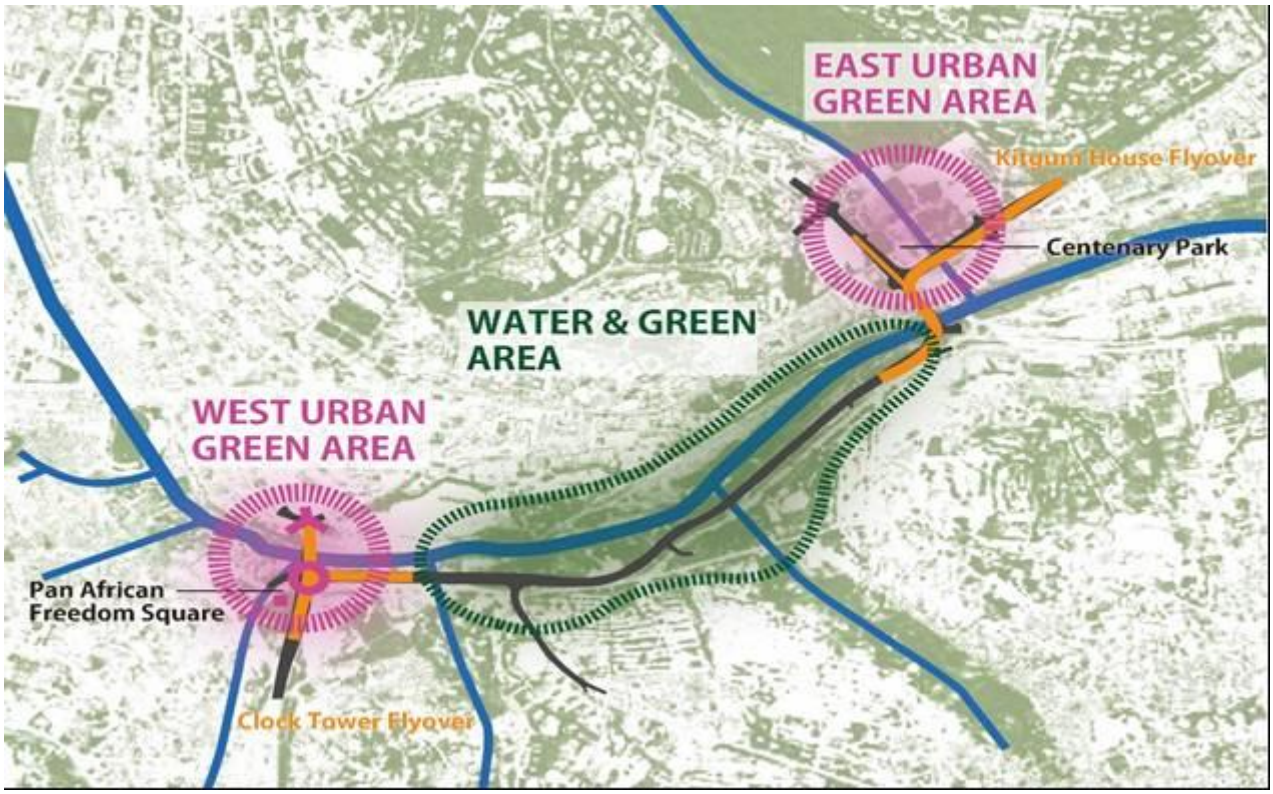
Figure 5.4-8: Small drainage channel at present

5.4.6 Landscaping

5.4.6.1 *Landscaping master plan for the Project*

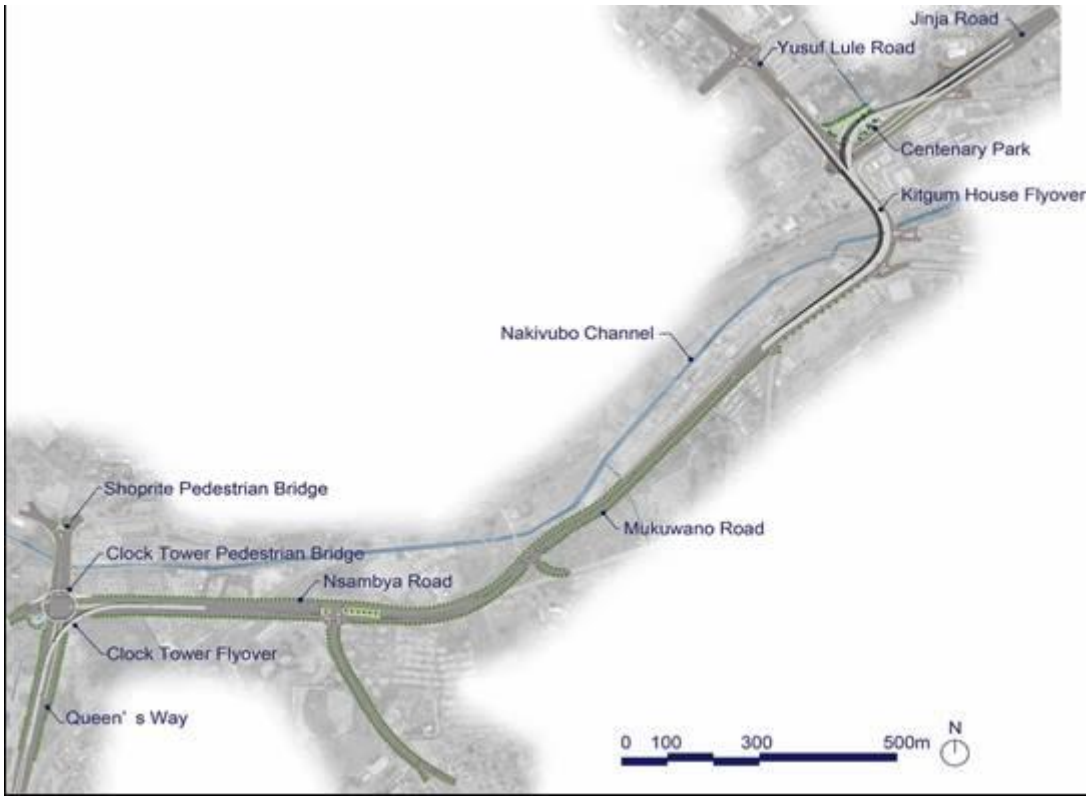
Based on the analysis of the current site conditions, a master plan for the Project's landscape was developed. The master plan was based on the contemporary road design and highlights the green area. ***The Green Area is defined as a vegetation oriented area under the landscaping master plan of the project taking advantage of the existing environment around the area (refer to the definition at the beginning).***

The area shall be created by maintaining the existing vegetation and planting along the road. The plan is described in the following figures:



Source: The DDC

Figure 5.4-9: Environmental Zoning Plan



Source: The DDC

Figure 5.4-10: Landscaping Master Plan

5.4.6.2 *Lighting Design Concept*

For road security and safety reasons, the flyover, pedestrian walk-ways and footbridges will be lit as it is common knowledge that crime is more prevalent in dark areas. The standard of lighting will take into account the aesthetics, natural landscape, appropriateness, adequacy and other safety considerations.

Furthermore, the use of LED bulbs which combine both long life and energy saving characteristics were recommended. The long life - LED lights will help cut down the maintenance expense of replacing light bulbs. The level and spread of lighting was designed in such a way that harmony with animals, plants and mother-nature as a whole would be maintained where necessary.

The lighting at the Clock Tower that comprised of the three-dimensional traffic signals and the monument lighting will become symbolic of the area visible from a distance especially at night thereby contributing to the uplifting of the standard and vibrancy of the area and pedestrian safety.

5.4.6.3 *Clock Tower Relocation*

Chapter 7 discusses the relocation and impacts of PCRs. The Clock tower is one of these discussed there in. The DDC proposed the relocation of the Clock Tower to the adjacent space (part of the Pan-African Freedom Square). The relocation was intended to improve traffic capacity and safe operations of the Clock Tower Junction.

At the same time, the DDC believed that the Tower had the potential to become a more attractive and appreciated tourist monument after the relocation because of easier access and greater interaction potential with the general public.

The proposed location maintains the tower's relationship with the Queen's Way and preserves its historical pedigree. The advantages and disadvantages are discussed under Chapter 7

5.4.6.4 *Illumination of the Flyover*

The DDC planned the lighting design for the pile and the beam of the flyover in terms of the beautification needed for the night view and the safety using LED.

5.4.6.5 *Planting along the Road*

The DDC has provided for a greenbelt planted along the road corridor verge besides the walkway in a bid to create the Kampala greenbelt project.

Along the walkway, the green belt features flowers, small trees and shrubs in a bid to create a conducive environment .

For median strips, the DDC planned to plant organic patterns by using a variety of flower shrubs.

Species of trees, shrubs and flowers to be planted for the beautification of the Project were selected taking into account the maintenance costs.

5.4.6.6 *Pavement of Walkways*

The pavement pattern was planned to create the lively scenery and have a varied view. .

5.4.6.7 *Standard Gauge Railway*

In July 2015, the Standard Gauge Railway (SGR) Project Team requested UNRA to modify the alignment of the Flyover. Since then, in order to harmonize the two projects, the DDC elaborated a number of technical proposals and held discussions continuously not only with the SGR and UNRA but with the Japanese Government and other related entities. In November 2016, Ugandan and Japanese governments reached an agreement for the harmonization resulting in the SGR crossingAccess Road with a viaduct. Thelength and vertical alignment of the Flyover in Lot 2 of the Project were required to be modified drastically.

5.4.7 Highway Design

5.4.7.1 *Road Geometrics*

The geometric standards of this project were adopted as follows after reviewing different internationally recognized standards.

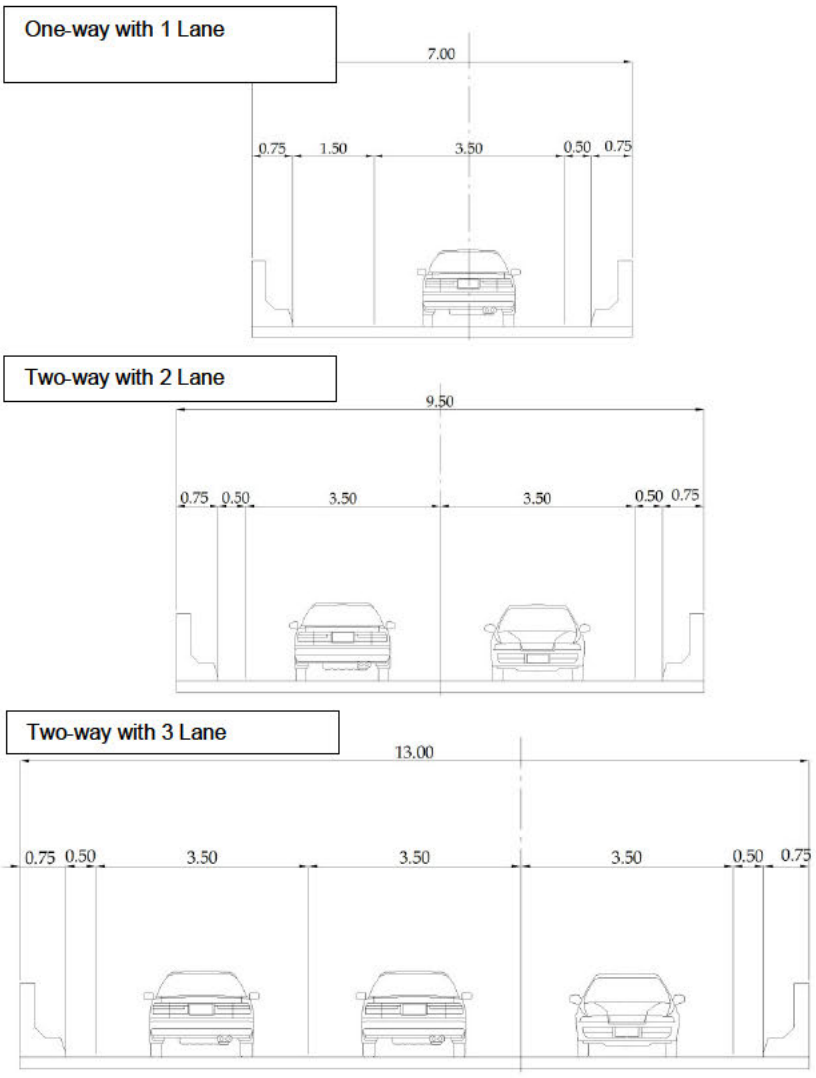
Table 5.4-5: Adopted Geometric Standards

Road Geometric Parameter	Adopted Figure
GENERAL	
Right-of-Way Width [m]	Min. 30
Design Speed [km/h]	50
Visibility Obstruction Parameters for sight lines	
i) Object Height	0.26
ii) Driver Height	1.05
Minimum Stopping Sight Distance [m]	60
HORIZONTAL ALIGNMENT	
Minimum Horizontal Curve Radius [m]	100
Maximum Radius for Use of Transition Curve [m]	300
Desirable Length of Transition Curve R_{min} [m]	44
CROSS SECTION	
Carriageway Lane Width [m]	3.50 (3.00*)
Shoulder Width [m]	Not Applicable
Median Width [m]	1.0 -5.0
Carriageway Normal Crossfall [%]	2.5
Shoulder Normal Crossfall [%]	2.5
Maximum Superelevation [%]	Flyovers 6, Elsewhere 4
Rate of Superelevation Run-off	1:150
Acceptable Radius for Reverse Camber [m]	300
Curve Widening [m]	R = 100-120; 0.9
	R = 121-250; 0.6
	R ≥ 250 Not Required
VERTICAL ALIGNMENT	
Desirable Maximum Gradient [%]	6
Minimum Gradient for Drainage [%]	0.5 Desirable 0.3 Absolute Minimum
Desirable Minimum 'K' Values for Vertical Crest Curves	9
Desirable Minimum 'K' Values for Vertical Sag Curves	11
Maximum Combined Gradient [%]	8.0
FACILITIES FOR PEDESTRIANS	
Standard Footway Widths[m]	
(i) Absolute minimum [m]	3
(ii) Desirable minimum [m]	3
FACILITIES FOR CYCLISTS	
Minimum Width for Cyclists [m]	
(i) Cycleway (separate from carriageway)	2.5
(ii) Combined cycleway and nearside traffic lane	4
FACILITIES FOR STRUCTURES	
Minimum Vertical Clearance at Structure over Road [m]	6
Headroom for Railway [m]	8
Minimum Horizontal Clearance between Carriageway Edge & Face of Abutment [m]	Desirable 1.0 Absolute minimum 0.75

Source: The DDC

5.4.7.2 *Typical Cross Sections*

In the Detailed Design of this Project, a typical lane width of 3.5 m, which is the same for the Design Class Paved Ib in the Road Design Manual of Uganda, was adopted. The Design Class Paved Ib is defined as a road which functions both as an international trunk road and a national trunk road and applies full and/or partial access control.



Source :The DDC

Figure 5.4-11: Recommended cross sections for the flyovers in the original Detailed Design

5.5 Engagement between the Detailed Design Consultant (DDC) and the Standard Gauge Railway (SGR)

One of the major reasons why the LOT 2 package delayed was because of the indecision regarding the SGR which according to government, had a higher priority than the Road project. The road alignment could only be fixed after the layout of the SGR has been agreed upon. For these reasons, at the commencement of the Detailed Design (DD) study, the DDC held a meeting with URC on 14th November 2014 whichconfirmed that the SGR will cross both Access and Nsambya Roads at grade. The DDC therefore proceeded to design KFCRUP based on the above conditions.

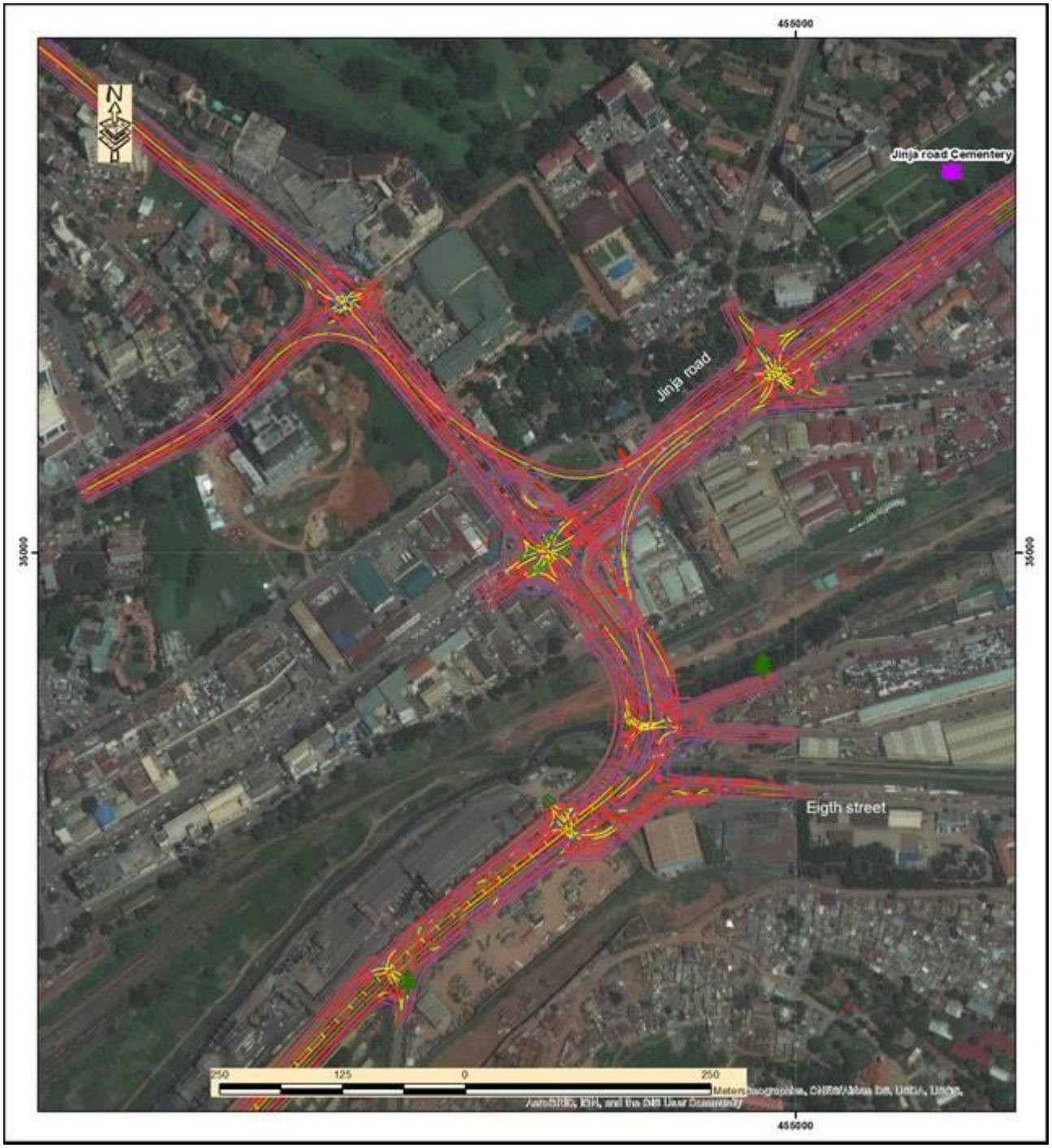
In July 2015, the SGR team informed the DDC that they were planning for the SGR to have an embankment of about 2.5m across Access Road; effectively closing off the road. This decision had major impacts on the traffic considerations for KFCRUP. The DDC studied and compared several options to resolve the conflict.. After a series of discussions with the SGR team, it was decided that the SGR will cross both Access Road and Nsambya Road at grade and for safety reasons automated barriers will be installed.

Regarding the acquisition of the EC land, UNRA requested that a conceptual study on modification of alignment of Kitgum House Flyover and additional Phase 2 flyover utilizing the EC land be undertaken by the DDC. A conceptual plan was developed as shown in Figure 5.5.1

The Phase 2 flyover was considered because at grade crossing of the railway might interrupt smooth traffic flow at Access Road in the future.

However, in March 2016 the SGR team informed the DDC through UNRA that the alignment of the SGR had changed and that a railway viaduct was being planned across Access Road as opposed to the previous plan of at grade crossing. According to the SGR team, the viaduct was necessary due to the elevation of the planned railway station that was to also serve as a multi-modal transportation hub.

The construction of the viaduct would require a redesign of the Kitgum House Flyover. Specifically, in order to accommodate the viaduct, the headroom requirement for the flyover increased from 8.0 metres to 16.6 metres. Furthermore, with the railway viaduct required raising of the profile of the Kitgum House Flyover by 8.6 metres in order to pass over the viaduct and consequently, causing the Phase 2 flyover to require a height of about 30 metres from the ground level in order to go above both the viaduct and the Phase 1 flyover as shown in the Figure below



Source: The DDC

Figure 5.5-1: Concept for Modification of Kitgum House Flyover

The changes require a height of about 30 metres of the flyover as shown in Figure 5.5.2 below.

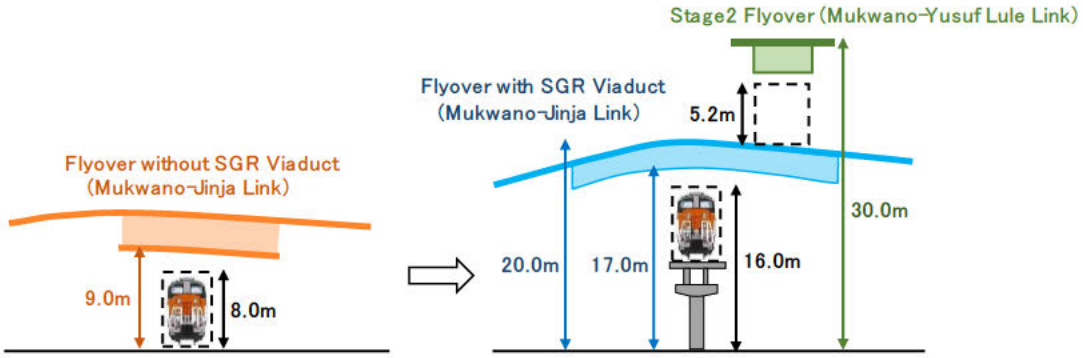
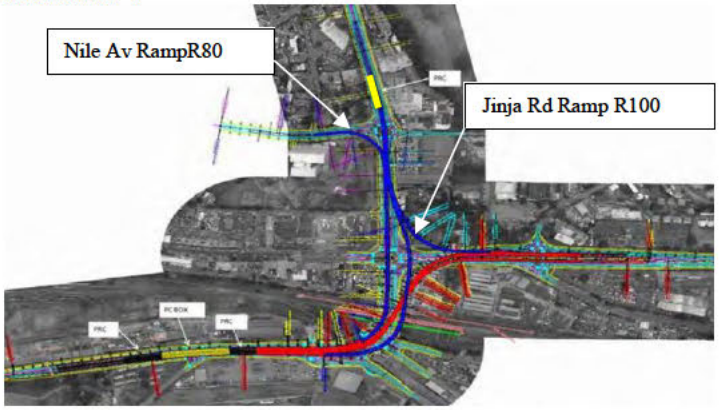


Figure 5.5-2: Impact of SGR Viaduct to Kitgum House Flyover

Taking into account the SRG meant that more land has been taken. Figure 5.5.3 shows the summary of the best-selected option within Lot2.

Image of the Selected Option	Alignment and Structures
Alternative2-1  	**Horizontal Alignment** Min-Curve Radius:80 Spiral parameter:A=63 **Vertical Alignment** Max gradien : 6.0% **Clearance Point** A: From Yusuf Lule Rd to Mukwano Rd The clearance is secured 8.2m from MJL road surface. 5.2m; Clearance for vehicle 3.0m; Bridge structure height **Structure** Yellow; Bridge of the Blue and Red; Bridge of the steel type

Source: DDC

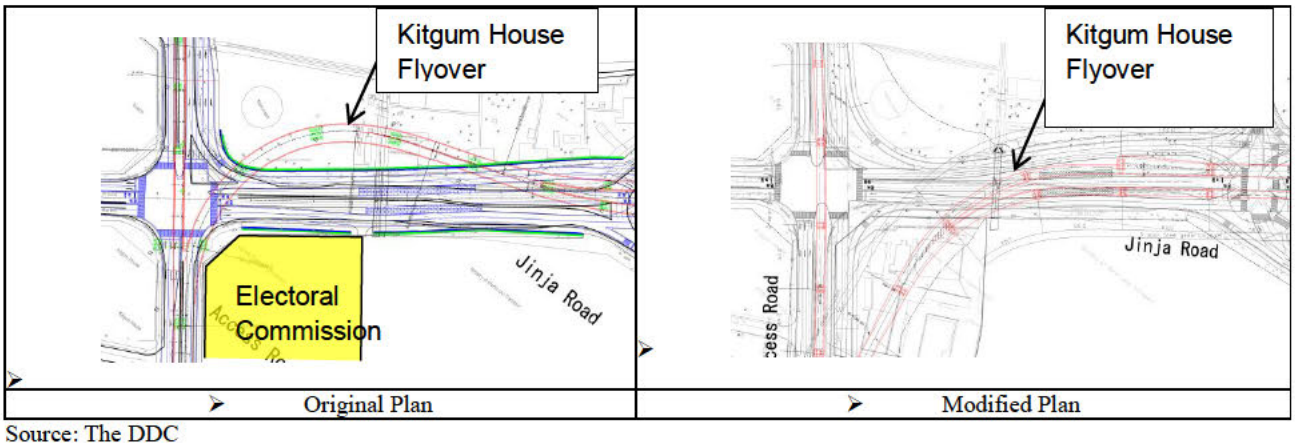
Figure 5.5-3: Summary of the Best LOT 2 Alignment

There are bound to be significant visual impacts due to the elevated level of the flyover as seen from the changes. The Visual Impact of the flyover was a major concern since it was out of character compared to surrounding environment. The Commissioner of the Department of Museums and Monuments pointed out that a raised Flyover was likely to dwarf the Monument at the Centenary Park. Nevertheless, the concerns about aesthetics and visual impact did not change the environmental footprint significantly.

5.5.1 Other Changes in Design from JICA F/S relevant to the Environment Review

Taking into account the above considerations, the following changes were further made during the detailed engineering design study in order to accommodate the revised design concept.

The horizontal alignment of Kitgum House Flyover was modified upon acquisition of the Electoral Commission land of the electoral commission. Fig 5.5.4 shows the modified versus the original plan.



Source: The DDC

Figure 5.5-4: Modified versus the original Alignment at Kitgum House Fly Over

5.6 Project Area of Influence

The Design Change has not significantly impacted on the project Zone of influence. The exception is the Nsambya Link road that tended to expand the zone of influence albeit in a minor way. In the original EIS, the ESIA focused on those areas of the project that were likely to be influenced by its activities during implementation which included the road construction corridor, the zones and accesses that would be traversed by the road as well as the neighborhoods which would be most impacted either directly or indirectly. Though the Right of Way (RoW) was normally 30 metres, for this project the road corridor would be as wide up to 80 metres in some places and even wider at Junctions.

Subsequently, the FO project will remain along the existing alignment save for the necessary expansions along parts of Queen's Way, Mukwano Road and Jinja Road. From the foot print of the environmental surveyors, the immediate Zone of Influence (ZOI) was taken to be at most 100 metres on either side of road from its centre line; extending for the entire extent of the FO project. The ZOI was determined based on a combination of considerations particularly with respect to noise pollution, dust and related air pollution. The other considerations included persons who had been conducting different business within the expanded road corridor and are likely to be impacted. Other activities discussed and noted during the initial ESIA included BRT activities.

5.7 General traffic demand forecast

JICA prepared a Traffic demand forecast during the Prefeasibility study. The demand forecast showed a potential reduction of traffic through the city centre as a result of introduction of the BRT. This meant that the road would shift to the proposed alignment hence the need to upgrade it to handle more traffic in less time.

Specifically, the traffic demand forecast in the pre-feasibility study that influenced the estimate was the introduction of Bus Rapid Transit (BRT) and accompanied changes in traffic management. One of the significant assumptions related to the traffic management was that Kampala Road would no longer carry general traffic after the start of the BRT operation. The pre-feasibility study assumed that passengers of mini-buses and large buses would shift to the BRT substantially after the introduction of the BRT in 2015. The assumption established that the passenger trips generated within the 1 km radius from the BRT would shift to the BRT. In the traffic demand estimate, it was assumed that approximately 91,000 trips were likely to shift from mini-buses and large buses to the BRT by 2023.

Furthermore, the pre-feasibility study took into consideration the decrease in the number of lanes for general traffic in the BRT route and passenger restriction to the general traffic at Kampala/Entebbe Junction. It also concluded that the main traffic flow would shift from Jinja-Kampala roads direction (East-West) to Yusuf Lule-Mukwano roads direction (North-South).

The JICA study team while conducting the traffic demand review at the Detailed Design phase, established that the traffic demand on the Flyover would be lower in case the BRT was not put in place since the capacity and velocity of Kampala Road would not change drastically at about / approximately 15,000 pcu on each flyover. Otherwise with the BRT in place, the traffic demand on the flyover would expand dramatically because the BRT would have the tendency to depress capacity and velocity of Kampala Road. Nevertheless, the study established that the flyover had a high traffic demand regardless of completion of other road and transport projects.

The BRT pilot route was assumed to have been completed by the end of 2013. At the time of the Detailed Design stage and this review, this seemed not to be the case since feasibility studies were yet to be implemented although the FO project was ready to be implemented and funds had been mobilised by Government. The fate of BRT was not clear at the time of preparing this report. It would have been beneficial to the FO Project had the BRT Project been completed before completion of the FO Project. However, this not being the case, may somewhat undermine the effectiveness of the FO Project. The DDC conducted additional studies to ascertain the traffic demand / volumes through the project route.

5.7.1 Traffic Demand on Flyover for Lot 1

Regarding Traffic Demand for LOT1, there were no additional major studies at the time of detailed Design with respect to Lot 1 as the original study was found applicable to the Detailed Design layout.

5.7.2 Traffic Demand on Fly over for LOT 2

Further studies have been undertaken for the traffic demand/volumes on the modified Layout for Lot 2, and results are summarised below. Table 5.7.1 shows demand on flyover by each alternative in 2024. Largest demand is observed in alternative 2.

Table 5.7-1: Demand on Flyover by 2024

Alternative 1		Alternative 2		Alternative 3	
Route	**Traffic volume pcu/day**	**Route**	**Traffic volume pcu/day**	**Route**	**Traffic volume pcu/day**
Yusuf Lule - Jinja	6,700	Yusuf Lule - Mukwano	17,200	Jinja - Nile	14,300
Mukwano - Jinja	29,200	Mukwano - Jinja	29,200	Mukwano - Jinja	29,200
Total	35,900	Total	46,400	Total	43,500

Source: The DDC

The travel time is expected to be greatly reduced with the proposed construction of the FO. The study team concluded that the construction of the flyovers along the Mukwano-Nsambya Roads would be significantly effective in decongesting the traffic to and from the City Centre.

5.8 Drivers to Design Change / Design Change Considerations

5.8.1 Detailed Design Change Considerations

Following further consultations as well as consideration of the theme of the preliminary design, several adjustments were made to the design.

5.8.2 Lot 1

Under Lot 1, there were minor changes to the general layout and alignment with minimal or insignificant additional environmental impacts. The table below shows some of the major considerations that led to design change at the Detailed Design phase under Lot 1.

Table 5.8-1: Major considerations that led to design change (Lot-1)

S/No	Consideration	Potential Impacts	Remarks

1	Expansion of the road in several places	Increased land acquisition area along to Mukwano road and Queen's Way	Covered under the revised / updated RAP
2	Relocation of Clock Tower and other PCRs	Community opposition and refusal by the DMM to grant permission for relocation	The DMM, the Pan African Movement and KCCA all granted permission with conditions
3	Additional link road between Nsambya and Kibuli	Increased soil erosion and storm water into Nakivubo Channel	Anti-erosion measures as well as appropriate drainage to be implemented

5.8.3 Lot 2

Under Lot 2 there were a number of design changes with increased environmental impacts as highlighted below.

Table 5.8-2: Major considerations that led to design change (Lot-2)

S/No	Consideration	Potential Impacts	Remarks
1	Expansion of the road in several places	Increased land acquisition area	Covered under the revised / updated RAP
2	modification of the flyover to be so as to allow the viaduct of the SGR to pass under the flyover.	Excessive height of the flyover leading to an adverse visual impact to city skyline in addition to obstructing the Centenary park Monument	Design should incorporate measures that would minimise the impact to the visual outlook of the city skyline and improve visibility of the monuments
3	Relocation of more of the flower garden attendants due to expansion (Lot 2)	Displacement and loss of livelihood of PAPs	Updated RAP to allow for livelihood restoration for flower garden attendants.
4	Taking over the Police quarters accommodation	Relocation of Police Officers	Uganda Police to take responsibility following compensation
5	Use of Centenary Park as a Temporary stock piling area.	Temporary disruption of monuments and park facilities	To be restored and improved after the works.
6	Opening the Nsambya Link road	Increased erosion and storm water	Opening only land needed for the works and rapid restoration of coverage.
7	The availability of the Electoral Commission land to give way to the Flyover	Waste due to demolition	Waste management already been considered in the earlier study;

5.9 Summary of the impacts and mitigation measures as identified at Detailed Design before D/C

Except in a few limited cases, the findings of the preliminary design study were considered valid after the Detailed Design Phase as the project footprint was not been significantly varied. The findings that were detailed in the Original ESIA Report have been summarised in the table below. The additional impacts as a result of the design changes were articulated in this report and included in the summarized table below.

The additional impacts as stipulated elsewhere in the report are related mostly to the relocation of the PCRs (Clock tower, Pan African Park, Byuma Bya Katwe shrine and the Centenary Park), Relocation of the Police quarters and demolition of the Electoral Commission premises. Demolition of the Electoral Commission Premises as well as the Police quarters would increase debris and other waste which impacts had already been handled in the original report.

It was noted in the initial EIS that during construction both positive and negative impacts are anticipated with most being social in nature since the project is within an urban environment with a high population density. This remains the case even with the design change report.

The positive impacts include Job creation and related benefits, Improved skills for local Communities as well as Tree Planting and enhanced landscape management.

The negative Impacts have been classified with proposed mitigation measures. These include the following:

Table 5.9-1: Summary of impacts

S.N	Impact	Mitigation Measures
	During Construction	
1	Soil Erosion	• Degraded sites including construction material storage points will be restored to as close to their previous condition as possible after road construction. • All embankments especially where the underpass will be created, trenches and outfalls after construction will be strengthened by use of stone pitching to limit erosion. • Sediment basins/traps will be placed to trap sediments before they enter the Nakivubo Channel and other storm water drains / watercourses.
2	Soil Degradation and Pollution	• Construction materials to be stored in approved containers and washing areas for site equipment servicing and repair will be carried out in a defined area with a concrete pad draining to oil traps. • Provide secure stores for hazardous materials and refuse pits that will be demolished on completion. • Abandoned equipment; tyres, batteries, filters, sparkplug etc to be removed and carefully disposed of as required by law. • Routine, systematic sprinkling of water in the work area and crushing site to reduce dust emissions.
3	Increased Storm Water	• Road drainage to discharge into existing natural water courses. • Collector systems for cut slopes to be provided to drain to the road drainage system. • Culvert outlets to be protected with reno-mattresses or similar. • Embankment slopes to be vegetated with Bahia grass or similar approved to control erosion. • Borrow pits and quarries to be self-draining.
4	Nakivubo Channel Water quality	• preventing siltation and chocking of the channel from construction materials. • Sedimentation basins should be created between the channel banks and areas where excavation and pitting is taking place these to be regularly checked. • Continue to monitor the channel from both up and downstream points during construction taking One sample per month during times when there is no rainfall.
5	Reduction in Air quality	• Exposed parts of the service roads should be paved. • Regular monitoring of air quality in the construction area. • Parameters to be monitored: Dust (PM), CO, NO2, SO2, Oxygen. • Use low sulphur fuels including diesel fuel with a sulphur content, 15 ppm and propane with negligible sulphur content. • Meet applicable criteria with respect to emission quality on all combustion-related equipment and provide maintenance according to manufactures specifications. • Apply dust suppressant such as water spray trucks for dust suppression on unconsolidated working surfaces will mitigate dust generation from construction traffic
6	Increased Noise levels	• The construction fleet to be kept in good condition, generators well fitted with efficient silencers. Speed controls (speed humps) at specified intervals (specific to each haul road) will be installed and maintained. • House the generators if required on sites in a Noise barrier structure to reduce noise levels. • Workers to use ear muffs to reduce exposure to noise particularly those working at the quarry and crusher areas to reduce injury to the ears due to prolonged noise pollution. • Self-audits to check on noise level..
7	Loss of vegetation	• Clearance of vegetation will be confined to those areas where it is inevitable (within the road corridor).

S.N	Impact	Mitigation Measures
	and other trees	• Landscape and replant Bahia grass or approved similar and plant trees where suitable in disturbed areas. • All removed tree species have been marked and will be replanted alongside the new road or in other equivalent places as will be advised by the KCCA landscape expert.
8	Disturbance to fauna and avi-fauna	• Clearance of vegetation will be confined to those areas where it is inevitable (within the road corridor). • The Flyovers should be painted with easily visible colours to aid vision of the flying birds. • Employ a delayed approach to removing of trees to enable birds to hatch their eggs in case the season is one of laying eggs in those trees
9	Loss of flower gardens and agricultural crops	• All flowers to be valued and compensated for. • Ornamental trees will be valued and compensated for, while their number will be included in the trees to be replanted along the road to intensify the planted area and enhance the scenery. • Where there is some additional space, flower gardens will be encouraged to shift a step backwards to allow for road construction.
10	Land take	• Land acquired will be fully compensated for in accordance with the law. • In cases of land away from the FO project (say for Borrow pits etc), agreements for land compensation or land take between the land lord and the Contractor will be made and "copies of all land agreements are to be shared with to UNRA". • For land take for the purposes of BPs, all removed topsoil will be used to restore the BPs after construction. The BPs will be reshaped and re-vegetated by the Contractor. • The Contractor will negotiate with the landlord at BP or quarry areas and will pay him directly for the materials acquired. • Vegetation will be done using the indigenous existing grasses whose seeds are naturally occurring in the stockpiled top soil. Otherwise other suitable species include *Cynodon dactylon, Panicum fulgens, Panicum repens* etc.).
11	Disruption of services and Utilities	• When working with Utilities (communications, Power lines, Water mains, sewer lines), it will be done in collaboration with the service provider and a due notice of at least one month is to be given. The same will be done for the relocation of major sign posts and road furniture where they exist. • The Contractor will design ways of working around the utilities so that relocation is minimized. • Light equipment will be used (as well as manual methods) in the initial stages of excavations taking care to see that utilities underground are not disrupted without warning as is always the practice within Cities and Urban Centres. • Due notice to the community will be given (by the service provider) to the public in case disruptions are envisaged. • Appropriate PPE will be provided to the workers during the activities in proximity with utilities for their safety • Lockout/Tag out procedures at the UMEME substation will be implemented to avoid eventualities • Relevant signage will be displayed along hazardous areas for Public safety
12	Waste management	• Demolished road structures to be carefully removed and recycled where possible. • Contractor to balance cut and fill where possible. • Workshop storage facilities to be licensed by NEMA. • Bitumen tanks will be placed on an impermeable surface and surrounded with a bund made from impermeable materials and placed away from any drainage. • Hazardous waste to be disposed of in accordance with the manufacture's specifications and stored in sealed drums before transporting to designated disposal points. • waste segregation to be aided by labelling bins to enable appropriate collection and recycling of waste. • Mobile toilets will be provided at site and garbage bins to be provided at strategic locations. • Bins for solid waste collection to be placed at the Contractor's camp and worksites to ensure that any hazardous waste (Torch and Radio Batteries, Oils, and polythene papers and plastic bottles etc.) are separately collected and disposed of in accordance with the law; take note that there are recycling plants for plastics and polyethenes. • . •

S.N	Impact	Mitigation Measures
13	Relocation of people	• The design has tried to avoid structures and buildings so as to minimize relocation of PAPs. • The commissioned Resettlement Action Plan should be implemented to provide resettlement assistance to any other who might be impacted. • Should the RAP identify any vulnerable people, they treated separately (in line with their vulnerability) from the rest who are not vulnerable.
14	Relocation of Clock Tower	• The clock Tower should be relocated into the Pan African park. • Clock tower may be relocated to a site where it will be visible from afar such as at the Shoprite pedestrian bridge and such relocation must be done with the involvement of relevant officials from the Department of Museums and Monuments.
15	Other PCRs	• No ancillary works, borrow areas within 2km of an identified cultural site of importance. • The Cemetery off Jinja Road and other Worship places will not be trespassed by the road project. • Awareness creation among the Contractor's worker force on identification of archaeological/Paleontological resource materials must be promoted. • In line with the General Specification for Road and Bridge and WB Physical Cultural Resource Safeguard Policy Guidebook, the Contractor must stop work immediately upon discovery of evidence of possible scientific, historical, prehistoric, or archaeological data and notify the Resident Engineer giving the location and nature of the finds. • The Contractor through the Resident Engineer must notify DMM of such findings for verification and salvage in line with the Historical Monument Act 1967, Section 11(1 &4) and section 12b).
16	Occupational Safety and health	• The Contractor must prepare and make available at site on request, a Safety and Health Policy and Management plan. • The Contractor must undertake a risk assessment and Safety &. • Prior to commencement of work, the Contractor must register with the Department of Occupational Health and Safety. • The Contractor must make an inspection requisition of the Commissioner for site plant and equipment to be certified. • There should be a PPE programme in place such that the following should be recorded: — Type of equipment — The date and time supplied — The person to whom it is given (he/she will sign for it) — Date of next PPE inspection — Replacement schedule for plant and components. • First-Aid kits to be provided at every active working site in offices, at site camps and any other location determined by the Project Manager. A clinic supplied and staffed by the Contractor in accordance with UNRA guidelines to be provided at the Contractor's camp. A list of supplies must be kept and displayed at all times in the clinic. • Working areas should be contained to limit access by unauthorized persons and children. • Explosives will be handled by a qualified person, transported under Police escort in accordance with the Explosives Act, and, stored at a designated place. • Contractor not to *use community water sources* for road use. • Trucks transporting any granular material to be covered. • Provision of fire hazard management procedures and equipment including emergency drills, exits and fire extinguishers • Training program for the work force.
17	Public health	• To protect the Contractor and local communities in case of disease outbreaks among the workforce, a premedical examination for workers should be conducted, followed by routine medical examination during the works and a final post medical examination. • Ensure procurement of a Nominated Service Provider to undertake a project-specific HIV/AIDS awareness/prevention programme as specified in the contract documents. • Adequate sanitation facilities to be provided at site.
18	Land scape	• To improve aesthetics and reduce noise pollution, it is recommended that trees are planted along the Road project at places along the FO and, visibility permitting, on road Islands. • The colour of the bridges and flyovers chosen will blend with the environment or the sky to enhance aesthetics. In this case, light blue was recommended as it easily harmonizes with the landscape and trees and sky blue gives a more urban image

S.N	Impact	Mitigation Measures
		• The steel and concrete joints of the FO especially at Kitgum House will be blended in such a way as to provide a continuous joint from the outside. • Walkovers or pedestrian Bridges to be constructed following an appealing shape which will first attract pedestrians, be pleasing to the eye and at the same time ensure safety and protection. • Quarries and borrow areas must be restored in accordance with an approved restoration plan as provided for in the appropriate management plan/project brief approved by NEMA.
19	Sanitation	• Gender considerations in allocation of sanitation facilities (Toilets and bathrooms) will be undertaken. • Separate male and female toilets and washrooms facilities to be provided with adequate privacy for each gender • Female office facilities will be provided with sanitary bins to aid proper disposal of the sanitary towels/pads • Mobile / portable plastic toilets will be provided for workers along the project road (FO) and other working areas that are not permanent.
	Operational Phase	
	Soil Erosion	• Regular and frequent inspection and maintenance is required to ensure roadsides soils are not exposed or removed and that any repairs required are carried out promptly. The following are essential; Cleaning of drainage channels. Replanting (in case of roadside works) with approved grass seed must be carried out as soon as possible to protect the exposed soils
	Storm Water	• Exposed areas to be vegetated with appropriate grass. • Drain storm water to natural drainage channels to reduce erosion during road side maintenance or related works. • Ensure self-drainage of borrow areas and quarries used for road maintenance.
	Climatic change Impacts	• Ensure that Roadside drains continue to discharge existing natural water courses or existing culverts. • Make use of the seasonal Forecast that is produced by the Department of meteorology to know when to clear the drains and prepare for severe weather events. • Drains to be cleaned regularly especially before the onset of the rains.
	Air and Noise pollution	• Provide noise barriers along Flyovers. • Regular monitoring of the environmental impacts • Regular inspection of Noise barriers to ensure functionality. • Ensuring use of approved fuels in motor vehicles. • Provide appropriate PPE to the workers • Water sprinkling and placement of humps to mitigate the impacts of pollution • Plant road side trees to reduce both air and noise pollution due to motor vehicles.
	Flora and fauna	• Care to be taken during maintenance to ensure that asphalt/Bitumen is not spilled into Nakivubo Channel and other sensitive areas. • The Flyovers should be painted with attractive colours so that they can be more visible to flying birds. • All burrow areas and quarries used for road maintenance to be self-draining.
	Urban waste	• Provide awareness rising to inform the community about keeping drainage channels clear and protecting road infrastructure. • Use radio broadcasts and public meetings to conduct sensitization. • KCCA should reduce waste at source and encourage reuse and recycling of waste. • Drains should be regularly cleaned and inspected before rain seasons.
	Safety	• Road furniture must be cleaned and inspected regularly to check its condition. • The traffic code must be enforced by the police. • It is recommended that the FO and the entire road is well lit t including in the bypass. • There should be measures to enforce the use of NMT and pedestrian lanes by those supposed to use them.
	Aesthetic beauty	• Noise barriers should be maintained along the Flyover to mitigate noise impact within the surrounding community. This will be in addition to the existing trees on the roadsides. • Paint the FO as well as the underpass as often as it fades to maintain the beauty of the structures. • The tunnel and the entire road structure will be well lit to enhance the aesthetic values.

S.N	Impact	Mitigation Measures
		• Measures to discourage people from writing graffiti on the pillars as well as oin the underpass will be put in place to include.
	Cumulative Impacts	
1		• Most of the planned project activities will commence after the FO project apart from the BRT which is expected to commence before. The BRT will coincide with the FO project along Queen's Way and at Hotel Africana Junction along Jinja Road where the impacts could be increased. Fortunately, the BRT is much smaller in width and passes through the middle of the road project hence minimizing the cumulative impacts. Mitigation measures taken in this FO Project will also address the resultant cumulative impacts due to the BRT. • Meanwhile future proposed project activities will be required to take into account the existing activities while conducting their specific project environmental assessment.

5.10 Resettlement Action Plan (RAP)

The number of impacted people in this project is less than 200. Nevertheless, a RAP was conducted during the preliminary study. This RAP showed that a few properties would be taken and land would also be acquired. The Project Affected People Impacted by the project included the Uganda Railways Corporation, Kampala Capital City Authority, Mukwano Industries Limited and Uganda Police. Specific measures to reduce resettlement were undertaken so as to avoid relocating of people due to the high value of land within Kampala city.

Following the DC, the area taken increased due to the expansion. Some of the PAPs had disputed the valuation during the disclosure. The RAP was updated during design change. Presently more land has been taken to include four blocks belonging to Uganda Police in addition to four smaller buildings that will be affected at the corner of Press House Road. These will need to be valued and an actual census taken to aid compensation and relocation of the PAPs. Provisional census shows the PAPs at police quarters to be about 90, which still puts the total number below 200.

It is evident in the summary of impacts that most Individuals who will be impacted are the flower garden attendants whose property has been valued at commercial rate and a 15% disturbance allowance paid to them. Most of these flower garden attendants were men and flower gardening was not the only business they had according to the survey.

6 BASELINE SURVEYS FOR THE FINAL DESIGN AND UPDATE

In general, most of the baseline survey had been covered under the preliminary design and was well documented in the main EIS report. In the Detailed Design, a few aspects were added, and these included additional air quality and noise measurements as well as geo-referencing all the trees that were likely to be removed by the development. The Clock Tower was to be relocated to the Pan African Park, while the other PCRs were to be impacted. These include the Pan African park, the Byuma Bya Katwe shrine and the Centenary Movement,

The design team of environmental practitioners measured, and geo referenced all the trees that were within the construction corridor and likely to be impacted by the project. This was done in both Lot1 and Lot 2. Following changes in the environment law, there was a more in depth study regarding the impacts to the PCRs articulated under Chapter 7 above.

6.1 General Survey for additional Environment Impact Analysis at Detailed Design Phase

The sections below provide the additional survey that was undertaken during the Detailed Design Phase. Although the decision to separate the project into Lot 1 and Lot 2at the time of the study had not been made, the survey was conducted across the entire project without differentiating Lots 1 and Lots 2.

6.1.1 Survey for Environmental Impact Analysis

6.1.1.1 *Objective of Baseline Surveys*

During the Final Design Stage, additional surveys to cover additional areas was undertaken. As before, the objective of the additional baseline survey was to establish existing environmental conditions in the project area so that these conditions form the basis of environmental monitoring during the construction phase and later during the operational phase of the Project. In addition to the baseline survey that was conducted during the preliminary design, there were three additional parameters to be used to establish the baseline environmental condition in the project area. The three parameters were selected as field survey items because the parameters were considered to have relatively large impact due to this project. These were: -

- Air Quality
- Noise Levels
- Traffic Volume

The DDC carried out the air quality, noise and traffic baseline surveys (including traffic volume survey at same place) at four locations in the Project area. The result of traffic noise survey was compared with traffic noise forecasted results. In addition, the study team conducted in-depth assessment of the impacted PCRs.

6.1.1.2 *Methodology for the Noise and Air Quality Monitoring*

Five sensitive receptors were selected in both Lot 1 and Lot 2 locations as shown under Fig 4.1.1 below. Monitors were placed at these points for 24 hours continuously. The elements monitored were Air Quality ((NOX, SOX, PM10 and PM2.5), Noise levels, Traffic volume and weather conditions. All these were monitored simultaneously.

The data was tabulated and compared with the national standards to provide a basis for monitoring compliance beyond which appropriate measures including legal action would be undertaken to ensure mitigation of the environmental impacts.. The data on Traffic volume and weather conditions was to be used to model future scenarios and respective mitigation measures. with respect to noise

6.1.1.3 *Air Quality Survey*

The survey details are as shown below in Tables 6.1.1, 6.1.2 and 6.1.3 below.

Table 6.1-1: Concept on Air Quality Survey

Contents	Description
(a) Survey Hours	Survey was carried out for 24 hours from 6:00Hrs in the morning to 6:00Hrs the next morning on weekdays.
(b) Survey Period	17th, 19th, 23rd February 2015 and 21st April 2015
(c) Survey Item	Air Quality (NOX,SOX, PM10 and PM2.5)
(d) Survey Equipment	Multi REA plus Gas Monitor, Industrial scientific iBird MX6 and particulate counter DT-9881M

Source: The DDC

6.1.1.4 *Noise Pollution Survey*

Table 6.1-2 Concept on Traffic Noise Survey

Contents	Description
(a) Survey Hours	Survey was carried out for 24 hours from 6:00Hrs in the morning to 6:00Hrs the next morning on weekdays.
(b) Survey Period	17th, 19th, 23rd February 2015and 21st April 2015
(c) Survey Item	Traffic Noise Volume (L_{Aeq}, L_{Amax}, L_{Amin}) every hour
(d) Survey Equipment	AWA 5661 (Class 1 integrating sound pressure level meter

Source: The DDC

6.1.1.5 *Traffic Volume*

Table 6.1-3 Concept on Traffic Volume Survey

Contents	Description
(a) Survey Hours	Survey was carried out for 24 hours from 6:00Hrs in the morning to 6:00Hrs the next morning on weekdays.
(b) Survey Period	17th, 18th, 19th February 2015and 21st April 2015
(c) Survey Item	Number of vehicles each 24-hour period 【Vehicle type】 Light vehicle: Passenger car, small truck, taxi, and small transportation bus (Matatu) Heavy vehicle: Heavy truck, large bus and construction machine

Source: The DDC

6.1.1.6 *Survey Location*

As indicated above, survey locations for air quality and noise surveys were selected with consideration for sensitive receptors such as places of worship, parks and residential buildings in the project area. In general, the survey equipment was placed on the edge of the pedestrian walkway (about 3 metres from the road edge) to allow for uninterrupted pedestrian traffic. As a result of being close to the traffic, the parameters monitored recorded high values especially for the case of noise. The location of the monitoring sensors is shown in Table 6.1.4 and Figure 6.1-1.

Table 6.1-4: Locations of Air Quality and Noise Surveys

	Location	Road	Receptor	Survey Date
1	Location-1: Centenary Park	Yusuf Lule Road	Centenary park	19th Feb 2015
2	Location-2: Opposite Mukwano Industry	Mukwano Road	Uganda Police Quarters	23rd Feb 2015
3	Location-3: Near Gapco petrol station	Nsambya Road	Islamic Institution	21st April 2015
4	Location-4: Near Shoprite Junction	Entebbe Road	BAPS Shree Swaminarayan Madir- Hindu Temple	17th Feb 2015

Source: The DDC

Source: The DDC

Figure 6.1-1: Survey Locations of Baseline Survey on GOOGLE Background

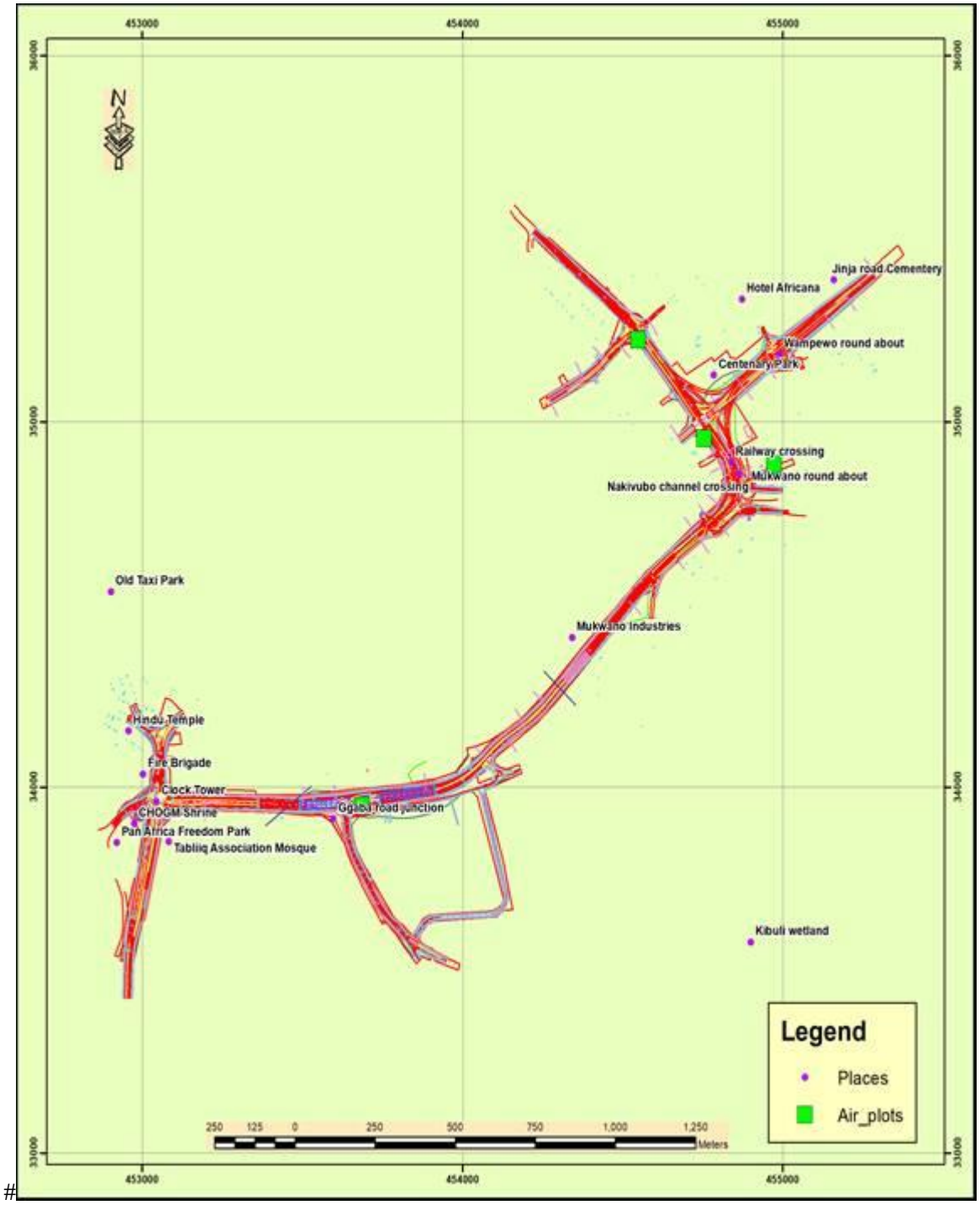


Figure 6.1-2: Sampling Points for air and noise pollution monitoring

6.1.1.7 *Sensitive Receptors*

The four survey locations selected to capture the pollution at potentially sensitive receptors with the identified sensitive receptors within the project area. are shown in Figures 6.1-3. below;

Location-1: Centenary park along Yusuf Lule Road - LOT2

Location-2 :The Police Residential quarters along Mukwano Road - LOT 2

Location-3: Empty plot earmarked for the Islamic Authorities along Nsambya road LOT 1

Location-4: The BAPS Shree Swaminarayan Madir- Hindu Temple along Entebbe Road, LOT1

Source: The DDC

Figure 6.1-3: Photos of Sensitive Receptors

6.1.1.8 *Road Conditions (Descriptors of Lateral Profile)*

The survey equipment was placed at the roadside within the pedestrian walkway in accordance with the description in Table 6.1.5.

Table 6.1-5: Survey Location

Location	Height of survey sensor from ground (m)	Width of sidewalk (m)	Lane width (m)	Lane width (m)
Location-1	1.3	2	13	9
Location-2	1.3	1	13	---
Location-3	1.3	2	13	9
Location-4	1.3	--	15	9

Source: The DDC

6.1.1.9 *Legal Framework Relevant to Air Quality and Noise Pollution*

- ***Air Quality***

According to Uganda's Draft National Air Quality Standards (2006), the ambient air quality standards are as shown in Table 6.1.6. The project area will be classified as Industrial and Mixed Use area. The findings of the air pollution measuring exercise will be used to compare against the standard values for Oxygen (O2), Particulate Matter (PM with aerodynamic diameter < 10 µm; PM10), Nitrogen oxides (NO) and Sulphur dioxide (SO2) as shown in the below table.

Table 6.1-6: Ambient Air Quality Standards for Uganda

Parameter / Location	%	Concentration (µg/m^3)		
	O_2	PM10	NOx	SO_2
Industrial and Mixed Use	19.5-23.05	500	120	120
Residential and Rural	19.5-23.05	200	80	80
Sensitive	19.5-23.05	100	30	30

Source: Draft National Air Quality Standards, 2006

- ***Noise***

The National Environment Noise Standards and Control Regulations (2003) have put in place a regulatory framework for the control of noise pollution. The purpose of the Regulations is to ensure the maintenance of a healthy environment for all people in Uganda, the tranquility of their surroundings and their psychological well-being by regulating noise levels and generally, elevating the standard of living of the people by :–

- Prescribing the maximum permissible noise levels from a facility or activity to which a person may be exposed
- Providing for the control and mitigating measures for the reduction of noise; and
- Generally giving effect to the provisions of section 28 of the National Environment Act.

Table 6.1-7: Maximum Permissible Noise Levels for General Environment

Facility	Noise level (LAeq)	
	Day (6:00-22:00)	Night (22:00-6:00)
C. Mixed residential (with some commercial and entertainment)	55	45
D. Residential + industry or small-scale production commerce	60	50
E. Industrial	70	60

Source: National Environment (Noise Standards and Control) Regulations, 2003

The National Environment (Noise Standards and Control) Regulations also specify maximum permissible limits for accelerating vehicles.

Table 6.1-8: Maximum Permissible Limits for Accelerating Vehicles

	Contents	Maximum permissible limits in dB(A)
1	Vehicles intended for carriage of passengers and equipped with not more than nine seats, including the driver's seat	78
2	vehicles intended for the carriage of passengers and equipped with not more than nine seats, including the driver's seat and having maximum permissible mass of more than 3.5 tones	
	a. With engine power > 150 kW	80
	b. With engine power < 150 kW	83
3	Vehicles intended for carriage of passengers and equipped with not more than nine seats, including the driver's seat: vehicles intended for carriage of goods	
	a. With maximum permissible mass not exceeding 2 tonnes	79
	b. With maximum permissible mass exceeding 2 tonnes but not 3.5 tonnes	80
4	Vehicles intended for carriage of goods and having maximum permissible mass exceeding 3.5 tonnes	
	a. engine power < 75 kW	81
	b. 75Kw <engine power > 150 kW	83
	c. Engine power not less than 150 kW	84

Source: National Environment (Noise Standards and Control) Regulations, 2003

In addition, the regulation also indicates maximum permissible noise level for construction sites as shown in Table 6.1.9 below.

Table 6.1-9: Maximum Permissible Noise Level for Construction Site

Parameter / Facility	Maximum Noise Level Permitted (LAeq) in dB(A)	
	Day (6:00.-22:00)	Night (22:00.- 6:00)
i)Hospital, schools, intuitions of higher learning homes for the disabled, etc.	60	50
ii) Buildings other than those prescribed in paragraph (i)	75	65

Source: National Environment (Noise Standards and Control) Regulations, 2003

6.1.2 Survey Results

The field surveys were carried out on selected weekdays in February and April 2015. The photos of field surveys are shown in the figures below.

During drizzle in Location-4	Measuring in Location-4
Gas masks were Mandatory	Early Morning in Location-1
Night time in Location-1	Morning hours in Location-1
Daytime in Location-2	Measurements in Location-3

Source: The DDC

Figure 6.1-4: Survey Location

6.1.2.1 *Air Quality Measurements*

Results of baseline survey (24 hours average) on ambient air are shown in Table 6.1.10. In the all locations, NO levels materially exceeded the air quality level standard for Industrial and Mixed Use area.

Table 6.1-10: Baseline survey results

Parameter / Location	Concentration (µg/m^3)			
	PM2.5	**PM10**	**NO**	**SO_2**
Location-1 : Centenary Park	31.1	135.6	358.0	0.0
Location-2 : Opposite Mukwano Industry	48.9	240.9	1,022.8	40.9
Location-3 : Near Gapco Filling Station	29.5	185.5	920.6	32.8
Location-4 : Near Shoprite Junction	170.6	965.6	613.7	73.7
National Standard (Industrial and Mixed Use).	-	500	120	120

Note: Air quality data highlighted in yellow exceeded the Air Quality Level Standard (Industrial and Mixed Use).
There are no PM2.5 environmental standards in Uganda.
Source: The DDC

6.1.2.2 *Noise*

Results of baseline survey on traffic noise are shown in Table 6.1.11. In all the locations, noise levels exceeded the maximum permissible noise levels for general environment (hereinafter called "standard noise limit") for industrial area (Daytime:70dB, Nightime:60dB) and the maximum permissible level for construction site.

Table 6.1-11 Baseline Survey Result of Traffic Noise

Location		**Road**	**Day(6:00-21:00)**			**Night(22:00-5:00)**		
			LAeq	**Lmax**	**Lmin**	**LAeq**	**Lmax**	**Lmin**
1	Location-1: Centenary Park	Yusuf Lule Road	75.1	105.1	65.2	69.2	95.9	48.3
2	Location-2: Opposite Mukwano Industry	Mukwano Road	76.4	108.0	53.6	69.5	102.5	52.6
3	Location-3: Near Gapco petrol station	Nsambya Road	76.0	104.0	61.7	73.7	90.6	44.6
4	Location-4: Near Shoprite Junction	Entebbe Road	77.8	105.7	64.0	72.2	95.2	47.9
	Standard Noise Limit (Industrial area)		70	-	-	60	-	-

Note: Noise level highlighted in yellow exceeded the standard noise limit (Industrial Areas).
Source: The DDC

6.1.2.3 *Traffic Volume*

Results of baseline survey on traffic volume are shown in Table 6.1.12.

Table 6.1-12: Baseline Survey Result of Traffic Volume

Location	Direction	Vehicle number (number/day)		
		Light vehicle	Heavy vehicle	Total
Location-1-LOT 2	Nakumatt-Kitgum	15,609	4,562	20,171
	Kitgum-Nakumatt	14,715	1,613	16,328
Location-2 LOT 2	Nsambya-Mukwano	4,025	980	5,005
	Mukwano-Nsambya	3,364	1,336	4,700
Location-3 LOT 1	Clock-Nsambya	5,778	4,467	10,245
	Nsambya-Clock Tower	8,136	7,829	15,965
Location-4 LOT1	Clock Tower-Shoprite	13,477	13,170	26,647
	Shoprite-Clock Tower	11,883	9,672	21,555

Source: The DDC

6.2 Traffic Noise Forecast

6.2.1 Legal Framework Relevant to Noise Pollution

The National Environment Noise Standards and Control Regulations (2003) provide a regulatory framework for the control of noise pollution.

The purpose of the Regulations is to ensure the maintenance of a healthy environment for all people in Uganda, the tranquility of their surroundings and their psychological well-being by regulating noise levels, and generally, elevating the standard of living of the people by –

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

6.2.2 Existing Noise Environment in Project Site

6.2.2.1 *Noise*

Results of baseline survey on traffic noise in February and April 2015 are shown in the Table below. Noise levels at the Project site exceeded the maximum permissible noise levels for general environment (hereinafter called "standard noise limit") for industrial area (Daytime: 70dB, Nighttime: 60dB) and the maximum permissible level for construction site.

Table 6.2-1: Baseline Survey Result of Traffic Noise

Location		Road	Day(6:00-21:00)			Night(22:00-5:00)		
			LAeq	Lmax	Lmin	LAeq	Lmax	Lmin
1	Location-1:Centenary Park	Yusuf Lule Road	75.1	105.1	65.2	69.2	95.9	48.3

Note: Noise level highlighted in yellow exceeded the standard noise limit (Industrial Areas).

Source: The DDC (2016)

6.2.2.2 *Traffic Volume*

Results of baseline survey on traffic volume are shown in Table 6.2.2

Table 6.2-2: Baseline Survey Result of Traffic Volume

Location	Direction	Vehicle number (number/day)		
		Light vehicle	Heavy vehicle	Total
Location-1	Nakumatt-Kitgum	15,609	4,562	20,171
	Kitgum-Nakumatt	14,715	1,613	16,328

Source: The DDC (2016)

6.2.3 Traffic Noise Forecast

6.2.3.1 *Forecast Item*

The items examined in forecasting the impact were traffic noise caused by increased traffic volume upon completion of the Project (i.e. the operational phase).

6.2.3.2 *Forecast Target Year*

The target years of the forecast are 2024 and 2034 when the Project is fully operational.

6.2.3.3 *Forecast Method*

The baseline data obtained was tabulated and sent to the Modelling specialist based in Japan. The model used was ASJ RTN-Model 2013. Specifically, the noise impact was conducted as follows:

The ASJ RTN-Model 2013 was used to assess the noise impact in the surrounding area. This was done by calculating the A -Weighted sound level, the A weighted Equivalent Sound level and the synthesis equation. These are described in detail below.

- ***A-weighted Sound Level***

A-weighted sound level (L_{PAi}) was calculated as follows:

$$L_{PAi} = L_{WA} - 8 - 20\log_{10} r + \Delta L_d + \Delta L_g$$

Where,
- L_{pAi}: A-weighted sound level propagated by sound source (i) (dB)
- L_{WA}: A-weighted sound power level by vehicle traffic (dB)
  - Heavy vehicles : $L_{WA} = 88.8 + 10log_{10}V$
  - Light vehicles : $L_{WA} = 82.3 + 10log_{10}V$
- V: Average traveling velocity (km/hr)
- r: Distance from sound source (i) to forecast point (m)
- ΔL_d: Compensation value by diffraction effect (dB)
- ΔL_g: Compensation value by ground surface effect (dB)

Since the future road is flat with the assumption that there will be no installation of equipment which cause diffraction, ΔLd=0 was applied for calculation. Also, as the road condition would be solid concrete and/or asphalt, ΔLg=0 was applied in the model to calculation the scenario.

- ***A-weighted Equivalent Sound Level***

A-weighted equivalent continuous sound pressure level was calculated as follows:

$$L_{AE} = 10\log_{10}\left(\frac{1}{T_0}\sum_{i=1}^{n} 10^{L_{PAi}/10}\Delta t_i\right)$$

$$L_{Aeqj} = 10\log_{10}\left(10^{L_{AE}/10} \times \frac{N}{3600}\right) = L_{AE} + 10\log_{10} N - 35.6$$

Where,
- L_{AE}: Sound exposure level (dB)
- L_{Aeqi}: A-weighted equivalent sound level by vehicle types and traffic lanes (dB)
- n: Number of set sound source (-)

- L_{PAi}: Sound level of sound source (i) (dB)
- Δt_i: Passing time of sound source interval (i)(sec) (=$\Delta di/V$)
- Δd_i: Length of sound source interval (i) (m)
- V: Average traveling velocity (m/sec)
- N: Traffic volume (vehicle/hr)
- T_0: Standard time (sec) (=1)

- ***Synthesis Equation***

The calculated equivalent sound level by vehicle types and traffic lanes was synthesized as follows:

$$L_{Aeq} = 10\log_{10}\left(10^{L_{Aeq1}/10} + 10^{L_{Aeq2}/10} + \cdots + 10^{L_{Aeqm}/10}\right)$$

Where, L_{Aeq}: Synthesized A-weighted equivalent sound level at forecast point (dB)

Using this model, the target years for the future scenarios were 2024 and 2034. In effect, the modeler was comparing the present noise scenarios with the situation after the road construction in 2024 and 2034.

6.2.3.4 *Forecast Condition*

- ***Traffic Volume and Traffic Speed***

The traffic volumes at the respective forecasted points in 2024 and 2034 were calculated by the future traffic analysis. Forecasted traffic volumes are shown in Table 6.2.3. Traffic speed is set at 60 km/hr for both the flyover and the surface road.

Table 6.2-3: Traffic Volume at Forecast Point in 2024 and 2023

Unit: PCU/day

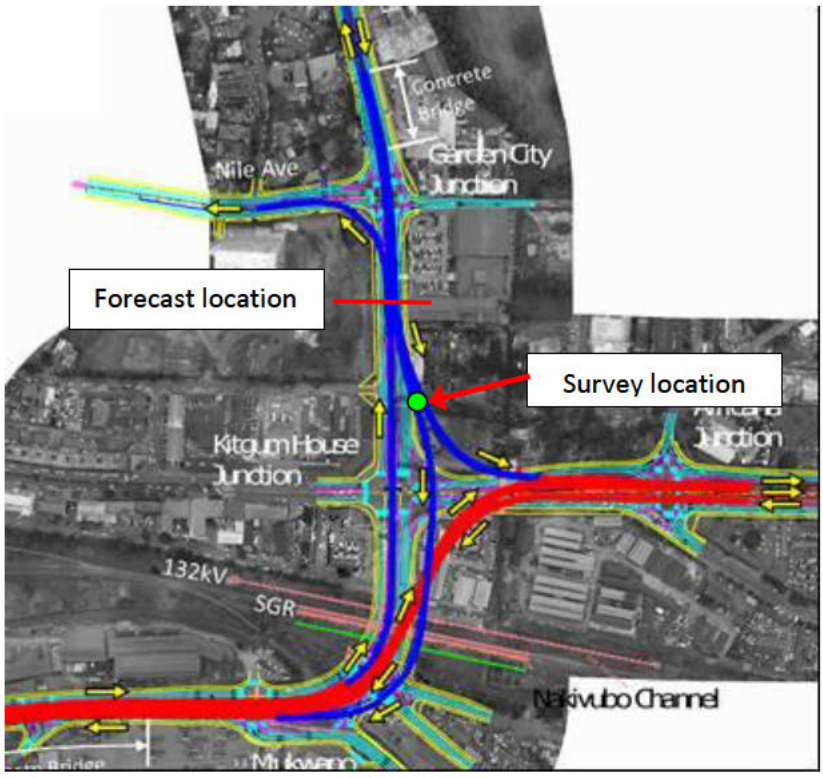
Name of Road	2024 (24h Traffic Volume)			2034 (24h Traffic Volume)		
	Light vehicle	Heavy Vehicle	Total	Light vehicle	Heavy Vehicle	Total
Mukwano → Yusuf Lule Flyover	10,719	1,988	12,707	12,030	2,308	14,338
Yusuf Lule → Mukwano Flyover	12,910	1,574	14,484	14,628	1,824	16,452
Yusuf Lule – Jinja Flyover	4,273	1,300	5,573	4,797	1,506	6,303
Yusuf Lule Road (Street)	12,887	1,039	13,926	14,547	1,208	15,755

Source: The DDC

- ***Forecast Location***

Field Survey (FS) locations for noise levels were selected with consideration of sensitive receptors such as places of worship, parks and residential buildings in the project area. In F/S phase, the Centenary park was selected as a sensitive receptor because the park has been used as a place of rest for the Public . Accordingly, a noise survey was conducted in front of the park in 2015. However, due to complication of the flyover structures, the point could not be selected as a forecasted point under condition of ASJ RTN Model 2013. As a result, based on the situation, the forecasted point was set either side of edge of the pedestrian walkway in front of Oasis mall, which is located near Centenary Park. It is not a sensitive area but this point was selected as representative point in surrounding area.

The location of forecasted point is shown in Figure 6.2.1 below.

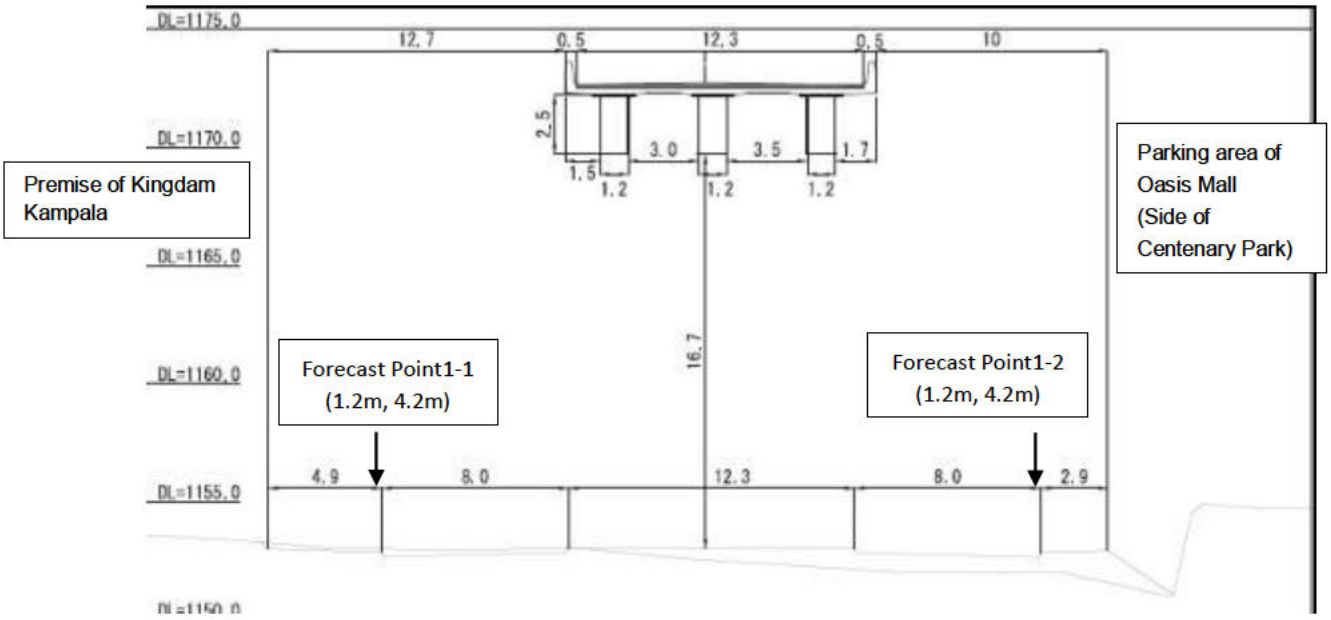


Source: The DDC

Figure 6.2-1: Forecasted Location

➢ *Road Cross Section along Yusuf Lule Road*

Road cross sections at forecasted points are presented below. Forecasted points were set at either side of the road edges of Centenary Park with its height of 1.2m and 4.2m in consideration of noise from flyovers.



Source: The DDC

Figure 6.2-2: Road Cross Section

➢ ***Position of Sound Source***

The sound sources were set at the center of traffic lanes.

6.2.4 Forecast Results of Noise for Future Traffic

The A-weighted equivalent sound levels estimated at each forecast point are presented in Table 6.2.4. Most locations of forecast sound levels fell slightly below the standard noise limit for roads according to the noise standards for Uganda. However, if ccompared with the scenarios for the years 2024 and 2034, the noise levels could well increase due to traffic growth.

Table 6.2-4: A-weighted Equivalent Sound Level

Location	Forecast Point	Time Zone	Forecast Noise Level (LAeq)		Request noise limit for road noise	Remarks
			2024	2034		
Yusuf Lure Flyover	Forecast Point 1-1 (Kingdom Kampala)	Day	67.5(4.2m) 68.3(1.2m)	68.0(4.2m) 68.8(1.2m)	70	With Flyover
		Night	59.2(4.2m) 60.0(1.2m)	59.7(4.2m) 60.5(1.2m)	60	
	Forecast Point 1-2 (Oasis Mall)	Day	67.2(4.2m) 68.0(1.2m)	67.7(4.2m) 68.5(1.2m)	70	
		Night	58.5(4.2m) 59.3(1.2m)	59.0(4.2m) 59.8(1.2m)	60	

Note: Noise level highlighted in yellow exceeded the standard noise limit (Industrial Areas).
Source: The DDC (2016)

6.2.5 Proposed Mitigation Measures for Each Forecast Point

The paragraphs below suggest preliminary mitigation measures at each selected forecast point.

6.2.5.1 *Location 1-1 (Side of Kingdom Kampala)*

According to the forecast result, except the 1.2 m high location at night time, it was forecasted that the noise levels would be slightly below the maximum noise limit standard in Uganda. It is expected that noise environment of the Project area will be improved by the Project because the noise level that could arise due to the traffic volume (e.g.. Idling and honking by motor vehicles etc.) at Kitgum Junction would reduce due to the minimized traffic congestion.

On the other hand, distance between the carriageway and the existing buildings such as Nissan Building will reduce due to the road widening. In that case, the perception of noise level within the building might increase.

6.2.5.2 *Location 1-2*

It is most likely that the Noise level during operation will be slightly below the maximum noise limit standard in Location 1-2.

The location falls on the same side as Centenary Park. As mentioned above, the noise forecast by ASJ RTN Model 2013 is not conclusive due to complication of the flyover structures in front of the Park. However, the noise level in Centenary Park might increase because some area of the Park will be right under the new flyover during the operational phase.

6.2.6 Mitigation Measures Study

6.2.6.1 *Installation of Noise Barrier to Flyover*

Based on baseline survey and forecast results, it wasexpected that the noise environment within the Project area will improve although not dramatically. In addition, noise level in some areas along the main road may increase as one got closer to the road. In that case, the Project teams (UNRA) were likely to be requested by affected persons to implement adequate mitigation measures such as installation of a Noise barrier so that the noise impact may not affect human living and activity in the future.

However, the model results showed that that noise barriers may need to be installed for sensitive buildings that had the same height of the flyover structure. This applies to the areas around the approach road. The installation of Noise barriers can reduce the noise impact close to sensitive receptors along the the Project corridor. These walls would also mitigate the effect of pollution (throwing of garbage from the flyover). Therefore, the Golf Course Hotel, Golf Course Club and Kingdom Kampala would be candidates for installing of noise barrier in the future.

The initial proposal based on these findings for installing of noise barrier including subsequent revisions is shown in the figure below.

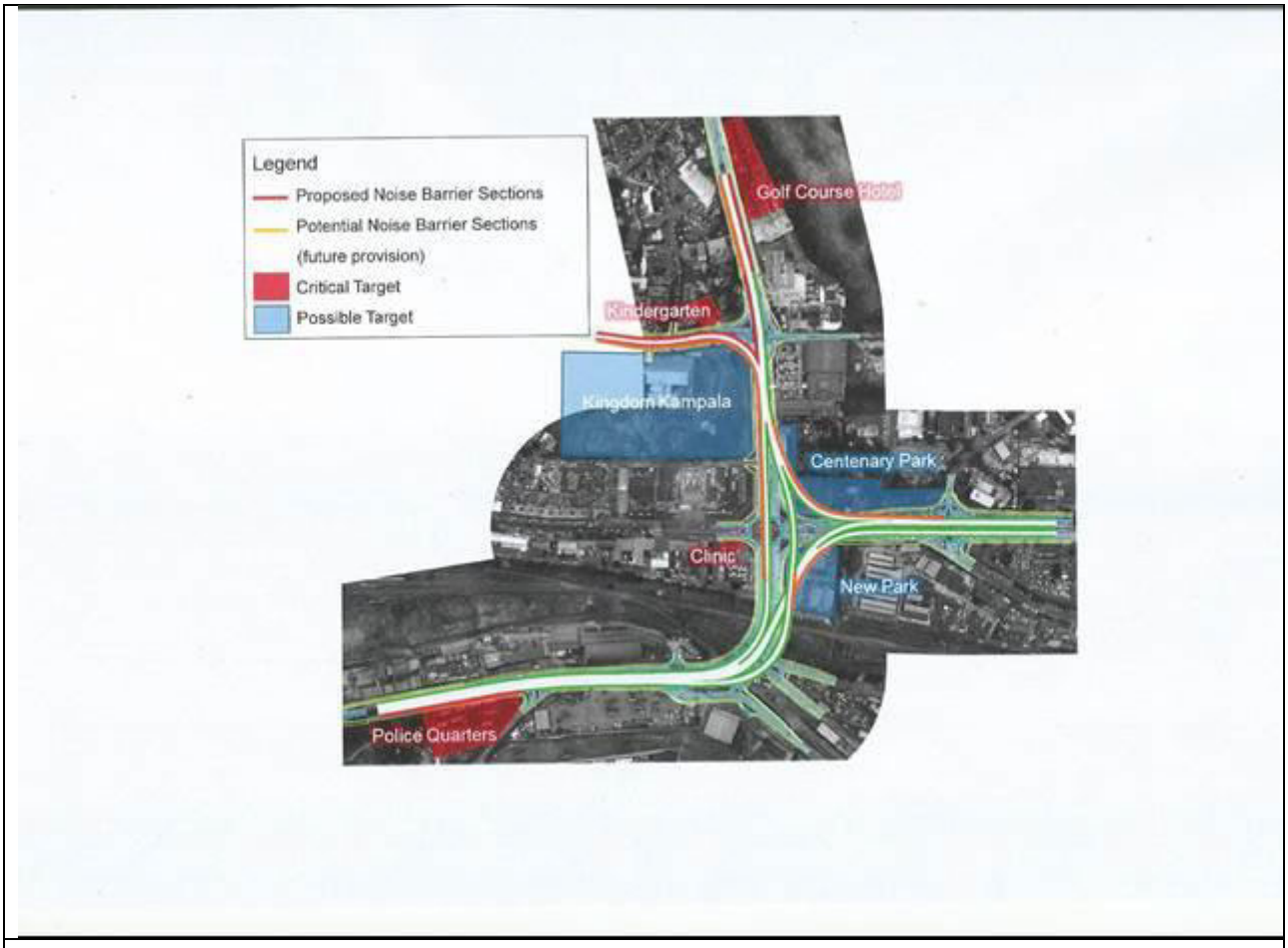


Figure 6.2-3: Initial Proposed Location for Installing Noise Barrier

Source: The DDC

6.2.6.2 *Verification of Noise Barrier Effect*

In order to verify the effect of the Noise barrier, noise forecast under the condition that a 3m noise barrier was set up on both edges of the flyover was implemented.

The comparison of forecast result with Noise barrier and without Noise barrier is shown below.

Table 6.2-5: A-weighted Equivalent Sound Level

Forecast Point	Time Zone	Forecast Noise Level (LAeq)			
		Without Noise barrier		With Noise barrier (3m)	
		2024	2034	2024	2034
Forecast Point 1-1	Day	67.5(4.2m) 68.3(1.2m)	68.0(4.2m) 68.8(1.2m)	67.5(4.2m) 68.3(1.2m)	68.0(4.2m) 68.8(1.2m)
Forecast Point 1-2	Day	67.2(4.2m) 68.0(1.2m)	67.7(4.2m) 68.5(1.2m)	67.2(4.2m) 68.0(1.2m)	67.7(4.2m) 68.5(1.2m)

Source: The DDC

Forecast results of with Noise barrier and without were almost same. The two scenarios are comparable. The forecast result suggested following;

i). Increased traffic volume along the flyover does led to a large noise impact

On the flyover, an increase of traffic volume of about 2,000 vehicles wass expected during the period from 2024 to 2034. However, the noise volume from the forecast results at the forecast points was expected to increase by only 0.5 dB.

ii). The main noise source in project area wass the existing street activities and not the flyover

The main noise source in this area will be the existing activities along Yusuf Lule Road/Mukwano Road as Normal Street noise. The noise Impact due to the flyover will be minimal because the flyover is a good distance / Height from the targeted sensitive areas. For this reason, the Noise barrier around the flyover would not be that effective in reducing the noise impact in the area with exception of areas where the structures are of similar height with the flyover.

6.2.7 Recommendation

As predicted during the feasibility study, If the Project is not implemented the Traffic volume will greatly increase due to the Traffic congestion. Therefore, implementation of the project will reduce Traffic congestion which in turn will reduce the Traffic volume and subsequently, the noise nuisence for the entire project area since the installation of Noise barriers will not be that effective for most areas. For areas where the Flyover and the buildings are the same height, a Noise barrier will be relevant and may be installed since the noise levels could be high for example at Golf Course Hotel, Police Quarters and at the Kindergarten as shown in Figure 6.2-4 below. The red line is proposed as a priority area of installing noise barriers. The orange line indicates the area where noise barrier installation should be considered if an impact is confirmed in the future.

Apart from the noise shielding, these noise barriers are expected to also protect sensitive receptors from garbage that might be thrown from the roads.;

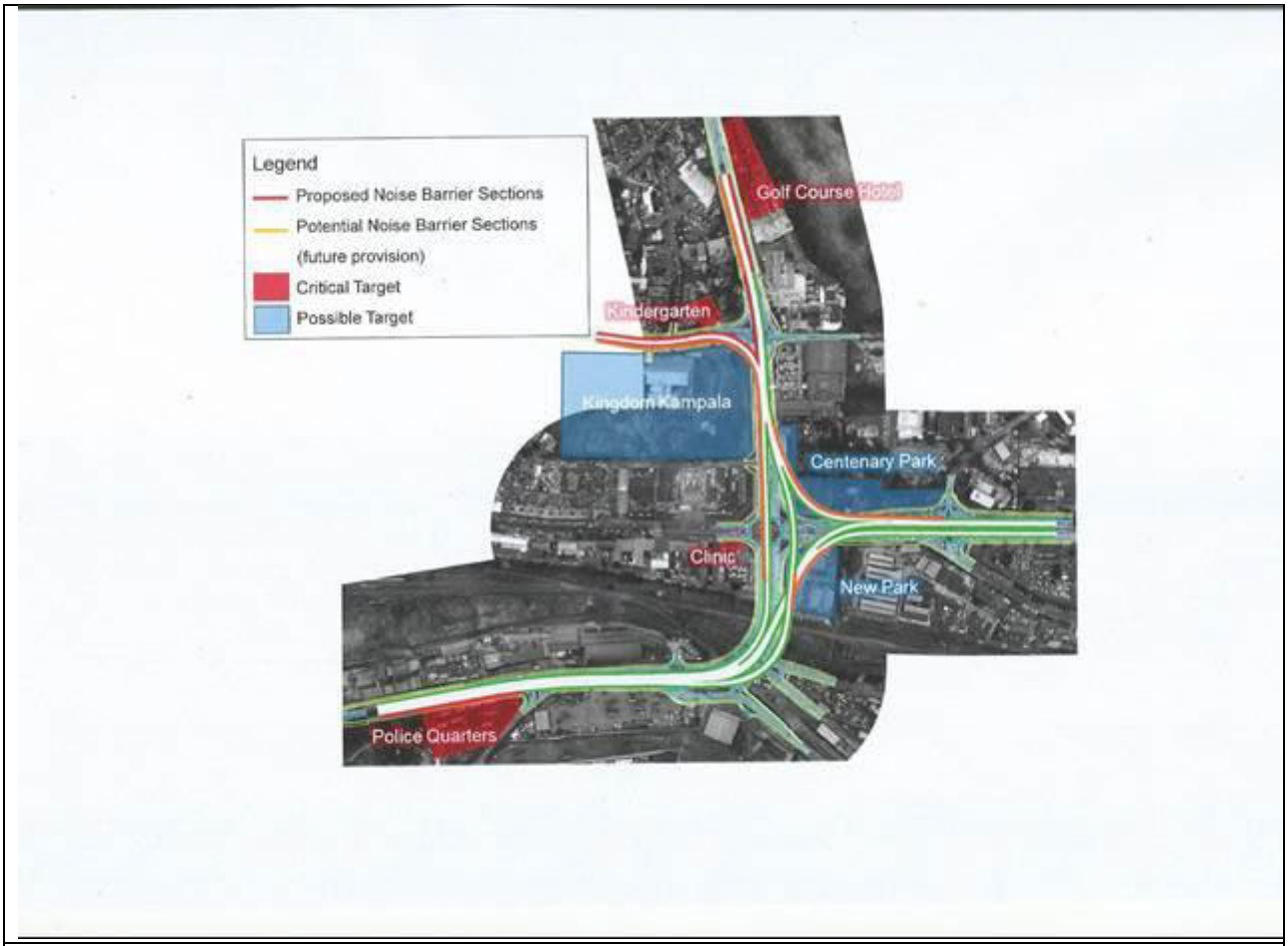


Figure 6.2-4: Proposed Location for Installing Noise barrier

Source: The DDC

i). Regular Noise Monitoring Study

The forecast is implemented only under certain conditions and representative of one-point source. Besides, the forecast result is only one indicator. Therefore, actual noise monitoring study during the operational phase of the project will be essential in order to assess the actual condition on the ground. It is therefore recommended that UNRA/KCCA conducts traffic noise monitoring study at these forecast locations during the operational phase regularly. Depending on the results of the monitoring study, UNRA/KCCA should consider updating and improving the mitigation measures where appropriate.

6.2.8 Potential for vibrations from the Flyover

During the study, Vibrations were not considered due to budgetary constraints. Nevertheless, the developer and Contractor will continue to monitor vibrations impact during construction and operations. These can guide future developments or inform additional mitigation measures. From Literature ***(Ref https://www.jstage.jst.go.jp/article/jsceja/62/2/62_2_204/_pdf)*** the vibrations associated with Flyovers are of two types as follows: -

Direct propagation vibration: The mitigations for Direct Vibrations are contained within the Flyover design. From the design, the number of telescopic devices (deck seams) that causes vibrations have been reduced in the detailed design phase. Secondly, in order to reduce further impact of noise and vibration caused by moving vehicles, a highly silent type device that suppresses noise and vibration has been selected. This means that Direct propagation vibrations will be minimal.

Low-frequency vibration: - Unfortunately, the cause of low-frequency vibrations is complex and difficult to assess. In this case, should there be complaints received from the surrounding areas/structures during the operational phase, it is recommended that regular monitoring takes place so that appropriate mitigations measures can be put in place at that time.

6.3 Geo - Referencing of Trees (Tree measurement along the KFCRUP ROW)

The provisional study had not conducted a detailed inventory of the impacted trees. Following the design change, it became imperative that the detailed inventory be conducted especially in light of the additional expansion.

Subsequently as part of the EIS upgrade, the Trees that fell within the project Right of Way were measured to establish their identification in terms of species, sizes in terms of Diameter at Breast Height (Dbh) as well as their Geographical Location. Dbh is a standard in forest inventory (it is 1.3 meters above the ground) and is the average height at the breast of an adult.

The trees that fell in the KFO ROW were identified by overlaying an outline map of the right of way on to Google earth. By zooming in, individual trees and the ROW outline were clearly identified to ascertain which trees fell within the outline.

Trees were measured using a diameter tape. All trees 10cm or more at dbh were measured. The geographical location of each tree was recorded using a Garmin GPS and waypoint number of the tree recorded. The starting waypoint was 165 because the GPS had other data on it. Should one wish to start from 1, there would be no difference. Occasionally, a tree would fork below dbh, both stems were taken as separate individual trees but shared the same GPS way point.

Photographs of some trees were taken and named using the same GPS waypoint number. This would enable linking a photograph to a GPS point and is very important for future identification of trees that could not be identified in the field.

The majority of trees encountered were ornamental species. Most of them are easily available in nurseries in and around Kampala city. thereby aiding their replacement after the construction phase. The location, species and distribution of replacement trees will be determined by the new landscape of the Right of Way after construction. Existence of certain infrastructure may determine characteristics of replacement trees such as width of the crow, rooting system, tree height, shading of leaves and others. Table 4.1.18 shows a summary of the impacted trees while Figure 6.3.1 shows the Location of trees along the Right of Way.

Table 6.3-1: Summary of Impacted Trees along the Right of Way

Species	Count
Palm trees (spindle palm)	234
Ficusbenjaminii	194
Grevillearobusta	94
Jacaranda mimosifolia	58
Terminalia	50
Roseapentandra	48

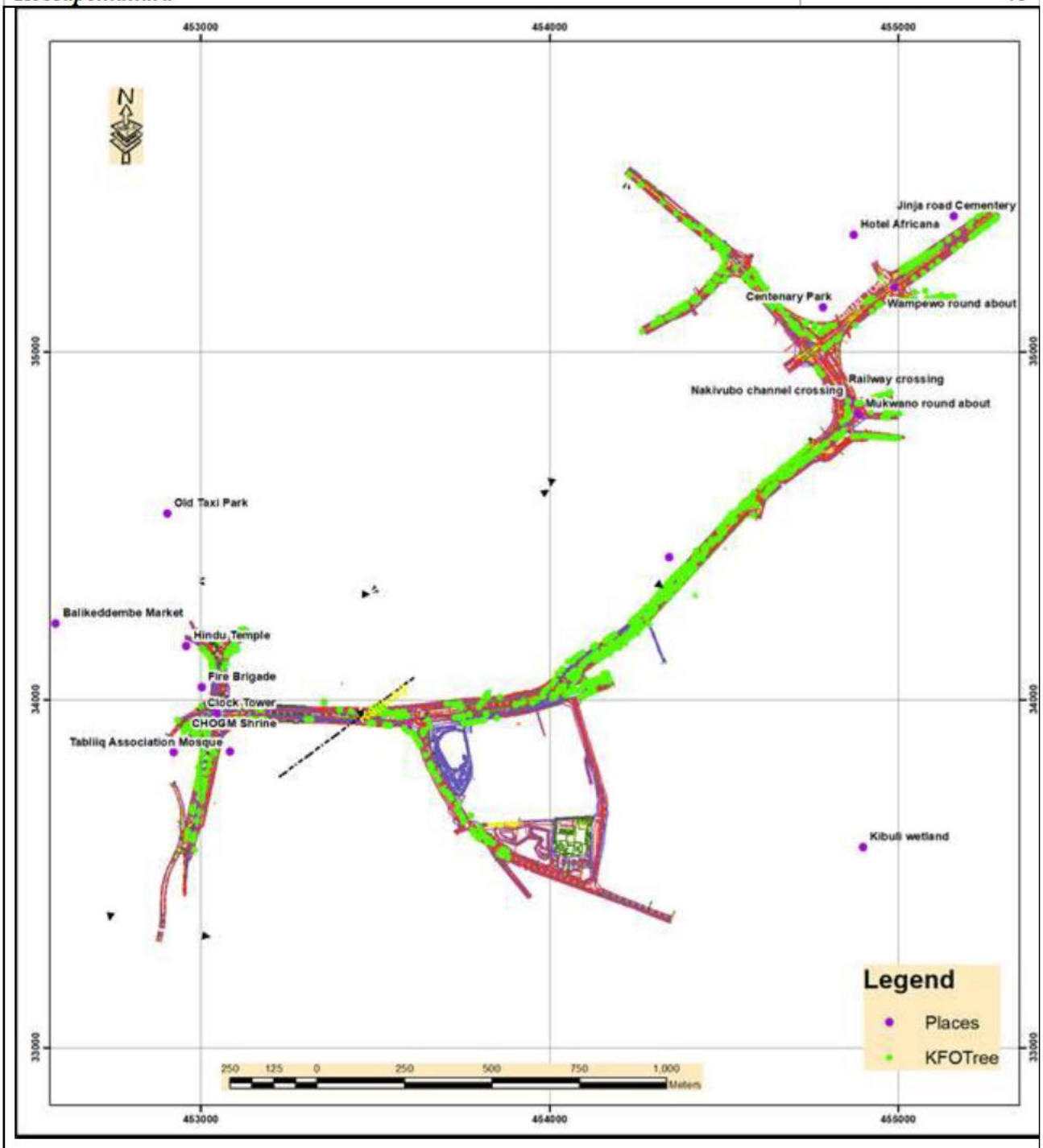


Figure 6.3-1:Location of trees along the Right of Way (Note that Individual Trees can be seen on a wider projection)

In view of the fore going, the Final design includes a Master Plan to take charge of the environment as well as the landscaping. Figures 6.3.2 and 6.3.3 show the Environmental and Landscaping Mater Plans. During the implementation of these Master Plans, the findings of this report will be taken into account in addition to continuous input from the relevant directorate within KCCA.

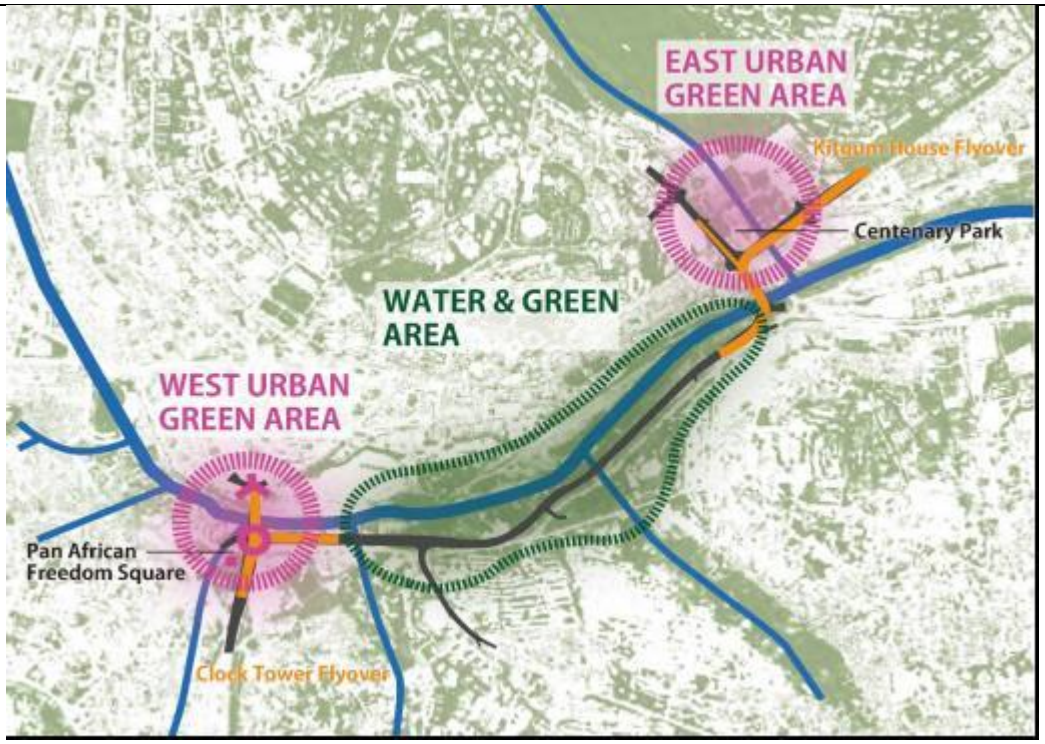


Figure 6.3-2: Environmental Master Plan

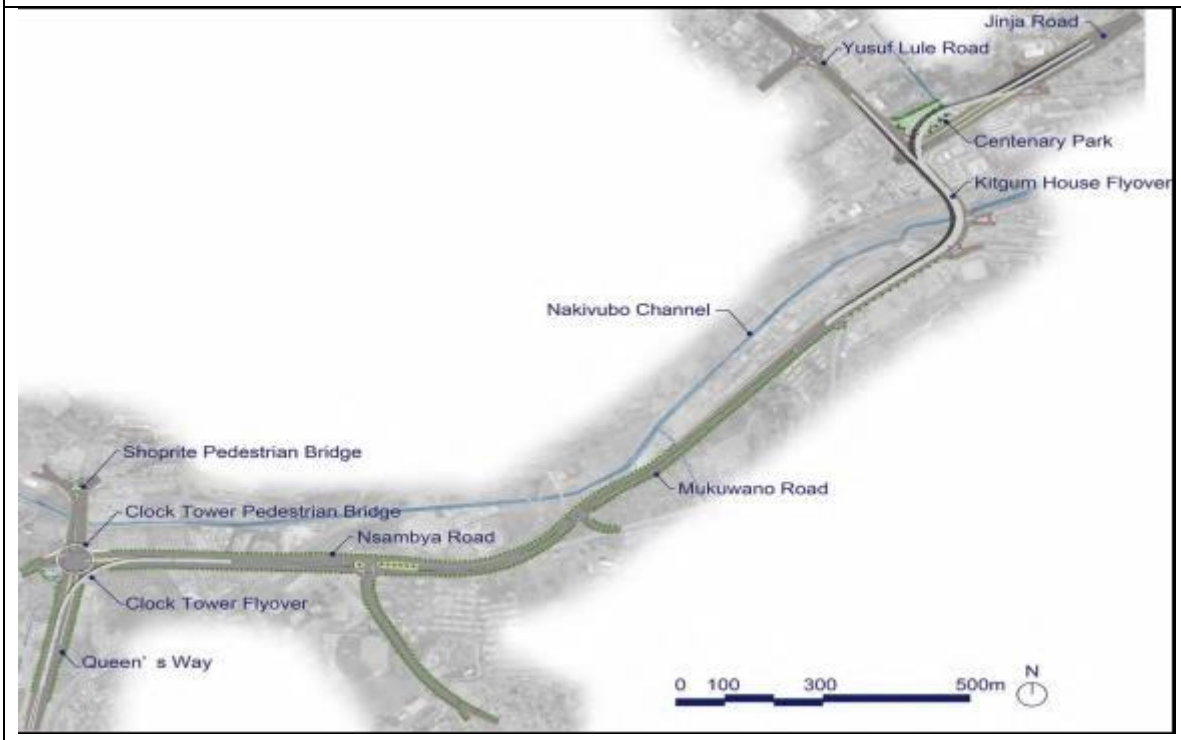


Figure 6.3-3: Landscaping Master Plan

6.4 Revised Footprint and Potential / Additional Impacts Lot 1

Under lot 1 the main change is that of the relocation of the Clock Tower. The clock Tower is an important cultural/ National Monument whose relocation would have to be approved by the Department of Museums, and Monuments. Although there is increased land take due to the Detailed Design changes, the impacts had already been covered in the original report. There will be no added Environmental footprint due to the design change.

However, there has been an additional road known as the **Nsambya Link**. This road does not traverse any known places of conservation or cultural concern. It goes over a steep hill where by the potential for soil erosion can be high especially during the construction phase. The total run off will also increase therefore, appropriate drainage will be required downstream.

The road will obstruct footpath from Nsambya, which will inconvenience pedestrian traffic. This will require that the Contractor arrange for the safety of these pedestrians.

6.4.1 Proposed Mitigation options (LOT1)

The design change causes the need for the relocation of the clock at theclock tower to the Centenary park, the relocation of one of the stones at the Byuma Bya Katwe Shrine and relocating some of the trees within the Pan African Park. Relocation of PCRs can be an emotional aspect, and the National Environment Act 2019 has imposed more stringent studies and consultations before such PCRs can be moved. Chapter 7 provides a detailed study of these PCRs including an archaeological assessment to ensure that no PCRs are disturbed in the place of relocation. For the Clock Tower there were a number of key Stakeholder all of whom have given the approval to relocate with a number of conditions as discussed under Chapter 7.

After the design Change, the Key stakeholders advised that among others the following are to be observed:-

- An archaeological study must be conducted at the new place before the relocation is done – This has now been done together with the relocation Plan.
- An architect must be procured before the relocation process to prepare details of the design of the replica concrete support structure, associated support structures and surrounding landscapes all to be submitted to the DMM;
- Documentation at all phases before and during relocation have to be considered.
- The team to conduct the documentation exercise should include at least one conservator from the DMM.
- Before the commencement of the relocation process, the Minister responsible for tourism and Antiquities will make a public pronouncement regarding the Clock Tower relocation.
- The KCCA land scaping department should guide the relocation of all trees especially those within the Centenary park.

6.4.2 The Nsambya Link Road (LOT1)

As discussed above, the main challenge with this road is the potential for soil erosion along the steep slope as well as narrow drainage at the lower end to accommodate the increased storm water volumes. There will be potential to impede mobility of pedestrians intending to use this section from upper Nsambya. The following measures will be relevant: -

- An ARAP to be conducted to ensure that those impacted (e.g. the Police properties) are well resettled.
- Anti-erosion measures during construction phase for example scour checks
- Provision of alternative access/route for the pedestrians;
- Widening of the drainage lower end to accommodate the storm water from upper Nsambya.

6.4.3 Revised Footprint and Potential / Additional Impacts Lot 2

Changes in the footprint have been minimal but were essential because of the need to accommodate the SGR and the demolish the Electoral Commission buildings. Other changes include the use of the Centenary Park as a temporary stock piling area. This will impact on the Centenary park monument and some of the property within the park. The relevant mitigation measures for the Centenary MONUMENT are discussed below in Chapter 7 which discusses PCRs.

6.4.4 Optimum Design Considerations for Lot 2

The need to change or confirm the optimum option was further analysed during the Detailed Design stage. Option three (3) was still considered due to the minor changes it paused including further expansion of the road and additional links to the Flyovers. The major changes were noted under Lot 2 resulting from the need to adjust for the SGR and acquisition the Electoral Commission land as well as .

6.4.5 Proposed Mitigation options (LOT 2)

Most of the mitigation measures have been discussed in the main report. The additional mitigation measures in this report include;

- ***Implementation of both the Landscaping and Environment Master Plan in conjunction with the relevant KCCA organs as developed under this design change.*** The Contractor will work closely with the KCCA landscape expert to ensure a comprehensive design concept.
- Periodic monitoring of noise environment to aid development of mitigation measures for the Project area such as Noise barriering along sensitive receptors. .
- Reduction of impacts that could arise during the use of the flyover for both Lot 1 and Lot 2 by;: -
  - Prohibiting the use of the flyover by the motorcycle transportation network/system;
  - Prohibiting the use of the flyover by Heavy vehicles (Lorries / trailers); and
- Placing rumble strips along the slopes of the Flyover in order to reduce driving speed.

- Mitigation measures for the PCRs are discussed in detail under Chapter 7 below.

6.4.6 Environmental and Social Implications of Design options

As was the case during both preliminary and Detailed Design stages of the three main options, options 1 had the highest impact on Social infrastructure since the road will traverse a highly developed urban setting. It would also have the capacity to disrupt social life both during construction and operation phases. The alignment of Option 1 is marginally longer than that of Option 2 and the property acquisition required for Option 1 was likely to be greater than that required for Option 2 for which less relocation is expected compared to Option 1.

In the case of Option 1, the proposed Flyover along Kampala and Jinja Roads will be so close to working places and the noise nuisance emitted especially during operations will be very high. Moreover, it will require that the BRT is put in place first before the Flyovers can be constructed. This is unrealistic given the events that have followed the developments of the BRT Project. There will be limited biological impacts since that area is devoid of intensive biological diversity compared to Options 2 and 3.

Both options 2 and 3 move parallel to Nakivubo Channel and cross it at one point along Access Road compared to Option 1 which crosses the channel once after the fire station which is otherwise away from the system for the most part.

Option 3 will have more biological impacts due to the likely destruction of the trees lining the roads to enable expansion of the road. However, most of the biological impacts can be compensated for through replanting of other trees. A detailed study of the trees was commissioned and each tree to be relocated was individually noted, marked and geo-referenced with the aim of compensating for the biodiversity loss during and after construction. An environmental Master plan has also been considered as discussed above.

6.4.7 Traffic Management and Safety of the Pedestrian Traffic

The Project area is already highly congested due to high volumes of traffic. Presently, it takes about 56 six minutes to cover the distance of about 3 kilometres from Clock Tower to Kitgum House. The main reason the high vehicular traffic volumes. Similarly, the Clock Tower area as well as Kitgum House zones have one of the highest pedestrian traffic in Kampala.

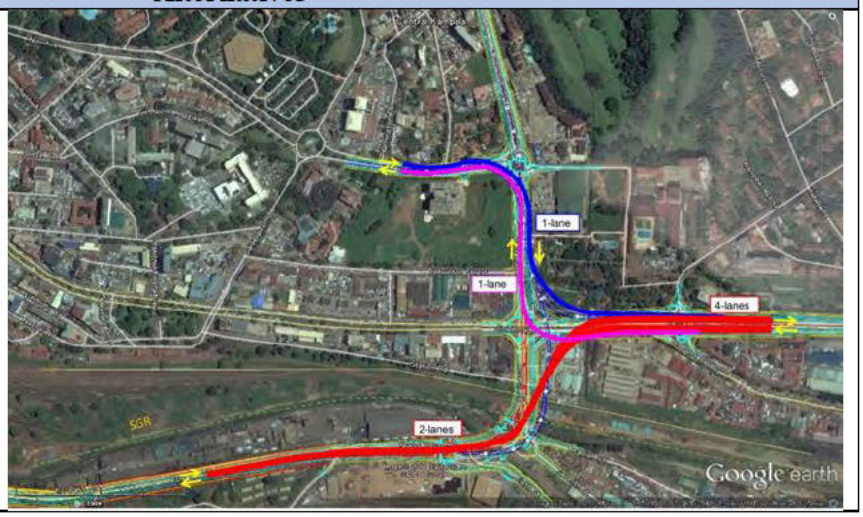
During construction, the two will reinforce each other leading to an inevitable gridlock. The Contractor will have to work closely with stakeholders to find an acceptable solution to this potential hazard. The Key stakeholders include the following:

S/No	Stakeholder	Relevance
1	UNRA	As the Client, they would advise on feasible alternative measures to minimise the additional costs
2	KCCA	The Project is under their jurisdiction and already have considerable experience in handling such challenges
3	Uganda Police Force	Together with KCCA, they are responsible for traffic management in the City. The Law to guide traffic mandates them to handle this task.
4	Presidential Protection Unit	This unit must be involved since it handles VIP traffic. They must give a no objection to the proposed diversion
5	Community	These are the impacted people. They should be sensitised and informed of the changes regularly through a well-designed communication strategy.

In view of the foregoing, the Contractor will be required to implement an approved comprehensive Traffic Management plan which will include the pedestrian traffic and safety. This plan will be subject to regular reviews the Contractor as guided by the stakeholders.

6.5 Analysis of Alternatives at Design Review

For Lot 2, three alternatives were considered; that is to say, alternative 1, 2, & 3. The figure below shows Alternative 3 which was selected just as was the case under the preliminary design. This alternative shows some minor changes of the optimum layout as selected in the preliminary design.

Alternative3	
Concept	
Cater for existing traffic demand	
Description	
Improvement of accessibility to business/government district in Nakasero area and commercial district around Katwe area	
Elevated direction	
Jinja Rd.←→Mukwano Rd. Jinja Rd.←→Nile Ave.	

Source: Study Team

Figure 6.5-1: Preferred Option for LOT 2 design consideration.

Under this consideration, all the traffic from Old Port Bell Rd, Wampewo Avenue, Kampala Rd. and other branch roads will be maintained at ground level. The only elevated traffic is that along Jinja Road to Mukwano Road and Jinja road to Nile Avenue. The possibility was as a result of the acquired additional land at the Electoral Commission area.

6.6 Additional Consultations during Detailed Design

6.6.1 Meetings with Sector Agencies

Initially, JICA organized stakeholders meeting at Hotel Africana where most of the key stakeholders were met. The key agencies included: -

- Ministry of Works and Transport
- Uganda Road Fund
- National Environment Management Authority (NEMA)
- Centre for Basic Research (CBR)
- World Bank (WB)
- National Water and Sewerage Corporation (NWSC)
- Kampala Capital City Authority (KCCA)
- Uganda Electricity Transmission Company Limited (UECTL)
- Orange Telecom now Africell UG limited

The meeting was to inform the stakeholder institutions about the project and seek their input on key aspects that the ESIA as well as the design teams should focus on. Amongst the issues discussed was the need to minimize the relocation of businesses and communities as well as the likely impacts on the Nakivubo Channel.

6.6.2 Additional consultations at Detailed Design Stage.

At the time of upgrading the EIS, the RAP upgrade team was also on the ground. It was found that the same people will be impacted with only four additional Locations. The teams took advantage of these consultations to discuss any new potential impacts that could arise and possible mitigation options with additional stakeholders. The social team went back to consult and inform each one of the PAPs (household heads or business owners) about the changes and interviewed the additional PAPs that were going to be impacted. Most of the individuals newly impacted were the Flower garden attendants. The rest were organizations which were also visited on a one-on-one basis. Below is a detailed report on the progress of these consultations' additional consultations.

6.6.2.1 *Consultative Meetings*

Since the number of additional Project Affected people was small, there were no additional group community sensitization meetings apart from the comprehensive consultations covering PCRs (Chapter 7). Instead, one-to-one joint meetings with the directly impacted communities were held as follows:

Table 6.6-1: Consultative Meetings

S/No	Type of meeting	Venue	Date of meeting	Remarks
1	One-on-one sensitisation during census of PAPs	Along the entire stretch of the FO	During August - December 2013	All PAPs at site were met by the ESIA social team
2	One-on-one sensitisation / consultation meetings following the change in design	Along the entire stretch covering those areas where change was anticipated	4th to 8th March 2014	Covered only those who would be affected by the change in design
3	Final consultations with UNRA and DMM	Additional consultations with the DMM were conducted to discuss the monuments in light of design change. In addition, the chair Person of the Flower garden attendants was met.	June 2019	one-on-one meetings to discuss mitigation options as shown in Annex 5 and 6
4	Intensive consultations with stakeholders on PCRs	One on One and at workshop in Mestil Hotel	18th February 2020	Agreement on relocation of PCRs

6.6.2.2 *Consultations regarding OSH activities*

The provisional study had conducted consultations with the Ministry of Labour Gender and Social development. Following the design change, further consultations have been held with the UNRA specialist so as to harmonize the UNRA safeguards strategy with the present requirements. From the said consultations, it became clear that in order to achieve the UNRA objective, the Contractor must be fully knowledgeable of and conversant with the legal, administrative and policy framework that will guide project implementation for purposes of Environmental and OSH compliance. The following will be relevant and the Resident Engineer must bring them to the attention of the Contractor.

Table 6.6-2: Contractor's and Consultant's Obligations Regarding OSH Activities

S/no	Activity	Action	Monitor
1	Literature Reviews and General Information	The Contractor and Consultant will be required to be conversant with the UNRA Environment and Social Management System, The legal frame work, the OSH activities and all the terms of the NEMA certificate of approval	Consultant, UNRA, NEMA, MoGLSD

S/no	Activity	Action	Monitor
2	Permits	➢ The Contractor is responsible for development of the method statement and risk assessment of the project activities as well as implementation of corrective measures to minimize eventualities. ➢ The Contractor must acquire a work permit for the project work sites as a work place. The Contractor is mandated to implement in compliance all conditions in the permit... ➢ The Operational Work Permit (Which is a working document prepared by the contractor and approve by RE) will be signed by the Consultant's Safety Personnel, the Consultant's Environment Specialist as well as the Resident Engineer and shared with UNRA. ➢ The Contractor is responsible for acquisition of NEMA CoA for camp sites and other respective operational sites. ➢ In case of the operational conditions change such as meeting a rock within the road corridor, the risk will be assessed and method statement amended accordingly to accommodate how to handle the rock. ➢ For demolishing structures such as the Electoral Commission, KCCA may require a demolition permit and this will be obtained by the Contractor.	Consultant, UNRA, NEMA, MoGLSD, KCCA-?
3	NEMA approval of Night activity	In the event that night activities are to be considered, an application for variation of the Work Schedules will be made to NEMA by the Contractor.	Consultant, UNRA, NEMA
	Night Activity	Contractor is responsible for requesting for approval to undertake night works. In addition, application for NEMA approval to undertake night works is imperative. Night works will be approved by the Consultant after has reviewing the method statement, request to undertake night works is submitted and being convinced that consultations have been conducted. Subsequently, the Contractor will ensure that NEMA conditions of approval are implemented and ensure that the noise levels are monitored and minimized. Contractor will ensure that Contractor equipment will have warning signs / beacon lights, Reverse lights and respective equipment inspected and certified as well as First Aid kits and fire extinguishers at minimum; Contractor will ensure that night works are preceded by adequate lighting of the project site to increase illumination and therefore visibility of the working area for safety of workers and other users. Contractor will ensure adequate supervision for night works	Consultant,UNRA, NEMA, MoGLSD
5	Statutory Inspections	Following the registration of the working areas as worksites by the Department of Occupational Safety and Health, all equipment will be inspected at the beginning by a representative from MoGLSD in addition to other mandatory statutory inspections from the Department of Occupational Safety and Health.	Consultant and DOSH/MoGLSD
6	PPE	In line with the legal and Policy framework, the Contractor will provide appropriate PPE and ensure stringent measures in place to enforce proper management and compliance with PPE at all times. Contractor will ensure that there will be toolbox discussions / training regularly where safety will be emphasized. In addition, safety warnings and signage inclusive of reflective warning signs placed at appropriate locations. Warning signs will be of standard size in accordance with the Road Traffic Manual.	Consultant,DOSH/MoGLSD

S/no	Activity	Action	Monitor
7	Safety Committee	The Contractor will ensure formation of a Safety Committee in accordance with OSH Act 2006 section 9). The Contractor will allow the committee to execute their duties including holding meetings accordingly.	Consultant, DOSH/MoGLSD
8	Permit to work	Permit to work system will be developed for highly hazardous activities as informed by the Project Risk Assessment including work at heights, activities involving high voltage and water/sewerage utility lines- and confined spaces. Contractor is responsible for ensuring the approval is given by the Consultant, Training and adequate supervision are provided for the workers.	Consultant
9	Consultants Instructions	While the Contractor will be required to be conversant with the UNRA Environment and Social Management System. The Consultant will bring the contents to the attention of the Contractor, and will require the Contractor to undertake the following: - **a) Sign the Code of Ethical Conduct to Implement E&S safeguards** b) Develop E&S management plans and procedures in line with the UNRA ESMS e.g. Environment and Social Implementation Plan, Risk Assessment and OSH Mgt Plan, Restoration plans, Gender, HIV, Blasting etc. c) Develop Code of conduct for thes Workers d) Develop Project Briefs/EIAs for all project support infrastructure including Borrow pits e) Support the HIV Nominated service provider to implement the HIV program f) Recruit Competent and Qualified Staff (for E&S implementation) including a Community Liaison Officer. g) Employ Local persons on the project. h) Provide measures for addressing Worker welfare issues e.g. Insurance, Contracts, feeding, transport, overtime, etc. i) Develop a Grievance redress mechanism j) Undertake Incident reporting and Investigation as specified in the ESMS manual. k) Conduct Monthly and quarterly reporting on implementation of E&S safeguards on projects as specified in the ESMS manual. l) Conduct Training and sensitization of all workers & the Community m) Acquire all consents and permits required for the project	

6.6.2.3 *Workers' Camp*

At the time of the Detailed Design, the location of the workers' camp had not been agreed on. During the implementation time, Contractor identified the location off the clock tower. This will constitute the contactor's camp and possibly the Engineer's offices. It is important that a NEMA certificate of approval is obtained for this camp as well as a registration of the place as a work site.

6.6.2.4 *Community Engagement*

- The Contractor will continuously engage the community and put in place a Grievance Redress Mechanism whereas the Consultant will ensure monitoring of compliance is done and concerns raised are resolved appropriately that will be appropriate for the City Road.
- Both the Consultant and the Contractor will study the revised **Environmental Law, Act No.5, 2091** in Uganda and harmonize the operations.

7 SUMMARY OF THE ENVIRONMENTAL AND SOCIAL IMPACT STUDY FOR THE KFO PCRS (CLOCK TOWER, PAN AFRICAN PARK, BYUMA BYA KATWE SHRINE AND CENTENARY MONUMENT)

7.1 Background and introduction

7.1.1 Introduction

Following the design change, it became clear that the Kampala Flyover (KFO) was going to lead to the relocation of the Clock Tower, the relocation of the Monument at Centenary Park; the Byuma Bya Katwe was also partly within the Right of Way (RoW). Moreover, the relocation of the Clock Tower was to place it within the Pan African freedom Square that houses important monuments including ceremonial trees planted by different dignitaries across both Africa and the other CHOGM States.

The department of Museums and Monuments (DMM) has identified 74 Monuments within Kampala. Two of these Monuments have been directly impacted by the Design Change. These are described in the following Table 1.1 below. The Katwe Shrine is not one of those identified by the DMM.

Table 7.1-1: Impacted Monuments and Cultural sites along the KFO

S/No	Monument	Description	Impact
1	The Clock Tower	This was constructed to commemorate the Queens visit in 1954. It has since become a national monument and some describe it as the gateway to Kampala	Obstructs traffic and must be removed / relocated
2	Centenary Monument	This was donated to the City Council by Shell to mark Kampala's 100 years.	The Flyover passed above the monument hence need for relocation
3	Byuma Bya Katwe Shrine	Although not one of those listed among the 74 by DMM, it is an important cultural asset	One of the stones at the shrine is located on the RoW.
4	Pan African Park	The place where the clock will be relocated has historical significance for the liberation struggle in Uganda and Africa. It also has ceremonial trees planted by different dignitaries from across Africa and CHOGM States of 2007.	Relocation of the clock will lead to removal of some VIP planted trees in the Park.

It so happens that the National Environment Act was revised and became effective after the studies discussed above.

7.1.2 Physical Cultural Resources Study

Even though in the intermediate period, a Design Change ESIA was conducted, the National Environment ACT Cap 254 was changed in 2019 to become the National Environment Act 2019. The New Act has introduced additional requirements where by Schedule 5 of The National Environment Act of 2019 and part (f) mentions Demolition or significant change of historic buildings, archaeological sites, National Monuments and related tourism sites specifies projects for which Environmental and Social Impact Assessments are mandatory. Schedule 10 also lists (h)areas of historical, archaeological and scientific interest; (i) areas of cultural and religious significance; as well as (j) areas used extensively for recreation and aesthetic reasons that will require mandatory ESIA. This is why it becomes mandatory to conduct additional ESIA studies targeting the Clock Tower, the Byuma Bya Katwe Shrine as well as the Centenary Monument in part fulfilment of the requirements of the Act.

The Design change also impacted on the other two monuments which are the Byuma Bya Katwe Shrine and the Centenary Monument. At the Katwe Shrine, one of the Rocks lies within the Right of Way (RoW). This shrine is an important cultural facility for some people in the area and is recognised by cultural leaders.

Thirdly, the design change has led to the Centenary Monument to come under one of the Flyovers. It needs to be relocated as well. While this is not as old as the Clock tower, it is one of the listed 74 monuments in Kampala.

For these reasons, a more detailed ESIA for the PCRs has been conducted the details of which are in Volume 1 of the ESIA for PCRs. The four PCRs is described below: -

7.1.3 The Queen's Clock Tower in Kampala.

The Clock Tower on Entebbe road was constructed in 1954 to commemorate the coming of Queen Elizabeth 11 to officiate the opening of the Owen Falls Dam renamed Nalubale in Jinja District. It's therefore one of Uganda's renown historical monuments and its relocation is of paramount national importance. Many have described it as the Gateway to Kampala and indeed iconic.

7.1.3.1 *Preservation and restoration.*

This Clock Tower is a site of the highest cultural significance. Sites of highest cultural significance are considered primarily as artefacts demanding protection as fragile and complex historical monuments. Retention of the existing form, integrity of the site and material if possible is a major objective.

The Contractor's design must be made in a way that protects the historical and original look of the tower while maintaining some of the aspects like the clock, steel ladders, original door, electrical fittings and the upper most part.

7.1.3.2 *Rehabilitation and reconstruction.*

For such a historical site as the Clock Tower, the activities of removal or addition are characteristic of measures in support of enhancement of the heritage resource. A property should be used for its originally intended purpose. If this is not feasible, every reasonable effort shall be made to provide a compatible use which requires minimum alteration. Consideration of new use should begin with respect of the existing and original traditional patterns. Therefore, modification of the tower to current contemporary functional use and recreation of vanished resources should be explored. This will include the functional use of the clock with a ringing bell and if the original clock is not available the contractor is to create one that should be a replica.

7.1.3.3 *Redevelopment of Clock Tower.*

The Contractor's design may introduce contemporary structures and additions sympathetic to the setting. However, this must involve proper documentation with a well-designed interpretation panel availing information to enhance the heritage and history of the area. Any element of built environment is inseparable from the history to which it bears witness, and from the setting in which it occurs. Additions will echo contemporary ideas but respect and enhance the spirit of the original Clock Tower.

7.1.4 Justification of the Clock Tower (and other PCRs) Relocation

7.1.4.1 *Objective*

The final objective is to deliver the KFO project with as little impact to the socio – cultural and overall biophysical environment as possible. Where such impacts are inevitable then appropriate mitigation measures have to be put in place to ensure sustainability of the project and its surroundings. The driving force why the monuments and other Physical Cultural Resources are to be relocated is because these resources have landed in the KFO RoW. Even though a number of alternatives were considered, the final design route was the most optimum to reduce the Grid lock within the City.

7.1.4.2 *Justifications*

The Relocations of the PCRs has a number of intrinsic benefits to both the environment as well as the Community. Through this relocation there is need to increase the lifespan of these monuments. The table below provides some of the benefits which justify relocation.

Table 7.1-2: Justifying Relocation

S/No	Monument	Benefits / justification
1	Clock Tower	✓ It is normal to relocate monuments for the national or common benefits of the community, and there is precedence in Uganda (e.g. the Lugard Monument at Old Kampala was relocated); ✓ Located away from the centre of heavy traffic ensures the long-term survival of the monument by reducing chances of its being knocked by overspending Trucks ✓ At the centre of the former Clock Tower, the level of air pollution is quite high which would impact on the long-term health of the monument; ✓ The current location as a result of the most optimum design limits or impairs smooth traffic flow and would not allow extra widening of the road to satisfy future demands; ✓ The Tower obscures traffic sight lines and reduces on the direct vision site distances. This poses safety challenges for both motorists and pedestrians; ✓ Presently the Tower is at the centre of the busy road such that others who want to appreciate it cannot safely approach it, yet monuments should be easily accessed and appreciated boosting tourism in general; ✓ The proposed relocation place has ample space to allow monument admirers approach the Tower at all times; ✓ The new choice maintains the integrity and iconic nature of the monument since it will shift by less than 50 metres; ✓ In view of the above, the design team have identified the following benefits: ✓ The Shifting will ease the implementation of the Bus Rapid transit (BRT) as well as the KFO; ✓ It will increase the motor vehicle carrying capacity due to the additional lanes that will be created; ✓ It will allow for smooth movement of traffic and improvements of visibility for both motorists and pedestrians; ✓ The new location will allow for ease of accessibility by those who would like to associate with monuments;
2	Byuma Bya Katwe shrine	✓ The shrine will not be relocated but one of the stones in the right of way will be relocated / removed. ✓ This according to the caretakers of the shrine is possible; ✓ The place will come to KCCA scrutiny as opposed to the present-day conditions where it lacks sanitation and there is a lot of littering;

S/No	Monument	Benefits / justification
		✓ It is dangerous to the worshipping community if the ceremonial rock is left in the RoW; ✓ The Rock in the RoW impairs visibility of children or those in very small motor vehicles as they may not see what is lurking behind the stone (a child or de-ranged person).
3	Centenary Monuments	✓ It is normal to relocate monuments for the national or common benefits of the community, and there is precedence in Uganda (e.g. the Lugard Monument at Old Kampala was relocated) ✓ It will be Located away from the centre of heavy traffic especially below the Flyover which could be dangerous to the monument; ✓ Monument lovers can easily access the monument if it is in a more accessible place ✓ It is easier to maintain and service if it is more accessible; ✓ There is adequate space in the Park for relocation without much change in its proximity; ✓ The proposed relocation place within the redesigned Centenary Park will have ample space to allow monument admirers approach it at all times;
4	Pan African Park and the CHOGM Trees	✓ Archaeological studies have concluded that there were no materials of Cultural significance to hinder relocation of the Clock Tower; ✓ The designated land use for Pan African Park fits in well with the Clock Tower so there will be no need to seek a Land Use Change Certificate. ✓ It will refocus the public and government to better care take the Park which seemed to be under neglect at present; ✓ Park Management has in the past relocated some trees along the paths within the Park and to even far off places like Mityana Forest Reserve, so as to provide space for national and community activities, establishment of the Gazebo, and expansion to the Electricity facility. Therefore, set a precedent. ✓ Provides opportunity to increase the number of CHOGM trees and thereby reduce the carbon Print; ✓ Provides advantage of extending CHOGM trees to other areas furthering prominence of the States that planted and the milestone Uganda achieved; ✓ The relocation act promotes and initiates the extension of "The Uganda CHOGM Forests 2007" that was recommended then, as long as more trees are planted for any one tree that is cut;

7.1.5 Discussion of feasible Alternatives inside and outside the project area where possible;

7.1.5.1 *Design Alternatives*

Under chapter 4 of the design change EIA, the design change alternatives have been discussed. However, for purposes of the PCRs there were a number of alternatives to be considered. These are discussed below:

7.1.5.1.1 Clock Tower

There were a number of alternatives which were discussed during the community consultations and stakeholders gave their views. Technically the optimum option was to relocate it to the Pan African Park as discussed in the justification above. However, the stakeholders also made some input as shown in Tables 4.1 to 4.6 below: -

Table 7.1-3: Viable Clock Tower Alternatives

S/No	Alternative	Stakeholder views	Remarks
1	Do nothing option and the clock remains as is.	✓ All Stakeholders wanted the project to take off and they supported it. This option could not be sustained	Rejected 100%
2	Because the Clock Tower is very old, it should be demolished and forgotten. Otherwise put a new and imposing Clock Tower that fits with the modern times.	✓ A few people at first supported this but eventually the majority of stakeholders wished to have the PCR preserved and Uganda's heritage kept.	Not popular
3	The Clock should be relocated into the UTL area. This they argued is near enough the old one.	✓ At first the Global Pan African Movement who did not support the Clock Tower relocating on their land supported this view. However, most others could not support this idea.	Not a popular decision
4	Remove the clock and relocate in the museum where interested people would find it and view it.	✓ Many argued that this would be disgracing Uganda's History. The Clock Tower is an Icon at the gateway of Kampala City. It must be within the vicinity to perform such functions.	
5	Relocate the Clock Tower within the Global Pan African Park.	✓ Almost all the stakeholders agreed with this option arguing that if fulfils all the requirements for the Clock Tower such as being within the right land use area, next to the old location, remaining and icon and at the gateway of the City as well performing the role of a landmark for those coming to Kampala for the first time.	Agreed on

7.1.6 Global Pan African Park and CHOGM Trees

It will be recalled that the Pan African Park is home to a number of VIP trees which were planted in recognition of the 52 Commonwealth Heads of Government who attended the Commonwealth Heads of Government Meeting (CHOGM) in 2007. There are also other trees there in planted by dignitaries from across Africa. If the Clock is to be relocated to the Park it means that some of the trees would have to be relocated. This was something the Global Pan African Movement agreed with to but with conditions. Subsequently there were different alternatives discussed by the Stakeholders. These include the following: -

Table 7.1-4: Viable Global Pan African Park Alternative

S/No	Alternative	Stakeholder views	Remarks
1	Do nothing option and Build the Clock around the trees without removing them.	✓ According to the design there would be no space to enjoy the monument, yet the Pedestrian Bridge was supposed to land at the clock base;	Not supported
2	Some of the stakeholders proposed that the relocated trees should be planted along the edges of the Park	✓ This is a viable option but needs to be more valued;	To be valued
3	Other stakeholders proposed CHOGM 2007 Forests be revived and CHOGM trees be planted there (be promoted). that the original idea of extending the 52 CHOGM trees into 52 districts to establish the Uganda	✓ Merits consideration	To be valued
4	Further proposal was that for each tree cut an indigenous one should be used in relocation.	✓ Merits consideration	To be valued
5	Additional proposal was that for any single tree cut should be replicated as many times as estimated to meet the environmental and carbon footprints.	✓ Merits consideration ✓ ✓	To be valued
6	A combination of measures discussed above was proposed where by some of the trees would be relocated within the Park, along the nearby roads (eg Queens Way), and others in far off places such as the Entebbe Express Way and in a Forest Reserve in Mityana (leased from NFA). Such trees must be labelled accordingly.	✓ This option was agreed on by most stakeholders	Agreed
7	In view of the current Pan African Park Management, upkeep and maintenance of the Park that has slackened a lot, including lack of water for almost 2 years, the place is greatly incapacitated.	✓ Given the relocation of the Clock Tower into the Park and its intended tourism attractions, there is a great need to draw up a management plan to lift the standards and sustain the Park.	To be valued

7.1.7 Byuma Bya Katwe Shrine

The Byuma Bya Katwe shrine is composed of the heap of stones located between the St. Stephen's Kitara Church of Uganda and the Queensway. One of the stones of this shrine lies in the RoW. Unless the stone is removed, the KFO as designed may not happen. The Consultant has discussed with a number of stakeholders who have provided a number of alternatives. These include the following: -

Table 7.1-5: Viable Katwe Shrine Alternatives

S/No	Alternative	Stakeholder views	Remarks
1	Do nothing option and leave the stone in the right of way.	✓ If this were to happen, then the design would have to drastically change;	Not supported
2	Stakeholders from St. Stephen Church proposed to demolish the shrine;	✓ The care takers could not accept this alternative and the team considered this alternative to be controversial;	Not Supported
3	The offending Stone should be relocated within the shrine.	✓ Both the care takers and Buganda Government did not object although Buganda said they were still consulting	Supported

7.1.8 Centenary park Monument

The Centenary Park Monument is one of the 74 Monuments in Kampala listed by the DMM. The Design Change (DC) has meant that the monument will fall directly under the Flyover that is going towards Garden City. In order to construct the Flyover easily, it is necessary that the Monument be removed. The Stakeholders had a number of alternatives to consider including the following: -

Table 7.1-6: Viable Centenary Monuments Alternative

S/No	Alternative	Stakeholder views	Remarks
1	The Monument should not be removed. Do nothing Option	✓ Stakeholders do not support the do-nothing option since they all said that they want and do support the project.;	Not supported
2	The Monument should be Boxed in so that the contractor works around it. Then he would unveil it after the works;	✓ This alternative was not acceptable by the engineering team as it would be difficult to manoeuvre while the Monument is in the Cage.	Not Supported
3	It should be temporarily removed and kept till the end of the construction. Afterwards it can be relocated at the most suitable place within the Park. While doing this, KCCA and DMM should be involved.	✓ Stakeholders did not object to this alternative provided the operation is guided by both the KCCA and DMM.	Acceptable to most stakeholders

7.1.9 Optimum alternatives

Having discussed the different alternatives for the relocation of the various PCRs, the following alternatives were adapted.

Table 7.1-7: Selected Alternatives

S/No	The PCR	Selected Option
1	Clock Tower	✓ Relocate to the Pan African Park
2	CHOGM Trees and Pan African Square	✓ Re Plant the removed trees (in multiples) within the Park and additional trees will be relocated following guidance from KCCA, Mityana Forest Reserve and UNRA for the Kampala - Entebbe Express Way.
3	Byuma Bya Katwe Shrine	✓ Remove the Rock in the RoW and relocate within the main shrine
4	Centenary Monument	✓ Temporarily remove the Monument and return after the construction of the KFO.

7.2 Conducting the ESIA study for the PCRs

As discussed above, a more detailed ESIA study has been conducted targeting the PCRs impacted on by the KFO. This Environment and Social Impact study has been done in line with the provisions governing ESIA procedures as contained in the National Environment Act 2019, The Environment Impact Assessment Guidelines, 1997; Environmental Impact assessment Guidelines for Road Projects, 2008; and the Environmental Impact Assessment Regulations, 1998. However, in order to fulfil the new requirements of the revised law, emphasis was put on the Clock Tower monument and other monuments within the vicinity of the project site. In particular, the following steps were covered: -

- Desktop survey
- Specific Literature revue
- Documentation
- Site Investigations
- Preliminary Scoping
- Site Survey
- Inventory of the Trees and other artefacts
- Specific activities related to Historical sites / Monuments (Clock Tower)

7.2.1 Other Social, Physical and Biological Environment Data Collection

As usual, the ESIA team, before preparing the Environment Impact Statement, inspected the state of the bio-diversity in the area (with particular reference to the Trees within the Pan African Park) in addition to the Physical Environment. It was noted that the trees within the Park are of diplomatic relevancy that was why the team consulted the Ministry of Foreign Affairs on the possible relocation of some of them and the required protocol. The consultant also investigated the social value of this Park with respect to recreation, job opportunities and other social economic concerns.

Vegetation survey: - Here, the main vegetation is within the Park and the significant flora are the trees planted within the Park to mark the Pan African Movement. These have been planted over time and space. In addition there are the 54 trees planted by differed heads of State that participated in the 2007 CHOGM meeting held in Kampala Uganda. Table 6.7.3 shows the table of the Different species of trees and the countries, which planted them in the Park. Unfortunately, the present location of the trees does not coincide with the official coordinates of the Map, an indication that these VIP trees have either been relocated and some may have died.

Table 7.2-1: Pan African Park CHOGM Tree Planting by 52 Heads of State

Code	Country	Species	Point _ X	Point _ Y
1.	Antigua and Barbuda	Albizziacoriaria	452862	34042
2.	Australia	Albizziacoriaria	452849	34082
3.	Bahamas	Albizziacariaria	452880	34112
4.	Bangladesh	Araucaria	452859	34132
5.	Barbados	Araucaria	452849	34142
6.	Belize	Araucaria	452859	34142
7.	Botswana	Araucaria	452889	34142
8.	Brunei	Araucaria	452899	34142
9.	Cameroon	Araucaria	452889	34122
10.	Canada	Casuarina	452839	34152
11.	Cyprus	Delonixregia	452849	34152
12.	Dominica	Ficusbenjamina	452859	34152
13.	Gambia	Ficusbenjamina	452879	34152
14.	Ghana	Ficusbenjamina	452899	34152
15.	Grenada	Ficusbenjamina	452829	34162
16.	Guyana	Grevilliarobusta	452839	34162
17.	India	Khayaanthotheca	452849	34162
18.	Jamaica	Khayasenegalensis	452859	34162
19.	Kenya	Khayasenegalensis	452879	34162
20.	Kiribati	Khayaanthotheca	452889	34162
21.	Lesotho	Khayasenegalensis	452899	34162
22.	Malawi	Khayasenegalensis	452909	34162
23.	Malaysia	Khayasenegalensis	452839	34172
24.	Maldives	Maesopsiseminii	452849	34172
25.	Malta	Maesopsiseminii	452859	34172
26.	Mauritius	Maesopsiseminii	452899	34172
27.	Mozambique	Maesopsiseminii	452909	34172

Code	Country	Species	Point _ X	Point _ Y
28.	Namibia	Maesopsiseminii	452919	34172
29.	Nauru	Miliciaexcelsa	452829	34173
30.	New Zealand	Miliciaexcelsa	452849	34182
31.	Nigeria	Miliciaexcelsa	452889	34182
32.	Pakistan	Podocarpususambarensis	452899	34182
33.	Papua New Guinea	Podocarpususambarensis	452909	34182
34.	Saint Kitts and Nevil	Prunusafricana	452919	34182
35.	Saint Lucia	Prunusafricana	452879	34192
36.	Saint Vincent and the Grenadines	Prunusafricana	452889	34192
37.	Samoa	Prunusafricana	452899	34192
38.	Seychelles	Khayagrandiloliola	452909	34192
39.	Sierra Leone	Khayagrandiloliola	452879	34202
40.	Singapore	Khayagrandiloliola	452889	34202
41.	Solomon Islands	Terminalia mentalis	452899	34202
42.	South Africa	Terminalia mentalis	452909	34202
43.	Sir Lanka	Terminalia superba	452919	34202
44.	Swaziland	Terminalia superba	452879	34212
45.	Tanzania	Terminalia catapa	452889	34212
46.	Tonga	Terminalia catapa	452899	34212
47.	Trinidad and Tobago	Grevillea robusta	452929	34212
48.	Tuvalu	Podocarpususambarensis	452929	34222
49.	Uganda	Podocarpususambarensis	452919	34234
50.	United Kingdom	Albizziacoriaria	452839	34112
51.	Vanuatu	Albizziacoriaria	452826	34122
52.	Zambia	Canarium	452929	34192

7.2.2 Policy, Legal and Institutional Framework

7.2.2.1 *Cultural Heritage Policies, Legislation and Institutional Frameworks*

The ESIA Policy, Legal and Institutional Framework has been discussed in the main approved ESIA document. However, it is useful to highlight those aspects that directly affect the PCRs. These include the following: -

7.2.2.2 *Laws directly relevant to PCRs*

- ***The Historical Monuments, Act Cap 46;***

This Act provides for the preservation and protection of historical monuments and objects of archaeological pale-ontological ethnographical and traditional interests. Under this Act, the Minister has wide ranging powers to protect any of the above objects and under Section 8, no person whether owner or not shall cultivate or plough the soil so as to effect to its detriment any object declared to be protected or preserved, and no alteration is permitted on any object declared to be protected or preserved. And under Section 11, any person who discovers any object which may reasonably be considered to be a historical monument or an object of archaeological, pale-ontological, ethnographical, and traditional interests is required to report it to the Conservator of Antiquities within 14 days of the discovery. The Environmental Management and Monitoring Plan will put in place measures for the protection of Physical Cultural Resources (PCRs).

- ***National Environment Law, act no. 5, 2019***

The National Environment Act Cap No 5, 2019 provides for EIA implementation requiring prior environmental assessment of any development projects which may significantly affect the environment. As one of its principles of management, the Act provides for the conservation of the cultural heritage and use of the environment and natural resources for the benefit of both present and future generations.

7.2.2.3 *Policies directly relevant to PCRs*

- ***The Uganda National cultural policy 2006***

The policy advocates for preservation and sustainable development of Uganda's heritage. The policy also aims at the preservation and promotion of cultural heritage for socio-cultural and educational purposes.

- ***World Bank Safeguard Policy on Physical, Cultural Resources (OP/BP) 4.11***

The World Bank safeguard policy OP/BP 4.11 on physical, cultural resources recognize that cultural resources are important as a source of valuable historical and scientific information, as assets for economic and social development and as ancestral parts of people's authentic identity and practices. The policy aims at involving or mitigating adverse impacts on cultural resources for development projects that the World Bank finances. In this regard, the policy requires the preparation of the PCRs management plan.

- ***Convention for Protection of the Cultural Property in the Event of Armed Conflict (1954)***

Also known as The Hague Treaty, this is the basic standard of behaviour in the case of military occupation or intentional destruction of cultural heritage.

- ***UNESCO World Heritage Convention (1972)***

Also known as The Convention Concerning the Protection of the World Cultural and Natural Heritage, this is the international agreement that established the World Heritage Centre and the World Heritage List.

- ***UNESCO Convention for Safeguarding Intangible Cultural Heritage (2003)***

The first convention to emphasize the non-material elements of heritage and to, underline its role in expressions of identity.

- ***Professional Codes, Doctrines, and Best Practices***

Beginning in the 1920s, with initiatives of the International Museums Office of the League of Nations, professional coalitions of conservators, architects, planners, archaeologists, historians, and preservationists have formulated a series of international standards for best practices in the heritage field.

- ***The International Charter for the Conservation and Restoration of Monuments and Sites (1964)***

Also known as The Venice Charter, it was adopted at the Second International Congress of the Architects and Technicians of Historic Monuments.

- ***Charter for the Conservation of Historic Towns and Urban Areas (1987)***

Also known as The Washington Charter, it was adopted by ICOMOS to complement the Venice Charter and respond to UNESCO's 1976 "Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas."

- ***Charter for the Protection and Management of the Archaeological Heritage (1990)***

Prepared by the International Committee for the Management of Archaeological Heritage (ICAHM) and approved by the 9th General Assembly of ICOMOS in Lausanne in 1990.

- ***The Nara Document on Authenticity (1994)***

The Nara Document was drafted at the Nara Conference on Authenticity in Relation to the World Heritage Convention, held at Nara, Japan, and organized by Japan's Agency for Cultural Affairs in cooperation with UNESCO, ICOMOS, and ICCROM.

- ***Charter for the Protection and Management of the Underwater Cultural Heritage (1996)***

Ratified by the 11th ICOMOS General Assembly in Sofia, Bulgaria, October 1996

- ***International Charter on Cultural Tourism (1999)***

Also known by the title, "Managing Tourism at Places of Heritage Significance", it was adopted by ICOMOS at the 12th General Assembly in Mexico, October 1999.

- ***Charter on the Built Vernacular Heritage (1999)***

Ratified by ICOMOS at the 12th General Assembly in Mexico, October 1999

- ***The Burra Charter (1999)***

Adopted by Australia ICOMOS at its Annual General Meeting in November 1999. The result of a national initiative, it is one of the most visionary and far-sighted doctrinal texts, widely used internationally.

7.3 Current Status and potential IMPACT on the Natural and Cultural, Socio Environment

There are four areas of interest for this study. These are the Clock Tower (CT), The Pan African Park, The Byuma Bya Katwe Shrine and the Centenary Monument. Regarding the relocation of the CT, archaeological studies did not find any artefacts at the proposed relocation site. Hence, there is no PCR related objection to the relocation.

7.3.1 The Clock Tower (CT)

7.3.1.1 *Location*

Presently the Clock Tower is located at the Junction of Queens way / Entebbe road and Nsambya Road.

Figure 7.3-1: The Clock Tower at present location

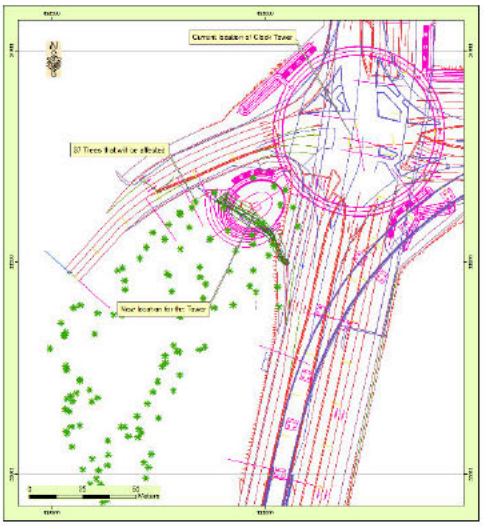


Figure 7.3-2: The New Design and Old Location of Clock Tower

Location: The CT is located at the centre of a very busy junction where only the traffic police can access it. It is very dangerous for an ordinary person to get near it because of the traffic volumes, which are often at a high speed. The other variables are shown below –

Table 7.3-1: Variables related to the status of Clock Tower

S/No	Variable	Status
1	Soil Profile	For most of the area around the CT, the top layer is of gravel followed by clays, then sand and lastly rock. The subgrades are mostly claying and silt which is existing in combination with sands and fine gravel as denoted by the AASHATO soil classification system. The presence of underground water was confirmed in the boreholes.
2	Air Pollution	There is significant variation in both PM10 and PM2.5 with time. Regarding PM10, for industrial and Mixed Use, the most polluted times are from11.00 to 11.45 where the concertation is mostly above 500(µg/m3). The next epoch is from 12.20pm to 12.36. Later in the afternoon, we have above normal concentrations from about 2. 45 pm to about 3.30pm. There are a few unexplained picks most likely due the passing of heavy trucks. Regarding NO2, from 9 O'clock through 11:00am to 1:15pm, the concentrations are mostly above the permitted maximum levels. The trend is the same in the afternoon from 2:00pm to after 4: 00pm. The spikes where the concertation is within acceptable levels much fewer. Compared to NOX, the SO2 is a bit less concentrated. It hovers around the maximum levels for a short while (9am to 915am) and returns to acceptable levels. It raises above the permitted levels once more from 11:25am until about 4:30pm. Although there are a few moments when the pollution is below the permissible levels, the average levels is not good at all.
3	Flora and Fauna	There is no indigenous or any vegetation at the Clock Tower. It is just concrete and cement floor.
4	Socio cultural concerns	Socially the Clock Tower is the main Icon and gateway to Kampala if one is coming from the Airport. Over time it has become a symbol of Kampala in its very inconvenient location. As a monument, it is one of the 74 monuments listed by the Department of Museums and Monuments (DMM) in Kampala. The archaeological study did not reveal any materials of concern although the DMM recognises the Clock Tower as an important monument. The main materials of Physical Cultural Concern are the Door, the Staircase and the Clock. The two are in place but the clock was not yet seen. The KCCA are expected to produce it.

S/No	Variable	Status
5		

7.3.2 The Pan African Park

7.3.2.1 *Location and Background to Pan African Movement / Park*

Location: - The Pan African Freedom Park is located close to the Clock Tower on 36 N 0452887 UTM 0034156, elevation 1162m and was believed to have served as a venue for a lot of events both positive and negative to Pan Africanism. The Pan African Park has an important revolutionary History and it is one of those places where Rebels opposed to the Idi Amin Regime were executed from in 1973. The current status is described in the table below: -

Table 7.3-2: Status of the Pan African Park

S/No	Variable	Status
1	Flora and Fauna	Flora and fauna: Presently the area which has been selected to relocate the Clock Tower has 25 (counting at root collars) or 37 (including forks) trees of 21 different species (See Fig 1.5 and 1.6). Tables A, Annex CT2 and Annex CT2.2 show the species used in the original CHOGM planting (17), the species that are to be affected (21), and the species in the entire Park (23) trees of different species (See Fig 7.3.2). Table 7.3.4 provides a summary of the Biomass likely to be removed as well as the accompanying carbon Equivalent. In total the CO2 equivalent to be removed is 15.11 tons. The total Biomass lost will be equivalent to 8.25 tons.
2	Documentation	At the time of planting the CHOGM trees in November 2007, the 52 trees were spread out in the Park without tampering with those that were already standing then as shown in the Map in Annex CT3. Today there are various gaps with a big empty space in the middle of the Park.
3	Soil profile	The study for the Clock Tower relocation is the same for the Park area. That is as stated above. That for most of the area around the CT and Park, the top layer is of gravel followed by clays, then sand and lastly rock.
4	Air pollution	The measurements for the Clock Tower are also representative for the area where the CT is to be relocated. The distance is only 45 metres, the same description as above is relevant. As discussed above, the measurements were made during the day and during working hours. These are the times when the motor vehicles are more numerous.
5	Flora	The inventory results of all trees in the entire Pan Africa Park show a total of 111 trees. They are comprised of 23 different species. For each tree 11 traits are recorded namely, diameter at 1.3m height (DBH), bole height, total height, crown width, bole volume, total volume, above ground biomass, below ground biomass, total biomass, total carbon, and the equivalent carbon dioxide (CO2). The total biomass, carbon and carbon dioxide sequestered is summarized in Table 7.3.3 below. Focusing on the area where the Clock Tower is to be relocated, The inventory results shows 25 trees in that area ignoring the forking. On inclusion of the forks as entity trees, the total is raised to 37 trees. So 37 trees comprised of 21 different species are to be impacted by the Clock Tower relocation. The total biomass, carbon and carbon dioxide sequestered is summarized in Table 7.3.4 below

Figure 7.3-3: 25 trees will be impacted by the relocation. For purposes of carbon print calculation, they are taken as 37 because of the forking above DBH.

Figure 7.3-4: Some of the trees to be replaced in addition to two Bill Boards.

Table 7.3-3: Summary of the Biomass in the Entire Pan African Park.

	Above Ground Biomass (ton)	Below Ground Biomass (ton)	Total Biomass (ton)	Total Carbon (ton)	CO2 Equivalent (ton)
Totals	55.0402	27.5201	82.5602	41.2801	151.4980
Rounded	55.04	27.52	82.56	41.28	151.50

Table 7.3-4: Summary of the Biomass likely to be removed at the Pan African Park.

	Above Ground Biomass (ton)	Below Ground Biomass (ton)	Total Biomass (ton)	Total Carbon (ton)	CO2 Equivalent (ton)
Totals	6.6419101	1.5940584	8.2359686	4.1179843	15.113002
Rounded	6.65	1.60	8.25	4.12	15.11
% of Total Park (all trees)	12	6	10	10	10

7.3.2.2 *Biomass and Carbon Footprint*

Following the inventory of the trees to be relocated, the total amount of carbon to be lost has been calculated and the CO2 Equivalent in Tons estimated. The 25 trees are yielding a total of 8.25 Tons of total biomass, 4.12 Tons of carbon and 15.11Tons of equivalent CO2 in a period of 12 years (considering CHOGM Trees); with KCCA's approach of 2 saplings per tree cut (50 saplings) would take 6 years to replace the lost biomass, carbon and equivalent CO2. Taking it further to 3 saplings per tree cut (75 saplings) would take 3 years to replace that lost biomass, carbon and equivalent CO2.

Table 7.3-5: Summary of the Biomass likely to be removed at the Pan African Park.

	Above Ground Biomass (ton)	Below Ground Biomass (ton)	Total Biomass (ton)	Total Carbon (ton)	CO2 Equivalent (ton)
Totals	6.6419101	1.5940584	8.2359686	4.1179843	15.113002

Rounded	6.65	1.60	8.25	4.12	15.11

7.3.3 The Byuma Bya Katwe Shrine

7.3.3.1 *Location and Status*

This is yet another cultural site located within the project area. The site is made up rock beds and boulders located about 500m away from Clock Tower along Queensway and only 10m south east of Queensway on 36 N 0452918, UTM 0033902, elevation 1171m. It is believed to be a spiritual site where traditional cultural practitioners/healers do make sacrifices/rituals in times of need.

The Katwe shrine, which had been clear of the Right of Way (RoW), was after Detailed Design Change (DDC) directly impacted whereby one of the stones was found to be in the RoW (See Fig 7.3.5 and 7.3.6). Subsequently, the design change EIA study has conducted comprehensive consultations to seek harmony among the different stakeholders and propose appropriate mitigation measures.

Table 7.3-6: Status of Byuma Bya Katwe

S/No	Variable	Status
1	Flora	Bio-physical Environment at the shrine: - The shrine is located at a fairly flat area with a slight slope to the North East. There is virtually no vegetation at the site. Otherwise reports indicated that up to 2007, the shrine was shielded by vegetation which vegetation was removed at the time of CHOGM 2007 due to security concerns. Presently there is no vegetation of environmental concern at this site which is mostly bare rock.
2	Sanitation	There is a lot of littering around and sanitation is an issue at this place. There is no easy place where pilgrims to the rock can go for sanitation purposes. The nearest public toilet will be across the KFO.
3	Cultural Icon	The Buganda Cultural Government is aware of the shrine and they recognise it. About relocation, the Buganda kingdom through her Ministers continues to consult. The caretakers say that it would be OK to relocate the stone to within the main shrine.

Figure 7.3-5: One of the care takers at the shrine

Figure 7.3-6: At the shrine one of the Boulders is in the right of way

Figure 7.3-7: Located between St Stephen's CoU and Queens Way

The Byuma ByaKatwe shrine is surrounded by bare ground since most of the vegetation was removed in 2007, due to security concerns;
Socially different people come to sacrifice at the shrine but there aren't any sanitation facilities for their use;
Caretakers believe the stone in the RoW can be relocated into the main shrine.
Buganda Government is aware of the shrine even though it was consulting further on the modalities of its relocation;
Buganda Kingdom Supports the KFO

7.3.4 The Centenary Park Monument

The Centenary Park marks the 100 years of Kampala City while the Centenary Park Monument was donated to the KCCA by Shell Uganda Limited to mark the Centenary.

7.3.4.1 *Design Change*

According to the design change, the monument falls directly below the Flyover heading towards garden city. It will be unviable to leave it in place hence it will have to shift to the centre. There has been no objection to its shifting. The main artefacts are the whole monument as well as the stone writings on it. These must be preserved in their entirety. The status of the monument is described in the Table 7.3.7 below: -

Table 7.3-7: Status of the Centenary Park Monument

S/No	Variable	Status
1	Flora	Plot 68 in Centenary Park had the highest diversity of tree species with 11 species followed by plot 64 near Garden City with the Golf Course (10 species), then plots 70 (before reaching the Cemetery near Ministry of Internal Affairs building) and 67 (second plot in Centenary Park). A host of other non-tree species, herbs, shrubs and grasses, including those of agricultural value were also recorded in the project area.
2	Drainage	Regarding the drainage and layout, the roadside of the Park is a channel for various infrastructures particularly those related to water mains, electricity, and telecommunications. Discussions with NWSC indicated that the area along the Centenary Park is the most significant transit region for the water that serves most of Kampala. This is the same for the power distributor, UMEME, which has a key power station in the area. At the time of writing this report, the underground utility lines are not inspected, but the consensus is that during construction the contractor working closely with the utility provider will assess the level of impact.
3	Air Pollution	The air pollution profile for this area is due to be taken at the final design of the LOT 2 Section. During the detailed design period, air monitoring was done at this site since it was considered as one of the sensitive receptors. At that time, the Centenary Park area was the most environmentally stable area compared to the rest of the sampled places in the City of Kampala. Table 7.3.8 gives the comparative concentrations showing that only the NO was above the limit.

Figure 0-8: The Centenary Monument at present location

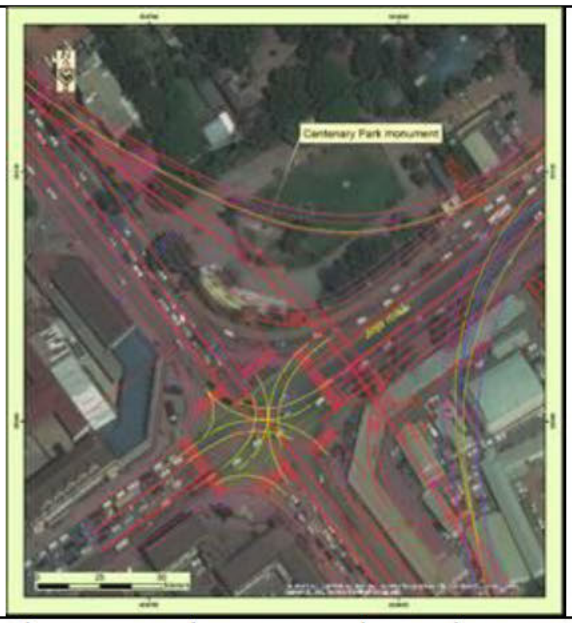


Figure 0-9: The New Design and Present Location of the Monument

Table 7.3-8: Comparative Concentrations of different gases.

Parameter / Location	Concentration (µg/m3)			
	PM2.5	PM10	NO	SO2
Location-1: Centenary Park	31.1	135.6	358.0	0.0
Location-2: Opposite Mukwano Industry	48.9	240.9	1,022.8	40.9
Location-3: Near Gapco Filling Station	29.5	185.5	920.6	32.8
Location-4: Near Shoprite Junction	170.6	965.6	613.7	73.7
National Standard (Industrial and Mixed Use).	-	500	120	120

Note: Air quality data highlighted in yellow exceeded the Air Quality Level Standard (Industrial and Mixed Use).

There are no PM2.5 environmental standards in Uganda.

Source: The DDC

7.3.5 Presentation of consultations with relevant stakeholders and affected persons;

7.3.5.1 *Consultations*

Detailed consultations were conducted and a summary of the Minutes is provided below –

Table 7.3-9: A summary Of the Minutes

S/No	Group	Summary of views
1	BAPs Swaminarayan Temple	✓ They are happy with the relocation of Clock Tower
2	Directorate of Fire and Rescue Services- Uganda Police Force	✓ The transfer of the Clock Tower monument should cater for the outlets for rescue and response. ✓ The trees on the land on which the Clock Tower it is to be relocated should be taken care of or replanted.
3	Directorate of Public Health Services and Environment -	✓ Needs Concept Note about the design of the entire

S/No	Group	Summary of views
	Kampala Capital City Authority	project from its inception in the year 2014.
4	Directorate of Public Health Services and Environment - Kampala Capital City Authority	✓ Needs consent Letter from Department of Museums and Monuments. ✓ Needs Concept Note about the design of the entire project from its inception in the year 2014.
5	Directorate of Gender and Community Services and Production - Kampala Institutional and Infrastructure Development Project [KIIDP2] - Kampala Capital City Authority	✓ The Centenary monument should be made more attractive and prominent while preserving its original concept. ✓ The Clock Tower Monument should have its original concept maintained and made more accessible by the users. Its visibility, accessibility and utilisation should be of prominence. ✓ The Contractor should take care of all the safety aspects before, during and after the construction phase. ✓ The Public should be sensitised.
6	Directorate of Public Health Services and Environment – Kampala Institutional and Infrastructure Development Project [KIIDP2] - Kampala Capital City Authority	✓ Ensure that all conditions within the certificate of approval of the Flyover project are met including additional conditions for the relocation of Monuments.
7	Ag. Deputy Director, Environment and Sanitation Directorate of Public Health Services and Environment – Kampala Capital City Authority	✓ Ensure that all conditions within the certificate of approval of the Flyover project are met including additional conditions for the relocation of Monuments.
8	Directorate of Physical Planning- Kampala Capital City Authority	✓ To be consulted on the relocation of the Clock Tower and the Centenary Monuments and the Byuma Katwe Shrine respectively.
9	Department of Protocol Services Directorate of Protocol and Public Diplomacy Ministry of Foreign Affairs	✓ Lacked information on the trees planted in the Pan African Freedom Square and preferred that the matter be handled by the Global Pan Africa Movement. ✓ He was left with the introductory letter to do more consultations
10	District Police Commander Central Police Station - Uganda Police Force	✓ He welcomed the development of the project and that he will need reinforcement to ensure prevailing security within the project area.
11	Kampala metropolitan traffic commander – Uganda Police Force	✓ The Projects Traffic Management Plan should be incorporated into the Traffic Master Plan in order to ensure harmony in the traffic flow. ✓
12	General Duties/Officer in Charge of Station Katwe	✓ The Katwe Police Station promises cooperation and general security within the project area.

S/No	Group	Summary of views
	Central Police Station- Uganda Police Force	
13	KCCA -USAFI Office	✓ Promised Cooperation in mobilising the Stakeholders of the USAFI Market and Park. ✓
14	Uganda Land Commission	✓ All the Government Land belongs to Uganda Land Commission and that the Commission only gives it out to user Ministry's, Departments and Agencies for specific use in accordance with the approved physical plan for a given area. ✓ Uganda Land Commission is happy with the project and is ready to provide any assistance where necessary to ensure that the project is successful.
15	[redacted]	✓ Promised cooperation during the implementation of the project. Maintain the original Concept;
16	USAFI Market Vendors Association and USAFI Taxi Park Operators Association.	✓ USAFI Market Vendors Association and Taxi Park Operators want the Clock Tower Monument to become a landmark or symbol of direction to the market and Park respectively. ✓ Relocate all Public Transport [Commuter Taxis and Motorcycle stages] and Food Vendors from the Clock Tower monument and the Contractors Camp to USAFI Taxi Park and Market respectively.
17	Secretary – Kampala Operational Taxi Stages Association [KOTSA] Old Park	✓ Alternative routes need to be created during the Clocktower relocation to ease on the traffic jam within the city centre and other outlets to the South and East of Kampala City. ✓ Remove all illegal motorcycle and commuter taxi stages involving for the around the construction area to help during the construction of the flyover.
18	Kampala Operational Taxi Stages Association [KOTSA] Old Park	✓ Alternative routes need to be created during the Clocktower relocation to ease on the traffic jam within the city centre and other outlets to the South and East of Kampala City.
19	Senior Environmental Inspector Department of Infrastructure Directorate of Environment Monitoring and Compliance - National Environment Management Authority [NEMA]-	✓ Work with the Department of Museums and Monuments to ensure to collect as much information as possible surrounding the monuments and shrines. ✓ Ensure that the conditions within the main Certificate of Approval for the Flyover Project are adhered to. ✓ Ensure that there is full stakeholder engagement and response on this study. ✓ Ensure that separate studies are done for auxiliary components of the road project. ✓ Work with the Department of Museums and Monuments to ensure to collect as much information as

S/No	Group	Summary of views
		possible surrounding the monuments and shrines. ✓ Ensure that the conditions within the main Certificate of Approval for the Flyover Project are adhered to. ✓ Ensure that there is full stakeholder engagement and response on this study. ✓ Ensure that separate studies are done for auxiliary components of the road project.
20	[redacted]	✓ Needed more time to conceptualise the project; ✓
21	Kampala Capital City Authority – Directorate of Physical Planning	✓ Maintain the original Concept; ✓ The Clock Tower monument is a land mark. ✓ The Design should have incorporated the Clock Tower and other monuments without having to relocate them.
22	Ministry of Tourism, Wildlife and Antiquities [MTWA] – Department of Museum and Monuments [DMM]	✓ Maintain the original Concept; ✓ The Department of Museums and Monuments should be fully involved in the relocation of these monuments ✓ The design should be sketched to enable the determination of the engineering aspects;
23	Director of Regional and International Economic Affairs Ministry of Foreign Affairs [MOFA]	✓ Ministry of Foreign Affairs will handle the protocol issues with the British High Commission and other Embassies regarding the Clock Tower Monument and CHOGM Trees Planted in the Pan African Freedom Square by the different dignitaries.
24	Director of Physical Planning and Urban Development Ministry of Lands, Housing and Urban Development [MLHUD] – Directorate of Physical Planning and Urban Development	✓ Ministry of Lands Housing and Urban Development would harmonise the land issue where the Clock Tower would be relocated. ✓ The Clock Tower monument the original concept should be maintained. ✓ The Clock Tower should have its integrity and history maintained as well as making a place of prominence which can be accessed by the general public.
25	- Assistant Commissioner Department of Physical Planning	✓ The design of the Clock Tower monument should maintain the original concept. ✓ It should remain imposing as it was before.
26	Assistant Commissioner Department of Urban Development	✓ Visibility of the monuments should be maintained ✓ Maintain the original Concept and history of the monuments should be preserved. They should achieve the balance between the old and the new since they identify the history of cities.
27	Sociologist Ministry of Lands, Housing and Urban Development [MLHUD] – Directorate of	✓ The Clock Tower should be left as a landmark for the country. ✓ Consult the Buganda Kingdom Cultural Ministry on the

S/No	Group	Summary of views
	Physical Planning and Urban Development	Byuma Bya Katwe cultural shrine. ✓
28	[redacted]	✓ Visibility of the monuments should be maintained ✓ Maintain the original Concept and history of the monuments should be preserved. ✓ Maintain the original Concept and history of the monuments should be preserved.
29	The Chairperson, Natural Resources Committee of the Parliament of the Republic of Uganda	✓ Happy with the Development
30	Cultural Site care Takers Jajja Getrida Nabona and Jajja Restituta Nalule Nabugo	✓ The two shrine care takers were happy with the development. ✓ The leader said that the stone can be relocated to within the shrine; ✓ She thought it was not necessary to pay for relocation;
31	[redacted]	✓ In a telephone discussion, he indicated that the Bank would not block development and the idea of relocation would be acceptable. He however asked for a letter to the Governor so that the response could be in written form and more official.

In addition a rap up workshop was arranged the general consensus from the workshop was also similar to the findings from the consultations. The following were the key agreements

7.3.5.2 *Clock Tower*

- ✓ That it is agreeable to shift monuments and they can be relocated provided their historical and cultural integrity is maintained. Besides that, relocation of monuments has happened before in Uganda (example of the Old Kampala Lugard's Monument) and hence a precedent;

- ✓ The Clock Tower can be relocated to the Pan Africa Park since it is the most suitable position in location, closeness and the preservation of the Clock Tower as the icon and gateway into Kampala city.

- ✓ The Clock Tower is a National Monument and should not be seen as a Buganda or Pan African Movement Icon

7.3.5.3 *African Park Pan*

Regarding the Trees in the Pan African Park, most Stakeholders agree with relocation of trees in favour of development. Besides, Pan Africa Park management too have in the past relocated the trees to establish the current Gazebo, expand the Electricity plant and create space in the middle for meetings, community activities and various fora. So, they suggest as follows: -

- ✓ Relocate trees within the Pan African Park but if replanting do write the history of each one,
- ✓ Other trees can be relocated to within either the CHOGM Forest at Kimaka Jinja that was created in 2007 for the purpose, or in the Mityana Forest Reserve or along the Kampala - Entebbe Express Way. The KCCA landscape department should guide. UNRA too should present their views given that the Kampala - Entebbe Express Way traverses areas beyond Kampala. For those areas outside the KCCA jurisdiction

the FSSD and or NFA should guide the contractor.

7.3.5.4 *Byuma Bya Katwe*

On Byuma Bya Katwe Shrine, there was reasonable agreement although few of the Stakeholders appreciated the Shrine. The Shrine Keeper and the Buganda Government did not object to relocating the stone that has been found to be in the RoW to within the shrine area though the Buganda Government continued to consult on the procedure. Otherwise there was concurrence as follows: -

- ✓ All Stakeholders supported the KFO project and pledged not to disrupt it but would rather support it;
- ✓ That the Stone in the RoW can be shifted to within the main shrine.
- ✓ That the issue of sanitation at the shrine area needs to be addressed by those concerned;
- ✓ That the Contractor should keep in consultation with both the Byuma Bya Katwe Shrine spiritual leader and the Vicar of St. Stephen's Church Kitara for harmony.
- ✓ That Noting that the shrine is also on the area reserved for the SRG, this should be handled at this stage in a once for all manner.

7.3.5.5 *Centenary Monument*

On the Centenary Monument, Stakeholders noted that this monument falls under the Lot 2 project and is at Final stage of design. Never the less there was agreement as follows: -

- ✓ It will be relocated but within the Centenary Park;
- ✓ DMM thinks that the designers should be involved in the relocation if they can be found;
- ✓ Although few thoughts that it should be boxed and remain fixed to allow the contractor work around it. Most were of the view that it should be temporarily removed and replaced after the works within the Park. The History of Movement to be written.

7.3.6 Institutional Support

Institutional stakeholders had considerable in put in the consultations. They all supported the KFO Project and would not like to disrupt development. They had the following approaches: -

7.3.6.1 *Department of Museums and Monuments (DMM)*

DMM while accepting relocation has given written conditions, which are attached as Annex CT8 to this report. They have given a number of conditions which including: -

- ✓ DMM should be fully involved from start to end of the relocations;
- ✓ A relocation plan should be prepared and DMM must approve it;
- ✓ There should be an Archaeological Study especially for the relocation site to make sure that the relocation will not desecrate other PCRs;
- ✓ Documentation at all phases before and during relocation have to be done including writing the history of the monuments.
- ✓ Amongst the team to conduct the documentation exercise should compose at Least one conservator from the DMM.

Other DMM Concerns include: -

- ✓ Regarding the Artefacts, the main items are the Clock, the Original Door and the original steps among others;
- ✓ There should be efforts to get the original design, Photographs and documentation;
- ✓ The Contractor should provide the cartographic Map of the new area of relocation;
- ✓ The list of approved technicians doing the relocation to be given to DMM (Certified Mansions,

Engineers, Conservators among others)

- ✓ Materials that will be used in reconstruction must be tested at an approved Laboratory (e.g. Kireka or UNRA approved labs)

7.3.6.2 *Global Pan African Movement (GPAM)*

While agreeing to relocation, the Global Pan African Movement (GPAM) wrote a letter (attached as Annex CT 9) in which they gave a number of conditions. These conditions did not receive universal acceptance by the other stakeholders. The conditions included the following:

- ✓ That the clock should be painted in the colours of the Pan African Movement and the word pan African freedom square should be ingrained at some place on the clock;
- ✓ Contractor to cooperate with the GPAM team in the design and painting of the relocated Clock;
- ✓ That they are willing to continue to discuss about the colour and slogan on the relocated Clock Tower;
- ✓ That they are ready to work with DMM and other Stakeholders to harmonise their position;

7.3.6.3 *Kampala capital City authority (KCCA)*

The KCCA agree with the relocation of monuments provided environmental and Physical Cultural Integrity is maintained. They went ahead to issue the Permit (attached as Annex CT 10) to allow the contractor cut the trees within the monument area for the smooth implementation of the KFO project and at the same time gave guidelines to maintain the carbon foot print. In the permit they have included the following: -

- ✓ That only those 25 identified trees should be removed and no other to be removed without the express permission of the KCCA;
- ✓ Contractor to ensure that of all cut tree logs and off cuts to locations that will be specified by KCCA;
- ✓ Every tree cut to be replaced by three saplings of specific species and size; and among others
- ✓ Failure to comply with the terms of the permit will render it invalid;

7.3.7 Conclusive remarks regarding the Agreements on the Monuments relocation

Having weighed all the arguments, it is safe to conclude that apart from the concern of the colours proposed by the GPAM, there was agreement on all the concerns related to the relocation of the monuments. In particular the following: -

- ✓ All Stakeholders consulted agree with the relocation of Clock Tower to Pan African Park;
- ✓ Conditions given by DMM as well as the Department of Physical Planning are accepted by Stakeholders
- ✓ The relocation should maintain the original concept with minimum changes;
- ✓ The New Clock Tower should still stand out and be a centre piece
- ✓ The relocation should maintain the original concept with minimum changes;
- ✓ All trees removed must be replanted following the guidelines as provided by KCCA except that this study has concluded that three saplings should replace each tree instead of the two as proposed by KCCA;
- ✓ There is lack of consensus with some of the proposals of the GPAM regarding the colours to be painted on the relocated Clock Tower;
- ✓ There is agreement on relocation of the stone at shrine although the Buganda Kingdom is still consulting;
- ✓ Sanitation facilities at Shrine area need follow up
- ✓ Traffic flow during construction to be monitored;
- ✓ Preserve any of the PCR that will be identified during the ongoing archaeological excavations and during relocation.

7.4 Proposed Mitigation Measures;

Impacts for the KFO are discussed under the Impacts Section. However, in this section the Impacts relevant to the PCRs are provided together with the proposed Mitigation measures. These are described in the tables below: -

7.4.1 Clock Tower

This is to be relocated to the Pan African Park with potential impacts to both the Pan African Park and the Tower. The tables 7.4.1 to 7.4.5 below highlights the potential impacts as well as the possible mitigation measures.

Table 7.4-1: Mitigation Options regarding the Iconic Nature of Clock Tower

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Regional	Medium	High	High	Probable	High	-	High
	2	2	3	7				
Potential Impacts: ✓ The Clock Tower as an Icon and the Gate way to Kampala will be lost; ✓ The role of Clock Tower as the Location Mark for travellers in Kampala will be lost; ✓ The Aesthetic Beauty of the Clock Tower to be lost ✓ The land use of the place to relocate might be different. Proposed Mitigation Measures ➢ Relocate within the same neighbourhood and the Pan African Park should be a good area since the land use designation is the same; ➢ Design Team to enhance the Aesthetic beauty through appropriate land scaping; ➢ In the new location the Clock Tower remains at the gateway and an icon ➢ The relevant Minister will make Public Pronouncement regarding the Clock Tower relocation. ➢ The design concept will remain the same and a replica or same as before CT to be placed;								
With mitigation	Local	Low	Medium Term	Low	Probable	Low	-	Medium
	1	1	2	4				

Table 7.4-2: Mitigation Options regarding the potential loss of Artefacts on Clock Tower

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Regional	Medium	Long term	High	Probable	Low	-	Medium
	2	2	3	7				

Potential Impacts:

- ✓ There will be serious damage to the fabric of the Clock Tower during the shifting and relocation;
- ✓ There is likelihood of losing important artefacts during relocation as it happened at the Old Kampala Lugards' Monument;
- ✓ The new place is also a place for monuments hence worry that relocation will destroy existing artefacts in the new place.

Proposed Mitigation Measures

- ➢ The three important Artefacts are the Door, the Clockworks and the Staircase which must be relocated to the new site;
- ➢ That all the features of the tower will be documented before the relocation including checking of the pH (both the alkalinity and the acidity) of the soils in the new site which will be compared with those at the old site;
- ➢ All other artefacts Identified by the conservator must be collected, identified, documented and moved to the new site;
- ➢ A record of the History of the Clock Tower and why it was relocated to be written on the wall of fame within the Park or on the wall behind the gallery at the designed Clock Tower;
- ➢ There will be an Archaeologist / Conservator on the team to ensure no artefacts in the place of relocation. Otherwise any artefacts found must be collected, identified and then moved to the location identified by the DMM
- ➢ That all the attributes of the Clock Tower which include the Clock and the bell will be available and kept intact;
- ➢ The Contractor will continue working with the DMM to check the history of the Clock Tower's conservation, for example literature on all repairs, so as to understand whether there were any previous cracks or damages.

With mitigation	Local	Low	medium Term	Low	Probable	Low	-	Medium
	1	1	2	4				

Table 7.4-3: Mitigation Options regarding management of stakeholders' expectation

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Regional	Medium	Medium term	moderate	Probable	High	-	Medium
	2	2	2	6				

Potential Impacts:

- ✓ There will be Mixed feelings from some of the stakeholders on both the relocation and new look of the monument.
- ✓ The British may not be happy with the relocation of Clock Tower;
- ✓ Possible Riots from those opposed to relocation of the Clock Tower;
- ✓ Negative Publicity to the City of Kampala regarding lack of respect for Monuments and cultural heritage;
- ✓ Political Opportunists taking advantage of any change.

Proposed Mitigation Measures

- ➢ Already there has been intensive consultations and the relocation is accepted by all stakeholders although some have given conditions;
- ➢ The Ministry of Foreign Affairs will handle the diplomatic fall out should it be an issue;
- ➢ Continue to engage stakeholders during the construction and after;
- ➢ Before the commencement of the relocation process, the Minister responsible for tourism and Antiquities will make a Public pronouncement regarding the Clock Tower relocation;
- ➢ Increase recreational space as well aesthetic beauty of the surrounding environment;
- ➢ Ensure that access to the Monument is unrestricted for those wishing to enjoy it;
- ➢ The Communication Strategy to put the relocation of PCRs on high priority.

With mitigation	Local	Low	Short Term	Low	Probable	Low	-	Medium
	1	1	1	3				

7.4.2 Land Take and loss of VIP Trees at the Pan African Park

As stated above, at least 25 trees will be removed to make way for the Clock Tower. Using the standard practice of trees forking out below 1.3 metres which are considered as trees in their own right, the impacted trees are 37.

The table 7.4.4 below highlights the potential impacts as well as the possible mitigation measures.

Table 7.4-4: Mitigation options regarding land take and removal of VIP trees

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
With no mitigation	Extent	Intensity	Duration	Consequence	Probable	MEDIUM	-	Medium
	Regional	Medium	Long-term	Medium				

Potential Impacts

- ✓ Conflicts due to land take from the Global Pan African Movement;
- ✓ Possible diplomatic wrangles related to relocation of trees that had been planted by Dignitaries of other States;
- ✓ Possible diplomatic displeasures due to exchanging of species with slackened procedure in identification, labelling and documentation of the trees species,
- ✓ Possible diplomatic wrangles due to the shrinking Pan Africa Park and delayed roll out of expansion of the Nucleus Uganda CHOGM 2007 Forests
- ✓ Reduction of the carbon foot print and carbon sinks;
- ✓ Destruction of Prized tree species;
- ✓ Disturbance of potential PCRs where the relocation is taking place; and
- ✓ Potential loss of the cultural / political heritage by cutting those Important trees.

Key mitigation measures:

- ➢ Ensure that land take is minimized by taking the minimum as shown in the design;
- ➢ The Ministry of Foreign Affairs expected to handle any challenges arising out of Uganda's development efforts;
- ➢ Retrieval, documentation, upkeep and office running to be part of the designed management plan for PAM Office.
- ➢ Extension of the CHOGM Tree planting to the 52 districts as earlier (in 20007) planned again to be part of the designed management plan for PAM, MWE, FSSD, MOLG for District Forest Services (DFS) and NFA.
- ➢ Relocating trees along Entebbe Express Way will greatly enhance carbon footprint, carbon sinks, induce prominence of the existing diplomatic relations ecotourism for UNRA and KCCA.
- ➢ Replace each cut tree with three saplings, such that the carbon footprint and carbon sinks are restored within a much shorter period of 3 years.
- ➢ In turn too tree planting along the road reserves (Entebbe Express Way) could take on clusters to increase visibility for the road users especially diplomats and dignitaries leading to improved tourism.
- ➢ Resolve the landownership dispute at the Park (is it KCCA or the Global Pan African Movement) and compensate the right owner;
- ➢ Replace the relocated trees in line with recommendations of the KCCA Landscaping Department;
- ➢ For the CHOGM trees a minimum of three saplings of a specific species as agreed on by both KCCA and the care taker of the Park;
- ➢ Contractor to will ensure that the conditions in the KCCA Tree Cutting Licence / Permit are met to the full;
- ➢ Preserve the carbon footprint through replanting in designated places.

With mitigation	Local	Low	Medium term	Low	Possible	VERY LOW	-	Medium
	1	1	2	4				

The Table 7.4.5 below highlights the potential impacts as well as the possible mitigation measures.

Table 7.4-5: Mitigation options regarding land take and removal of VIP trees

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
With no mitigation	Regional	Medium	Long-term	Medium	Probable	MEDIUM	-	Medium
	2	2	3	7				
Potential Impacts ✓ Conflicts due to land take from the Global Pan African Movement; ✓ Possible diplomatic wrangles related to relocation of trees that had been planted by Dignitaries of other States; ✓ Possible diplomatic displeasures due to exchanging of species with slackened procedure in identification, labelling and documentation of the trees species, ✓ Possible diplomatic wrangles due to the shrinking Pan Africa Park and delayed roll out of expansion of the Nucleus Uganda CHOGM 2007 Forests ✓ Reduction of the carbon foot print and carbon sinks; ✓ Destruction of Prized tree species; ✓ Disturbance of potential PCRs where the relocation is taking place; and ✓ Potential loss of the cultural / political heritage by cutting those Important trees. Key mitigation measures: ➢ Ensure that land take is minimized by taking the minimum as shown in the design; ➢ The Ministry of Foreign Affairs expected to handle any challenges arising out of Uganda's development efforts; ➢ Retrieval, documentation, upkeep and office running to be part of the designed management plan for PAM Office. ➢ Extension of the CHOGM Tree planting to the 52 districts as earlier (in 20007) planned again to be part of the designed management plan for PAM, MWE, FSSD, MOLG for District Forest Services (DFS) and NFA. ➢ Relocating trees along Entebbe Express Way will greatly enhance carbon footprint, carbon sinks, induce prominence of the existing diplomatic relations ecotourism for UNRA and KCCA. ➢ Replace each cut tree with three saplings, such that the carbon footprint and carbon sinks are restored within a much shorter period of 3 years. ➢ In turn too tree planting along the road reserves (Entebbe Express Way) could take on clusters to increase visibility for the road users especially diplomats and dignitaries leading to improved tourism. ➢ Resolve the landownership dispute at the Park (is it KCCA or the Global Pan African Movement) and compensate the right owner; ➢ Replace the relocated trees in line with recommendations of the KCCA Landscaping Department; ➢ For the CHOGM trees a minimum of three saplings of a specific species as agreed on by both KCCA and the care taker of the Park; ➢ Contractor to will ensure that the conditions in the KCCA Tree Cutting Licence / Permit are met to the full; ➢ Preserve the carbon footprint through replanting in designated places.								
With mitigation	Local	Low	Medium term	Low	Possible	VERY LOW	-	Medium
	1	1	2	4				

7.4.3 Byuma Bya Katwe Shrine

This shrine is the origin of the name Katwe and was originally a place to serve iron mongers. Reasonable consultations about the shrine have been made, and there is general agreement that the single stone within the Right of Way (RoW) can be relocated. The most agreed benefit is that the shrine area will come under scrutiny such that security and the sanitation of the place may be improved.

The Shrine Keeper and the Buganda Government did not object to relocating the stone that has been found to be in the RoW to within the shrine area though the Buganda Government continues to consult.

The table below discusses some of the negative impacts as well as mitigation measures;

Table 7.4-6: Mitigation Options regarding the potential impacts of relocating parts of the Katwe shrine

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Regional	Medium	medium term	Medium	Probable	Medium	-	Medium
	2	2	2	6				
Potential Impacts: ✓ The site of Omulongo Byuma Bya Katwe will be affected hence disorganizing the people who use it. ✓ The Musambwa (the spirits) could get annoyed and cause havoc to the believers; ✓ Potential opposition from the people who use the shrine could disrupt the Project ✓ The nearby Church and the Shrine do not necessarily agree on spiritual matters and any potential conflict can be enhanced by either; ✓ The Kabaka of Buganda who is said to be the owner of all spirits of Buganda may get annoyed if the shrine is disturbed. Proposed Mitigation Measures ➢ Consultations with the Kingdom, care takers have been done and there is no objection to relocation; ➢ Relocation of the stone must be done to within the shrine; ➢ Before relocation engage the shrine caretakers to guide the teams so that the shrine is not desecrated; ➢ At all times there must be continuous engagement with the caretakers and the Kingdom; ➢ The chance of finding artefacts at the site is high, hence the conservator on the team to be on standby during relocation of the Stone; ➢ KCCA and or Contractor must attend to sanitation concerns in the neighbourhood of the shrine.								
With mitigation	Local	Low	Medium Term	Very Low	Probable	Low	-	Medium
	1	1	2	4				

7.4.4 Centenary Monument

As discussed before, following final design change, the monument falls directly below the Flyover heading towards garden city. It will be unviable to leave it in place hence it will have to shift to the centre. This could have both negative and Positive impacts. The table below highlights the potential impacts and proposes mitigation measures.

Table 7.4-7: Mitigation Options regarding the relocation of the Centenary Monument.

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without mitigation	Local	Medium	Medium term	Low (medium)	Probable	Low	-	Medium
	1	2	2	5				
Potential Impacts: ✓ Removal of trees in the Park will lead to loss of carbon footprint; ✓ The raised Flyover will dwarf the monument and change its character; ✓ The shifting of the Centenary monument to be parked somewhere to enable road construction is risky to the safety of the monument and it's most likely to be dwarfed after the flyover; ✓ Contractor may damage the Monument; ✓ Those moving it may lose the artefacts around the monument. Proposed Mitigation Measures ➢ The Conservators from DMM should be involved in the relocation of the Monument; ➢ To avoid damage by contractor it should be removed during construction; ➢ To improve aesthetics and visibility, it will be relocated within the revamped Park to a more prominent point; ➢ The main artefacts on the monument are the stone markings showing the Sculptors as well as the Sponsors. These will be moved together with the monument; ➢ There will be a written history showing the chain of events that led to its new location ➢ Key stakeholders who are the KCCA, DMM must be kept informed of all activities; ➢ If possible, the monuments relocation committee should include the Artist who designed it (Ms. Sylivia Nabiseeka) and Mr. George Kyeyune (Head of the school of fine Art); ➢ That During removal, packaging and relocation / replacement, KCCA and DMM will be involved; ➢ The contractor must obtain a tree cutting permit and replace all tree species in line with the guidelines of the KCCA tree cutting permit.								
With mitigation	Local	Low	Short Term	Very Low	Probable	Very Low	-	Medium
	1	1	1	3				

7.5 Procedures to address chance finds.

7.5.1 Introduction

Archaeological sites are the only physical evidence that tells us about the past history of Uganda and are indicators of the indigenous people's cherished values and identity. The 1995 Constitution of Uganda, under the national objectives and directive principles of the state policy (XXV), obligates the state to protect and preserve Uganda's Heritage. This emphasizes the Historical Monuments Act 1967 amended in a decree in 1977 that governs the protection of all cultural property in Uganda. The DMMs therefore is mandated to protect, preserve, gazette and rescue/salvage any material of archaeological, paleontological or historical importance on behalf of the State.

7.5.2 Potential of Discovery of previous Unknown Archaeological Sites

As noted earlier Chance Finds are sites or materials such as pottery or Stone tools, Iron Slag, Charcoal that could be found during earthworks of any development. Pottery or broken pots may be decorated or plain, red ware or brownish or even yellowish-white for those that used kaolin. Stone tools may also be in black/dark (Chart), white without or with crystals (Quartz/Quartzite) and many others. Some other people may find iron Slag, Spears, Knives or other objects made from iron ore and bones of either human or animal remains.

It is therefore important to follow the protocol provided below while operating from an archaeological rich area such as Nsongezi and Kagera.

7.5.3 Procedures to address chance finds.

a) In line with the General Specification for Road and Bridge and WB Physical Cultural Resource Safeguard Policy Guidebook, the Contractor must stop work immediately after discovering evidence of possible scientific, historical, prehistoric, or archaeological data and notify the Resident Engineer giving the location and nature of the finds.

b) The Contractor shall exercise care so as not to damage artifacts or fossils uncovered during excavation operations and shall provide such cooperation and assistance as may be necessary to preserve the findings for removal or other disposition by the Employer.

c) The Contact shall also document document/record the Chance Find and provide a report with the following
   - Date and Time of discovery
   - Location of the discovery
   - Description of the PCR
   - Estimated dimensions of the PCR
   - Temporary protection implemented.

d) The Resident Engineer should notify the Commissioner DMMs of such finds for verification and salvage by writing a notification letter or email and where urgency is needed a telephone call. The contact name' [redacted] This is in line with the Historical Monument Act 1967, Section 11(1 &4) and section 12b).

e) The DMMs should be able to provide a solution at least within 7 to 28days after being contacted. This implies that where salvage archaeology is required, works of the contractor should be suspended for at least not more than 28 days. A report of the finds should be shared with all authorities especially the developer and DMMs.

8 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMMP)

It's noted that the design change was undertaken as a result of a number of drivers including the following: -

- Changes demanded by the developer;
- The need to accommodate the SGR crossing the proposed road at two points thereby requiring an increase in the height of the Flyover to over 30 metres;
- In some areas, there was need to avoid planned developments which had been proposed by some of the stakeholders
- Some sections of the road were widened

These changes although minimal, have led to some impacts which this Management plan also addresses. The impacts include: -

- High potential for soil erosion and related impacts due to excavations during the construction of the Nsambya Link Road that goes uphill from the Mukwano road;
- Inconveniencing more traffic (both motorised and pedestrian) due to the widening of the road;
- Poor aesthetics due to the highly raised flyover within the Kitgum house-Africana Hotel section; and
- Negative impacts on the monuments especially the Centenary Park Monument that would be dwarfed by the massive flyover.

Apart from those additional impacts, the environmental footprint has not drastically changed hence the changes on the ESMMP remain minimal. It was anticipated in the preliminary EIS that after the KFO opens to traffic, the most likely potential hazards identified for the FO would be either an accidental oil spill due to petroleum transporting tankers running off the flyway, or a fire hazard due to presence of the power stations at Centenary Park and Entebbe road. There is also potential for an accident within the underpass / tunnel which could lead to a fierce fire in case the accident vehicle was carrying petroleum products or other hazardous materials. Accidents in tunnels /underpasses are a very specific issue for which a specific emergency management plan is required. Depending on the nature of materials involved, tunnel accidents often involve fire which is dangerous not only for those directly involved in the accident but also for rescuers and for the surrounding environment. The transportation of petroleum products and other hazardous materials on the road network of Uganda must be at the top of the country's preparedness agenda. It is recommended therefore that UNRA, working closely with NEMA, the Department of Disaster Preparedness and other security agencies, prepare a flexible contingency/ emergency response plan to handle such emergencies.

Key stakeholders involved for any major hazard would be the following: -

- The Department of Disaster preparedness currently based in the Office of the Prime Minister which would be charged with lead the operations;
- The Ministry of Defence (armed forces for rescue and provision of guided support);
- Police (Ministry of Internal Affairs);
- The Polluter in this case the Company / entity responsible for transporting hazardous materials on Ugandan roads;
- UNRA;
- The Local Government Structure;
- The Uganda Red Cross to provide additional logistics.

In addition, due to the importance attached to the Monuments along the FO as well as the mitigation measures already agreed on, should any other unforeseen impacts be observed, then the Department of Museums and Monuments will be involved in remedial efforts and recovery planning.

Although the Department of Disaster Preparedness is the key focal institution for handling major humanitarian disasters, for road accidents however, the Uganda police have been mandated by the National Disaster Preparedness Policy as the lead agency to mobilize emergency operations.

The law provides that the polluter should pay for any pollution that he / she makes. However, sometimes a particular hazard may be such that the owner is unable to comply, having neither the technology required nor the human resources to overcome the hazard. In this case, National Disaster Preparedness team will take over.

8.1 ESMMP for the Project

ESMMP is enclosed in the accompanying table below. This summarizes and lists the various impacts considered to date and possible mitigation measures with their location and preferred timing.

The authorities responsible for implementing the mitigations and for monitoring them are identified along with summaries of proposed monitoring indicators. For the most part, mitigation must be carried out by the Contractor with the Resident Engineer's input. Monitoring is mostly conducted by the Resident Engineer and Environmental Specialist (or company).

8.2 Implementation Measures of ESMMP

These implementation measures must be read in the context of the ESMMP discussed in the previous paragraphs. Resident engineer will be employed by the developer (UNRA) during construction phase for implementation of the ESMMP.

Table 8.2-1: Proposed Environmental and Social management Plan

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
1	Land acquisition	• UNRA safeguard unit to prepare Resettlement Action Plan (RAP) for Project Affected People (PAP)s. • Land acquired must be fully compensated for in accordance with the Ugandan laws and JICA environmental guidelines. • As for BPs and Quarries, agreements for land compensation or land take between the land lord and the Contractor will be signed and "copies of all land agreements are to be shared with UNRA." • The land for monuments must be acquired and should be titled in the names of the Uganda land Commission who are mandated to oversee monuments land	• RoW and Safeguards team in UNRA • PRO and Safeguards team of the contractor, • A public Relation Officer (PRO) who is employed by UNRA. • The PROs coordinate his/her consultations with affected landowners with the Local Government Official. The formal consultations are to be pre-arranged with landowners and notes about the outcomes from the consultations must be recorded by the PRO • UNRA land acquisition Unit to acquire the land	• Within the affected areas. • Land for monuments at Pan African Park and Centenary Park.	• Before the commencement of Activities. • Consultations and agreements regarding land take compensation must be concluded well in advance of the commencement of construction works. They must be conducted at or shortly after mobilization.	• No of complaints recorded. • Amount of money paid out. •	• Resident Engineer • Environmental & Social Specialist • Road Committees • DMM
2	Human Resources	• Employ competent Environment specialist, Safety Officer, and Human Resources expert to implement the ESMMP	• Contractor	• On the project	• For entire lifetime of project	• Availability of personnel	• Resident Engineer, • UNRA

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
3	Loss of road side trees and ornamental crops	• Planting of trees along the FO roads will be done in consultation with UNRA and KCCA. • Affected permanent trees, crops, and other private properties inside proposed project area will be compensated based on market price	• Contractor	• Within the identified green area	• Towards end of project after earth moving activities	• Number of trees planted and acres of land revegetated	• Resident Engineer; • Environmentalist & Social • KCCA
4	Loss of at BPs	• After construction all removed topsoil will be used to restore the BPs. • Restoration of the temporarily removed vegetation at BPs will be done using the indigenous existing grasses whose seed are naturally occurring in the stockpiled top soil. Suitable species include *Cynodondactylon, Panicum fulgens, Panicum repens etc.*).	Contractor	• At Exhausted BPs	• After extraction and construction	• Area restored • Registered complaints	• Resident Engineer; • Environmentalist & Social Specialist
5	Involuntary Resettlement	• UNRA safeguard unit prepare Resettlement Action Plan (RAP) through field survey and stakeholder meetings. • Relocation cost for target quarters of Uganda Railway Corporation (URC) will be paid to URC. • Compensation for lease term of the quarters and lands will be paid to Rift Valley Railways (RVR). • Resettlement families (23 families) will be provided disturbance allowance based on their rental rate. • RVR provide alternative quarters for resettlement families as necessary or three months' rent in lieu in addition to disturbance allowance. • For those flower garden attendants who have moved into the area, KCCA may consider relocating them to another place.	• UNRA Safeguard Unit manage the implementation of resettlement, and • KCCA and UNRA enforcement teams	• Within the affected areas.	• Before the commencement of Activities.	• No of complaints recorded. • Amount of money paid out. • Resettlement condition of each of the resettled families • Illegal presence of vendors and how many	• UNRA safeguards team • Resident Engineer • Environmental & Social Specialist
6	Soil erosion, Slope failure (soil erosion control measures);	• Degraded sites including construction material storage points will be restored to as close to their previous condition as possible after road construction. • All embankments especially where the underpass will be created, trenches and outfalls after construction will be strengthened to limit erosion. This can be	• Contractor, and • Resident Engineer	• At the underpass, slopes off Jinja road, along the Samba Link Road and any other	• During quarry and borrow pit operation and at excavations along the batters and drainage structures. Details	• Availability of CoA. • No. of Erosion control structures constructed .	• Resident Engineer • Environmental & Social Specialist

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
		done by stone pitching, use of gabions or lining banks with concrete as appropriate as possible and planting of Bahia grass (*Paspalum notatum Flugge);* • Sediment basins/traps will also be used to trap sediments before they enter the Nakivubo Channel and other storm water drains / watercourses. Such facilities will be regularly checked and maintained to ensure free flow. • The excavations for the Samba Link road to ensure that soil erosion is minimal • Storm water off the Link road to be accommodated by larger culvers across Moquino road.		exposed area including at quarry areas, Borrow areas, and along construction sites for drainage structures;	to be given by the Resident Engineer	• Number of silt traps constructed • No. of sand bags placed	
7	Haulage routes and Diversions	• After the works obliterate the routes and diversion scarifying the road as appropriate unless such roads are community roads; • Provide access where necessary, and Diversions as appropriate;	• Contractor, and • Resident Engineer	• In areas where haulage roads and diversions exist;	• At the end of the works for the routes and during the works for dumping and access construction	• Number of routes obliterated, access provided and number of complaints recorded;	• Resident Engineer • Environmental & Social Specialist
8	Excavation for the Tunnel / Underpass	• Contractor will be required to comply with the recommendations within the acquired NEMA Certificate of Approval for all operations; • The supervisor will inspect the cliffs / walls to ensure that no slope failure is likely and if any loose hanging cliffs / stones are observed, then the supervisor will knock them down and put in place protective measures. • Replant all erodible areas as soon as possible if affected by the road works; • The underpass / Tunnel will be sealed at the earliest possible time to minimize hydro-geological disturbance	• Contractor, and • Resident Engineer	• In the tunnel / underpass environs	• During Construction	• Area replanted • Records of Supervisors ' inspection routine;	• Resident Engineer • Environmental & Social Specialist
9	Storm Water Disposal	• Channel storm water along already existing drains or channels; • Silt laden storm water to be directed away from the Nakivubo channel / wetlands and	• Contractor; • Resident Engineer	• Along the drainage channels	• During the works and after	• Number of Channels constructed ,	• Resident Engineer • Environmental & Social Specialist

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
		fragile ecosystems; self-drainage to be maintained within borrow areas and quarries. • Embankment slopes to be planted with ***Bahia grass*** or similar approved to control erosion. • Measures should be taken to prevent silt deposition from the road into the Nakivubo Channel. • Drains rom the Samba Link road will be wide enough to accommodate the storm water into Nakivubo Channel; • Borrow pits and quarries to be free draining.				• Complaints recorded;	
10	Soil Degradation and Pollution	• Construction materials to be stored in approved containers and washing areas for site equipment servicing and repair will be carried out in a defined area with a concrete pad draining to oil traps; • Provide secure stores for hazardous materials and refuse pits. To be demolished on completion. • Abandoned equipment, tyres, batteries, filters, sparkplug etc. to be removed and carefully disposed of as required by law.	• Contractor • Resident Engineer	• At construction sites and washing areas;	• During the construction and especially towards the completion of the project	• Number of containers / stores for storing materials;	• Resident Engineer • Environmental & Social Specialist
11	Air Quality (Increased dust and air pollution)	• Provide dust masks fitted with appropriate filters competent to remove crystalline silica dust from the breathing zone of each worker • All workers to wear full Personal Protection Equipment (PPE) and the Consultant and Contractor to enforce compliance; • Place flagmen in order to control construction traffic at suitable intervals along the haulage routes and within / close to busy areas (during construction) near schools / places of worship. • Dust suppression through wet crushing at crusher units and when appropriate by spraying dusty road surfaces with water to be enforced; • Contractor not to use community water sources for road use • Haulage Lorries carrying crushed material to be covered to reduce flying stones and dust;	• Con signposts and supervision by the Resident Engineer	• Construction sites and work areas; • Along the haulage routes especially in close proximity to schools. • Along the haulage route especially in the vicinity of settlements	• During upgrading works.	• Occurrence of dust in the air. • Complaints from other residents • Number of waterbousers in use; • Source of water and holding capacity /tanks at crusher area. • Air quality monitoring results	• Resident Engineer • Environmental & Social Specialist

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
		• Air quality monitoring survey at roadside area will be conducted as necessary and regularly to compare with the baseline data.					
12	Waste Disposal	• Demolished road structures to be carefully removed and recycled where possible; • Encourage UNRA provide a disposal area for excess excavation for future projects; • Contractor to balance cut and fill if possible • Workshop storage facilities to be licensed by NEMA. Waste oils to be transported to a licensed disposal site, all in accordance with the Waste Management Regulations (1999). • Bitumen tanks to be placed away from any drainage, placed on an impermeable surface and surrounded with a bund made from impermeable materials; • Hazardous waste to be disposed of in accordance with the manufactures specifications and stored in sealed drums before transporting to designated disposal points; • Washing areas for site equipment, servicing and repair to be in an area with a concrete pad. • Separate bins to be provided for recyclable materials and arrangements for recycling made. • Mobile toilets will be provided at site and garbage bins to be provided at strategic locations. • Separate male and female toilets and washrooms facilities to be provided. • Metal scrap and all other recyclable waste will be collected and recycled.	• Contractor during the works period. • Resident Engineer.	• At workshops, • Campsite • Crusher areas • And any other working site	• During construction phase and at decommissioning	• Drums of oil collected; • Presence of drums at site • Presence of mobile toilets; • Presence of impermeable surfaces and bunds	• Resident Engineer • Environmental & Social Specialist& Social
13	Disruption of Flora, Fauna and Avi-Fauna	• Clearance of vegetation will be confined to those areas where it is inevitable (within the road corridor); • The Flyovers should be painted with easily visible colours so that they can be more visible to flying birds; • Employ a delayed approach to removing of trees to enable birds which might be laying eggs in those trees to hatch them;	• Contractor during the works period. • Resident Engineer.	• Along the road project and at the high biodiversity area around Centenary Park, Clock Tower Area,	• Before commencement of construction and during the construction phase;	• Number of trees replanted; • Identified number of trees that had birds eggs in them;	• Resident Engineer • Environmental Specialist

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
		• Ensure that the plots around the Centenary Park, Clock Tower Area, between Moquino Roundabout and Samba Junction all of which have a higher Bio – Diversity are protected; • Regarding the Centenary Park all the removed trees should be documented and later replanted in consultation with the landscape office of the KCCA; • Encourage and adopt MOWT policy of planting trees along the boundaries of the road reserve; • Review the register of the trees that have been removed and replant with guidance from KCCA		between Moquino Roundabout and Samba Junction			
14	Increased noise levels and vibration Due construction and Flyover	• Limit noise due to haulage/quarry traffic by keeping the construction fleet in good condition, well fitted with efficient silencers. Place flag Persons in order to control construction traffic at specified intervals during construction phase.; • House the generators at the Contractor's camp site within a Noise barrier structure to reduce noise levels; • At workshop areas, workers must use earmuffs (PPE) • Noise level monitoring as necessary during construction phase and operation phase. • Continue to monitor noise levels during the operational phase of the road; • For most areas the installation of Noise barriers will not be effective • Install Noise barriers at the Golf course Hotel, Police Quarters and at the Kindergarten. • Apart from the noise shielding, these noise barriers are expected to also protect sensitive receptors from garbage that might be thrown from the roads. • UNRA/KCCA will continue to monitor Vibrations during construction and operations of the road	• Contractor (During Construction); and • UNRA/KCCA during operations	• Workshop area	• During construction and operations.	• Noise levels (Construction vehicles and machine, Traffic noise). • Complaints from local residents • Complaints from workers	• Resident Engineer • Environmental & Social Specialist

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
15	Road safety during the operation of the road / FO	• The traffic code should be enforced by the police; • Road furniture must be cleaned and inspected regularly to check its condition; • The traffic code must be enforced by the police. • UNRA/KCCA and the Uganda Road Safety Council are recommended to continue sensitizing local communities of the Highway Code. • Police should give talks and training in good road behaviour at schools • It is recommended that the FO and the entire road are well lit throughout including in the bypass; • There should be measures to enforce the use of NMT and pedestrian lanes by those supposed to use them;	• Contractor for the signposts and Resident Engineer for the sensitization	• Speed controls at approaches to Along the road project	• During construction and operation;	• Presence of road signs • Number of sensitization and training seminars with number of attendance; • No of complaints from local residents • No of traffic mishaps / accidents.	• Resident Engineer • Environmental & Social Specialist
16	Traffic management and Pedestrian Safety	• The Contractor will have to work closely with stakeholders to put in place a traffic management plan such that the Comprehensive Traffic Management plan will have been agreed on by the key stakeholders; • The Key stakeholders include UNRA, KCCA, Uganda Police Force, Presidential Protection Unit, and the community • The traffic management strategy will also include the pedestrian traffic and will ensure that their safety is taken care of; • The plan will be subject to regular reviews by the Contractor as guided by the stakeholders.	• The Contractor, • Safety Officer	• To cover the whole road project as well as places outside of the area but are connected traffic wise	• Continuously	• Stakeholders involved; • Number of either traffic signals or flag persons, • Police officers assigned to manage traffic	• Resident Engineer, • Safety Officer • KCCA • Uganda Police
17	Workers Occupational Safety and Health	• The Contractor to provide a qualified Safety Officer • The Contractor must prepare and make available at site on request, a Safety and Health Policy Document • The Contractor must have in place a risk assessment and Safety & Health management plan;	• The Contractor and Resident Engineer, • Safety, Health and social Officers	• At work areas, and along the road	• During construction	• Number of sanitation facilities; • Availability of bins • Presence of a Safety Officer;	• Resident Engineer • Environmental Specialist

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		• The Contractor must make an inspection requisition of the Commissioner for site plant and equipment to be certified. • Personal Protection Equipment (PPE) (including masks, hard hats, boots, reflective vests, safety harnesses and gloves) for the workforce shall be mandatory, foremen to ensure compliance; • The Contractor shall (a) train workers in the use/purpose of PPE; (b) ensure that PPE items fit the users; and, (c) replace PPE items as needed and in accordance with the manufacture's specifications; • First-Aid kits to be provided at every active working site as well as a clinic supplied and staffed by the Contractor in accordance with UNRA guidelines • Place flag Persons in order to control construction traffic at suitable intervals along the haulage routes and within / close to busy areas (during construction) near schools / places of worship. • Water spray, at least twice a day or as required. To be used for dust suppression at crusher units and dusty road surfaces within and close to busy sections. • House the generators if required on sites in a noise barrier structure to reduce noise levels; • Sanitation facilities provided at camps, workshop areas, crusher areas and at any other place where groups of workers are likely to concentrate; • Sanitation facilities for men to be clearly separated from those for women to protect their privacy • Bins for solid waste collection to be placed at the Contractor's camp and worksites to ensure that any hazardous waste (Torch and radio batteries, oils, and polythene papers and plastic bottles etc.) are separately collected and disposed-off in accordance with the law;				• Presence of PPE • Record of trainings for workers;	

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		• Separate bins to be provided for recyclable materials and arrangements for recycling done with a suitable recycling facility to be identified; • Mobile / portable plastic toilets will be provided for workers along the project road (FO) and other working areas that are not permanent.					
18	Public Safety	• A premedical examination for workers should be conducted, followed by routine medical examination during the works and a final post medical examination. • Put a project-specific HIV/AIDS awareness/prevention programme in place as specified in the contract documents. • If an NGO is to conduct the AIDS and STD Awareness Mitigation Campaign in accordance with to UNRA requirements the Contractor will be responsible for identifying and retaining the NGO. • The Contractor will operate the clinic; • Adequate sanitation facilities to be provided at site.	• Contractor, Engineer • Subcontracted Service Providers	• At Clinic and selected meeting areas	• During construction and decommissioning	• Presence of Clinic • Number of meetings;	• Resident Engineer • Safety Engineer • Environmental & Social Specialist
19	Relocation of infrastructure and utilities	• When working with utilities (communications, power lines, water mains, sewer lines), it will be done in collaboration with the service provider and a due notice of at least one month is to be given. The same will be done for the relocation of major sign posts and road furniture where they exist; • The Contractor will design ways of working around the utilities so that relocation is minimized; • Light equipment will be used (as well as manual methods) in the initial stages of excavations taking care to see that utilities underground are not disrupted without warning as is always the practice within cities and urban centers. • Where the utility line is likely to be disrupted, the Contractor will halt the works until the	• Contractor • Resident Engineer; • Service provider	• Wherever the affected infrastructure is located	• Warning at least one month before works begin; • During the works for relocation and management;	• Number of utility lines etc. relocated • Complaints raised	• Resident Engineer • UNRA • Environmental & Social Specialist

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
		utility provider has advised on the best way forward. • At all times the community should not be deprived of the service for a prolonged period (in excess of 24 hours) without the service; • Due notice to the community will be given (by the service provider) to the public in case short disruptions are envisaged;					
20	Contractor's and Consultants Obligations regarding OSH activities	• The Contractor will be required to be conversant with the UNRA Environment and Social Management System, • The Contractor must prepare a work permit that will be the guiding implementation document for each task to be commenced. Within the work permit, the Contractor will include both the method statement as well as the risk assessment. • In case of the operational conditions change such as meeting a rock within the road corridor, the risk will be assessed and the work permit amended accordingly to accommodate the method statement of how to handle the rock. • In the event that night activities are considered and yet this is outside the Certificate of EIA Approval for the Works, an application for variation of the Work Schedules will be done to NEMA by the Contractor • Night Work will be approved by the Consultant after he /she has studied the method statement, and being convinced that consultations have been conducted. Subsequently, the Contractor will ensure that the noise levels are monitored and minimized. • Contractor will ensure that Contractor equipment will have warning signs / beacon lights, Reverse lights, First Aid kits and fire extinguishers at minimum; • Contractor will ensure that night works are preceded by adequate lighting of the project	• Contractor	• Along the entire stretch of project area	• During construction	• Availability of work permit; • Method statements • Approvals from NEMA and Consultant • Reports from the Department of Occupational Health • Minutes of toolbox meetings; • Presence of safety Committee	• Consultant / RE, • NEMA • Department of Occupational health

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
		site to increase illumination and therefore visibility of the working area for safety of workers. • Following the registration of the working areas as worksites by the Department of Occupational Safety and Health, all equipment will be inspected at the beginning by a representative from UNRA / Ministry of works in addition to the mandatory statutory inspections from the Department of Occupational Safety and Health from the Ministry of gender • Contractor will ensure that there will be toolbox discussions / training regularly where safety will be emphasized. In addition, safety warnings and signage inclusive of reflective warning signs to be put at appropriate places. Warning signs will be of standard size. • The Contractor will be required to form a Safety Committee to conduct regular inspection of safety performance of the project and assess any performance gaps. • Utility Lines will be included in the work permit. They are to be mentioned in the work permit especially the risk analysis which will cover sewerage lines, water lines, power and communications lines. In case of overhead power lines, the risk will have to be assessed before construction of flyovers.					
21	Contractor's requirements to human resources management	• Sign the Code of Ethical Conduct to Implement E&S safeguards • Develop E&S management plans and procedures in line with the UNRA ESMS e.g. Environment and Social Implementation Plan, Risk Assessment and OSH Management Plan, Restoration plans, Gender, HIV, Blasting etc. • Develop Code of conduct for his Workers • Develop Project Briefs/EIAs for all project support infrastructure including Borrow pits • Support the HIV Nominated service provider to implement the HIV program	• Contractor	• Across the entire project	• Continuously	• Code of conduct in place • Management plans in place • Project briefs developed	• Consultant / RE • UNRA

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		• Recruit Competent and Qualified Staff (for E&S implementation) including a Community Liaison Officer. • Employ Local persons on the project. • Provide measures for addressing Worker welfare issues e.g. Insurance, Contracts, feeding, transport, overtime, etc. • Develop a Grievance redress mechanism • Undertake Incident reporting and Investigation as specified in the ESMS manual. • Conduct Monthly and quarterly reporting on implementation of E&S safeguards on projects as specified in the ESMS manual. • Conduct Training and sensitization of all workers & the Community: and Acquire all consents and permits required for the project				• NEMA Certificate of approval in place • Number of competent staff in place • Monthly reports • Incident reports	
	ESMP Plan with respect to PCRs (Clock Tower Relocation, Pan African Park, Katwe Shrine and Centenary Monument)						
22	Relocation of the Clock Tower: - ***Iconic Nature of Clock***	• Relocate the CT within the same neighbourhood and the Pan African Park should be a good area since the land use designation is the same; • Design Team to enhance the Aesthetic beauty through appropriate land scaping; • In the new location the Clock Tower remains at the gateway and an icon • The relevant Minister will make Public Pronouncement regarding the Clock Tower relocation. • The design concept will remain the same and a replica or same as before CT to be placed; • Prepare relocation plan through discussion among relevant authorities (Relocation methods, location, schedule and conditions)	• UNRA safeguard unit, • Department of Museums& Monuments, and • KCCA • Contractor • Engineer	• At existing location of Clock Tower monument and the new place of relocation	• Relocation plan to be guided by the guidelines as provided by the DMM, • Relocation will be conducted during construction phase	• Approval for relocation plan by Department of Museums and Monuments • Records of implementation status of the relocation	• Resident Engineer & Social • Environmental Specialist • DMM
23	Relocation of the Clock Tower: - ***(Potential Loss of Artefacts on the CT)***	• The three important Artefacts are the Door, the Clockworks and the Staircase which must be relocated to the new site; • That all the features of the tower will be documented before the relocation including checking of the Ph. (both the alkalinity and the acidity) of the soils in the new site which will be compared with those at the old site;	• UNRA safeguard unit, • Department of Museums& Monuments, and • KCCA; • Contractor • Engineer	• At existing location of Clock Tower monument and the new place of relocation	• Relocation plan to be guided by the guidelines as provided by the DMM, • Relocation will be conducted before the main	• Approval for relocation plan by Department of Museums and Monuments	• Resident Engineer • Environmental & Social Specialist • DMM

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
		• All other artefacts Identified by the conservator must be collected, identified, documented and moved to the new site; • A record of the History of the Clock Tower and why it was relocated to be written on the wall of fame within the Park or on the wall behind the gallery at the designed Clock Tower; • There will be an Archaeologist / Conservator on the team to ensure no artefacts in the place of relocation. Otherwise any artefacts found must be collected, identified and then moved to the location identified by the DMM • That all the attributes of the Clock Tower which include the Clock and the bell will be available and kept intact; • The Contractor will continue working with the DMM to check the history of the Clock Tower's conservation, for example literature on all repairs, so as to understand whether there were any previous cracks or damages; • An architect must be procured before the relocation process to prepare details of the design of the replica concrete support structure and associated support structures and surrounding landscapes all to be submitted to the DMM; • The contractors design must be made in a way that protects the historical and original look of the tower while maintaining some of the aspects like the clock, steel ladders, original door, electrical fittings and the upper most part.			construction commences:	• List of artefacts collected; • List of personnel involved in the relocation;	
24	Relocation of the Clock Tower: - ***(Managing Stakeholders expectation CT)***	• Already there has been intensive consultations and the relocation is accepted by all stakeholders although some have given conditions; • The Ministry of Foreign Affairs will handle the diplomatic fall out should it be an issue; • Continue to engage stakeholders during the construction and after; • Before the commencement of the relocation process, the Minister responsible for tourism and Antiquities will make a Public pronouncement regarding the Clock Tower relocation;	• Resident Engineer: • Contractor; • DMM; • KCCA	• At the Pan African Park designated place	• Relocate before construction	• Minutes by MOFA; and • the copy of the ministerial announcement;	• Resident Engineer • Environmental & Social Specialist • DMM

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		• Increase recreational space as well aesthetic beauty of the surrounding environment; • Ensure that access to the Monument is unrestricted for those wishing to enjoy it; • The Communication Strategy to put the relocation of PCRs on high priority.					
25	Pan African Park ***(Land take and removal of VIP trees)***	• Ensure that land take is minimized by taking the minimum as shown in the design; • The Ministry of foreign Affairs expected to handle any challenges arising out of Uganda's development efforts; • Resolve the landownership dispute at the Park (is it KCCA or the Global Pan African Movement) and compensate the right owner; • Replace the relocated trees in line with recommendations of the KCCA Landscaping Department; • For the CHOGM trees a minimum of three saplings of a specific species as agreed on by both KCCA and the care taker of the Park; • Contractor will ensure that the conditions in the KCCA Tree Cutting Licence / Permit are met to the full; • Preserve the carbon footprint through replanting in designated places; • The Bill Boards in the Park to be relocated and compensated for;	• Resident Engineer: • Contractor; • DMM; • KCCA	• At the Pan African Park	• Relocation must be done before construction; •	• Amount paid for land compensation; • Number of saplings planted; • Minutes kept by the MOFA about relocation;	• RE • UNRA • KCCA
26	Byuma Bya Katwe Shrine ***(relocating one of the stones of the shrine)***	• Consultations with the Kingdom, care takers have been done and there is no objection to relocation; • Relocation of the stone must be done to within the shrine; • Before relocation engage the shrine caretakers to guide the teams so that the shrine is not desecrated; • At all times there must be continuous engagement with the caretakers and the Kingdom; • The chance of finding artefacts at the site is high, hence the conservator on the team to be on standby during relocation of the Stone.	• Contractor, • Jajja caretaker; • Resident Engineer; • Local leader	• Within the main shrine	• Before construction commences	• Absence of presence of the stone	• RE • UNRA • KCCA

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27	Monuments Centenary Monument – (Relocation of Monument)	• The Conservators from DMM should be involved in the relocation of the Monument; • To avoid damage by contractor it must be removed before construction commences; • To improve aesthetics and visibility, it will be relocated within the revamped Park to a more prominent point; • The main artefacts on the monument are the stone markings showing the Sculptors as well as the Sponsors. These will be moved together with the monument; • There will be a written history showing the chain of events that led to its new location • Key stakeholders who are the KCCA, DMM must be kept informed of all activities; • If possible, the monuments relocation / restoration committee should include the Artist who designed it (Ms. Sylvia Nabiseeka) and Mr. George Kyeyune (Head of the school of fine Art); • That During removal, packaging and relocation / replacement, KCCA and DMM will be involved; • The contractor must obtain a tree cutting permit and replace all tree species in line with the guidelines of the KCCA tree cutting permit.	• Contractor, • DMM • Resident Engineer	• At Centenary Park	• Before Construction	• Number of meetings with stakeholders • Minutes of the committee meetings • Design of the platforms	• RE • UNRA • KCCA
28	Other Impacts on Physical Cultural resources	• No ancillary works, borrow areas within 2km of an identified cultural site of importance; • The sculpture within Centenary Park will be relocated	• Contractor • Resident Engineer; • Department of Museums and Monuments	• At the affected site	• Before and during construction	• Presence of the stakeholders during relocation • Recorded notes of the materials and status of the monument	• Resident Engineer • Environmental & Social Specialist and • Department of Museums and Monuments
	Use of Centenary Park as stocking area	• Remove from Centenary Park the Monuments (under Supervision of KCCA and or DMM) and keep them in a safe environment in readiness for their replacement after the construction; •	• Contractor • Resident Engineer; •	• At Centenary Park	• Before commencement	• Number of items removed; • Record of the	• RE • Environmental & Social Specialist and • KCCA

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Responsible Party/implementer (Who)	Site of Implementation (Where)	Optimal Timing for Implementation (When)	Monitoring Indicators	Monitoring (Who)
						removed items;	
	Others						
29	Impacts on landscaping and Aesthetics	• Implement the planned Environmental and Landscaping Master Plans in conjunction with the relevant Department within the KCCA.	• Contractor • Resident Engineer; • KCCA	• Over the entire Project area	• towards end of construction and beyond	• Number of trees planted versus the ones removed; • Species planted, • Volumes of soil moved	• Resident Engineer • Environmental & Social Specialist and • KCCA
30	Restore Centenary Park Monument	• Restore the Centenary Park to its position with appropriate improvements following the guidance from the relevant KCCA landscaping directorate;	• Contractor • Resident Engineer;	• At Centenary Park	• After the major construction works	• Numbered restored	• Environmental & Social Specialist and • KCCA • DMM

Table 8.2: Proposed Environmental and Social Monitoring Plan

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
1	Land acquisition	• UNRA safeguard unit to prepare Resettlement Action Plan (RAP) for Project Affected People (PAP)s. • Land acquired must be fully compensated for in accordance with the Ugandan laws and JICA environmental guidelines. • As for BPs and Quarries, agreements for land compensation or land take between the land lord and the Contractor will be signed and "copies of all land agreements are to be shared with UNRA." • . • The land for monuments must be acquired and should be titled in the names of the Uganda land Commission who are mandated to oversee monuments land.	• No of complaints recorded. • Amount of money paid out.	• Resident Engineer • Environmental Specialist • Road Committees • DMM	• All land acquisition to be completed before handing over to contractor	• Uganda shillings for cost of compensation	• N/A	$33,251,000
2	Human Resources	• Employ competent Environment specialist, Safety Officer, and human resources expert to implement the ESMMP	• Availability of said personnel	• Resident Engineer, • UNRA	• Full time employment	• N/A	• N/A	(3X18X3000) = USD$162,000
3	Loss of road side trees and ornamental crops	• Planting of trees along the FO roads will be done in consultation with UNRA and KCCA. • Affected permanent trees, crops, and other private properties inside proposed project area will be compensated based on market price	• Area planted • species of grass/trees planted	• Resident Engineer • Environmental Specialist	• Monthly	• Number of trees Planted	• N/A	$8,200
4	Loss of at BPs	• After construction all removed topsoil will be used to restore the BPs. • Restoration of the temporarily removed vegetation at BPs will be done using the indigenous existing grasses whose seed are naturally occurring in the stockpiled top soil. Suitable species include	• Area planted • species of grass/trees planted	• Resident Engineer • Environmental Specialist	• Monthly	• Area in square metres or acres restored	• N/A	$5,000

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		Cynodondactylon, Panicum fulgens, Panicum repens etc). •						
5	Involuntary Resettlement	• UNRA safeguard unit prepare Resettlement Action Plan (RAP) through field survey and stakeholder meetings. • Relocation cost for target quarters of Uganda Railway Corporation (URC) will be paid to URC. • Compensation for lease term of the quarters and lands will be paid to Rift Valley Railways (RVR). • Resettlement families (23 families) will be provided disturbance allowance based on their rental rate. • RVR provide alternative quarters for resettlement families as necessary or three months' rent in lieu in addition to disturbance allowance. • For those flower garden attendants who have moved into the area, KCCA may consider relocating them to another place.	• No of complaints recorded. • Amount of money paid out. • Resettlement condition of each of the resettled families • Illegal presence of vendors and how many	• UNRA safeguards team • Resident Engineer • Environmental & Social Specialist	• To be completed before handing over to contractor	• Uganda shillings for resettlement	• N/A	$1,600
6	Soil erosion, Slope failure (soil erosion control measures);	• Degraded sites including construction material storage points will be restored to as close to their previous condition as possible after road construction. • All embankments especially where the underpass will be created, trenches and outfalls after construction will be strengthened to limit erosion. This can be done by stone pitching, use of gabions or lining banks with concrete as appropriate as possible and planting of Bahia grass (*Paspalum notatum Flugge);* • Sediment basins/traps will also be used to trap sediments before they enter the Nakivubo Channel and other storm water drains / watercourses. Such facilities will be	• Availability of CoA. • No. of Erosion control structures constructed. • Number of silt traps constructed • No. of sand bags placed	• Resident Engineer • Environmental & Social Specialist	• Weekly	• N/A	• N/A	Included in the BOQ

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		regularly checked and maintained to ensure free flow. • The excavations for the Sambya Link road to ensure that soil erosion is minimal • Storm water off the Link road to be accommodated by larger culvers across Moquino road.						
7	Haulage routes and Diversions	• After the works obliterate the routes and diversion scarifying the road as appropriate unless such roads are community roads; • Provide access where necessary, and Diversions as appropriate;	• Number of routes obliterated, access provided and number of complaints recorded;	• Resident Engineer • Environmental & Social Specialist	• Weekly	• Metres of road obliterated	• N/A	Part of the BOQ
8	Excavation for the Tunnel / Underpass	• Contractor will be required to comply with the recommendations within the acquired NEMA Certificate of Approval for all operations; • The supervisor will inspect the cliffs / walls to ensure that no slope failure is likely and if any loose hanging cliffs / stones are observed, then the supervisor will knock them down and put in place protective measures. • Replant all erodible areas as soon as possible if affected by the road works; • The underpass / Tunnel will be sealed at the earliest possible time to minimize hydro-geological disturbance	• Area replanted • Records of Supervisors' inspection routine;	• Resident Engineer • Environmental & Social Specialist	• Daily during excavation	• Area in square metres or acres restored	• N/A	$3,000
9	Storm Water Disposal	• Channel storm water along already existing drains or channels; • Silt laden storm water to be directed away from the Nakivubo channel / wetlands and fragile ecosystems; self-drainage to be maintained within borrow areas and quarries. • Embankment slopes to be planted with ***Bahia grass*** or similar approved to control erosion.	• Number of Channels constructed, • Complaints recorded;	• Resident Engineer • Environmental & Social Specialist	• Daily	• Area in square metres / acres replanted	• N/A	$2,000

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		• Measures should be taken to prevent silt deposition from the road into the Nakivubo Channel. • Drains rom the Samba Link road will be wide enough to accommodate the storm water into Nakivubo Channel; • Borrow pits and quarries to be free draining.						
10	Soil Degradation and Pollution	• Construction materials to be stored in approved containers and washing areas for site equipment servicing and repair will be carried out in a defined area with a concrete pad draining to oil traps; • Provide secure stores for hazardous materials and refuse pits. To be demolished on completion. • Abandoned equipment, tyres, batteries, filters, sparkplug etc to be removed and carefully disposed of as required by law.	• Number of containers / stores for storing materials;	• Resident Engineer • Environmental & Social Specialist	• Weekly	• N/A	• N/A	Part of the BOQ
11	Air Quality (Increased dust and air pollution)	• Provide dust masks fitted with appropriate filters competent to remove crystalline silica dust from the breathing zone of each worker • All workers to wear full Personal Protection Equipment (PPE) and the Consultant and Contractor to enforce compliance; • Place flagmen in order to control construction traffic at suitable intervals along the haulage routes and within / close to busy areas (during construction) near schools / places of worship. • Dust suppression through wet crushing at crusher units and when appropriate by spraying dusty road surfaces with water to be enforced; • Contractor not to use community water sources for road use • Haulage Lorries carrying crushed material to be covered to reduce flying stones and dust;	• Occurrence of dust in the air. • Complaints from other residents • Number of waterbuses in use; • Source of water and holding capacity /tanks at crusher area. • Air quality monitoring results	• Resident Engineer • Environmental & Social Specialist	• Monthly for air quality monitoring	• CO_2 and other Greenhouse gases– ($\mu g/m^3$) or ppm • Others - Concentration ($\mu g/m^3$)	• PM_{10} – 500 Industrial and Mixed Use • PM10 - 200 Residential and Rural • PM10-100Sensitive • NOx - 120 Industrial and Mixed Use • NOx -80 Resident	For Air Pollution $30,000 Others part of BOQ

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		• Air quality monitoring survey at roadside area will be conducted as necessary and regularly to compare with the baseline data.					ial and Rural • NOx - 30Sensitive • SO_2 - 120 Industrial and Mixed Use • SO_2 -80 Residential and Rural • SO_2 – 30Sensitive	
12	Waste Disposal	• Demolished road structures to be carefully removed and recycled where possible; • Encourage UNRA provide a disposal area for excess excavation for future projects; • Contractor to balance cut and fill if possible • Workshop storage facilities to be licensed by NEMA. Waste oils to be transported to a licensed disposal site, all in accordance with the Waste Management Regulations (1999). • Bitumen tanks to be placed away from any drainage, placed on an impermeable surface and surrounded with a bund made from impermeable materials; • Hazardous waste to be disposed of in accordance with the manufactures specifications and stored in sealed drums before transporting to designated disposal points; • Washing areas for site equipment, servicing and repair to be in an area with a concrete pad.	• Drums of oil collected; • Presence of drums at site • Presence of mobile toilets; • Presence of impermeable surfaces and bunds	• Resident Engineer • Environmental & Social Specialist	• Daily	• N/A	• N/A	Part of BOQ

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		• Separate bins to be provided for recyclable materials and arrangements for recycling made. • Mobile toilets will be provided at site and garbage bins to be provided at strategic locations. • Separate male and female toilets and washrooms facilities to be provided. • Metal scrap and all other recyclable waste will be collected and recycled.						
13	Disruption of Flora, Fauna and Avi-Fauna	• Clearance of vegetation will be confined to those areas where it is inevitable (within the road corridor); • The Flyovers should be painted with easily visible colours so that they can be more visible to flying birds; • Employ a delayed approach to removing of trees to enable birds which might be laying eggs in those trees to hatch them; • Ensure that the plots around the Centenary Park, Clock Tower Area, between Moquino Roundabout and Samba Junction all of which have a higher Bio – Diversity are protected; • Regarding the Centenary Park all the removed trees should be documented and later replanted in consultation with the landscape office of the KCCA; • Encourage and adopt MOWT policy of planting trees along the boundaries of the road reserve; • Review the register of the trees that have been removed and replant with guidance from KCCA	• Number of trees replanted; • Identified number of trees that had birds' eggs in them;	• Resident Engineer • Environ& Social mental Specialist	•	• Number of trees Planted	• N/A	$8,200 for replanting, while as per the BOQ for the rest
14	Increased noise levels and vibration Due construction and Flyover	• Limit noise due to haulage/quarry traffic by keeping the construction fleet in good condition, well fitted with efficient silencers. Place flag Persons in order to control construction traffic at specified intervals during construction phase.;	• Noise levels (Construction vehicles and machine, Traffic noise). • Complaints from local residents	• Resident Engineer • Environmental & Social Specialist	• Monthly for monitoring noise and vibration	• Decibels for noise monitoring	• As provided under the National Environment (Noise	$5,000

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		• House the generators at the Contractor's camp site within a noise barrier structure to reduce noise levels; • At workshop areas, workers must use earmuffs (PPE) • Noise level monitoring as necessary during construction phase and operation phase. • Continue to monitor noise levels during the operational phase of the road; • For most areas the installation of Noise barriers will not be effective • Install Noise barriers at the Golf course Hotel, Police Quarters and at the Kindergarten. • Apart from the noise shielding, these noise barriers are expected to also protect sensitive receptors from garbage that might be thrown from the roads. • UNRA/KCCA will continue to monitor Vibrations during construction and operations of the road	• Complaints from workers				Standards and Control) Regulations, 2003	
15	Road safety during the operation of the road / FO	• The traffic code should be enforced by the police; • Road furniture must be cleaned and inspected regularly to check its condition; • The traffic code must be enforced by the police. • UNRA/KCCA and the Uganda Road Safety Council are recommended to continue sensitizing local communities of the Highway Code. • Police should give talks and training in good road behaviour at schools • It is recommended that the FO and the entire road are well lit throughout including in the bypass;	• Presence of road signs • Number of sensitization and training seminars with number of attendance; • No of complaints from local residents • No of traffic mishaps / accidents.	• Resident Engineer • Environmental & Social Specialist	• Every four months	• Money spent on sensitisation	• N/A	$12,000

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		• There should be measures to enforce the use of NMT and pedestrian lanes by those supposed to use them;						
16	Traffic management and Pedestrian Safety	• The Contractor will have to work closely with stakeholders to put in place a traffic management plan such that the Comprehensive Traffic Management plan will have been agreed on by the key stakeholders; • The Key stakeholders include UNRA, KCCA, Uganda Police Force, Presidential Protection Unit, and the community • The traffic management strategy will also include the pedestrian traffic and will ensure that their safety is taken care of; • The plan will be subject to regular reviews by the Contractor as guided by the stakeholders.	• Stakeholders involved; • Number of either traffic signals or flag persons, • Police officers assigned to manage traffic	• Resident Engineer, • KCCA • Uganda Police	• Traffic plan to be reviewed weekly or on demand depending on traffic challenges	• N/A	• N/A	Part of the BOQ
17	Workers Occupational Safety and Health	• The Contractor to provide a qualified Safety Officer • The Contractor must prepare and make available at site on request, a Safety and Health Policy Document • The Contractor must have in place a risk assessment and Safety & Health management plan; • The Contractor must make an inspection requisition of the Commissioner for site plant and equipment to be certified. • Personal Protection Equipment (PPE) (including masks, hard hats, boots, reflective vests, safety harnesses and gloves) for the workforce shall be mandatory, foremen to ensure compliance; • The Contractor shall (a) train workers in the use/purpose of PPE; (b) ensure that PPE items fit the users; and, (c) replace PPE items as needed and in accordance with the manufacture's specifications;	• Number of sanitation facilities; • Availability of bins • Presence of a Safety Officer; • Presence of PPE • Record of trainings for workers;	• Resident Engineer • Safety Engineer • Environmental & Social Specialist	• OSH monitoring to be conducted daily; • Training of workers to be done weekly and on induction	• N/A	• N/A	Within the BOQ

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		• First-Aid kits to be provided at every active working site as well as a clinic supplied and staffed by the Contractor in accordance with UNRA guidelines • Place flag Persons in order to control construction traffic at suitable intervals along the haulage routes and within / close to busy areas (during construction) near schools / places of worship. • Water spray, at least twice a day or as required. To be used for dust suppression at crusher units and dusty road surfaces within and close to busy sections. • House the generators if required on sites in a noise barrier structure to reduce noise levels; • Sanitation facilities provided at camps, workshop areas, crusher areas and at any other place where groups of workers are likely to concentrate; • Sanitation facilities for men to be clearly separated from those for women to protect their privacy • Bins for solid waste collection to be placed at the Contractor's camp and worksites to ensure that any hazardous waste (Torch and radio batteries, oils, and polythene papers and plastic bottles etc.) are separately collected and disposed off in accordance with the law; • Separate bins to be provided for recyclable materials and arrangements for recycling done with a suitable recycling facility to be identified; • Mobile / portable plastic toilets will be provided for workers along the project road (FO) and other working areas that are not permanent.						

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
18	Public Safety	• A premedical examination for workers should be conducted, followed by routine medical examination during the works and a final post medical examination. • Put a project-specific HIV/AIDS awareness/prevention programme in place as specified in the contract documents. • If an NGO is to conduct the AIDS and STD Awareness Mitigation Campaign in accordance with to UNRA requirements the Contractor will be responsible for identifying and retaining the NGO. • The Contractor will operate the clinic; • Adequate sanitation facilities to be provided at site.	• Presence of Clinic • Number of meetings;	• Resident Engineer • Environmental & Social Specialist	• Clinic to be operated continuously during working hours	• Money spent on clinic	• N/A	$36,000
19	Relocation of infrastructure and utilities	• When working with utilities (communications, power lines, water mains, sewer lines), it will be done in collaboration with the service provider and a due notice of at least one month is to be given. The same will be done for the relocation of major sign posts and road furniture where they exist; • The Contractor will design ways of working around the utilities so that relocation is minimized; • Light equipment will be used (as well as manual methods) in the initial stages of excavations taking care to see that utilities underground are not disrupted without warning as is always the practice within cities and urban centers. • Where the utility line is likely to be disrupted, the Contractor will halt the works until the utility provider has advised on the best way forward. • At all times the community should not be deprived of the service for a	• Number of utility lines etc. relocated • Complaints raised	• Resident Engineer • Environmental & Social Specialist	• Relocate before handing over to contractor	• Length of lines handed over (metres)	• N/A	In the BOQ

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		prolonged period (in excess of 24 hours) without the service; • Due notice to the community will be given (by the service provider) to the public in case short disruptions are envisaged;						
20	Contractor's and Consultants Obligations regarding OSH activities	• The Contractor will be required to be conversant with the UNRA Environment and Social Management System, • The Contractor must prepare a work permit that will be the guiding implementation document for each task to be commenced. Within the work permit, the Contractor will include both the method statement as well as the risk assessment. • In case of the operational conditions change such as meeting a rock within the road corridor, the risk will be assessed and the work permit amended accordingly to accommodate the method statement of how to handle the rock. • In the event that night activities are considered and yet this is outside the Certificate of EIA Approval for the Works, an application for variation of the Work Schedules will be done to NEMA by the Contractor • Night Work will be approved by the Consultant after he /she has studied the method statement, and being convinced that consultations have been conducted. Subsequently, the Contractor will ensure that the noise levels are monitored and minimized. • Contractor will ensure that Contractor equipment will have warning signs / beacon lights, Reverse lights, First Aid kits and fire extinguishers at minimum; • Contractor will ensure that night works are preceded by adequate	• Availability of work permit; • Method statements • Approvals from NEMA and Consultant • Reports from the Department of Occupational Health • Minutes of toolbox meetings; • Presence of safety Committee	• Consultant / RE, • NEMA • Department of Occupational health	• OSH activities to be inspected daily	• N/A	• N/A	In the BOQ

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		lighting of the project site to increase illumination and therefore visibility of the working area for safety of workers. • Following the registration of the working areas as worksites by the Department of Occupational Safety and Health, all equipment will be inspected at the beginning by a representative from UNRA / Ministry of works in addition to the mandatory statutory inspections from the Department of Occupational Safety and Health from the Ministry of gender • Contractor will ensure that there will be toolbox discussions / training regularly where safety will be emphasized. In addition, safety warnings and signage inclusive of reflective warning signs to be put at appropriate places. Warning signs will be of standard size. • The Contractor will be required to form a Safety Committee to conduct regular inspection of safety performance of the project and assess any performance gaps. • Utility Lines will be included in the work permit. They are to be mentioned in the work permit especially the risk analysis which will cover sewerage lines, water lines, power and communications lines. In case of overhead power lines, the risk will have to be assessed before construction of flyovers.						
21	Contractor's requirements to Human Resources Management	• Sign the Code of Ethical Conduct to Implement E&S safeguards • Develop E&S management plans and procedures in line with the UNRA ESMS e.g. Environment and Social Implementation Plan, Risk	• Code of conduct in place • Management plans in place	• Consultant / RE, • UNRA	• Monthly reports	• N/A	• N/A	In the BOQ

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		Assessment and OSH Management Plan, Restoration plans, Gender, HIV, Blasting etc. • Develop Code of conduct for his Workers • Develop Project Briefs/EIAs for all project support infrastructure including Borrow pits • Support the HIV Nominated service provider to implement the HIV program • Recruit Competent and Qualified Staff (for E&S implementation) including a Community Liaison Officer. • Employ Local persons on the project. • Provide measures for addressing Worker welfare issues e.g. Insurance, Contracts, feeding, transport, overtime, etc. • Develop a Grievance redress mechanism • Undertake Incident reporting and Investigation as specified in the ESMS manual. • Conduct Monthly and quarterly reporting on implementation of E&S safeguards on projects as specified in the ESMS manual. • Conduct Training and sensitization of all workers & the Community: and • Acquire all consents and permits required for the project;	• Project briefs developed • NEMA Certificate of approval in place • Number of competent staff in place • Monthly reports • Incident reports					
	Monitoring Plan with respect to PCRs (Clock Tower Relocation, Pan African Park, Katwe Shrine and Centenary Monument							
22	Relocation of the Clock Tower: - ***Iconic Nature of Clock***	• Relocate the CT within the same neighbourhood and the Pan African Park should be a good area since the land use designation is the same; • Design Team to enhance the Aesthetic beauty through appropriate land scaping;	• Approval for relocation plan by Department of Museums and Monuments • Records of implementatio	• Resident Engineer • Environmental Specialist • DMM	• Continuously during relocation	• N/A	• N/A	Subject to Assessment by DMM and Contractor

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		• In the new location the Clock Tower remains at the gateway and an icon • The relevant Minister will make Public Pronouncement regarding the Clock Tower relocation. • The design concept will remain the same and a replica or same as before CT to be placed; • Prepare relocation plan through discussion among relevant authorities (Relocation methods, location, schedule and conditions)	n status of the relocation					
23	Relocation of the Clock Tower: - ***(Potential Loss of Artefacts on the CT)***	• The three important Artefacts are the Door, the Clockworks and the Staircase which must be relocated to the new site; • That all the features of the tower will be documented before the relocation including checking of the Ph. (both the alkalinity and the acidity) of the soils in the new site which will be compared with those at the old site; • All other artefacts Identified by the conservator must be collected, identified, documented and moved to the new site; • A record of the History of the Clock Tower and why it was relocated to be written on the wall of fame within the Park or on the wall behind the gallery at the designed Clock Tower; • There will be an Archaeologist / Conservator on the team to ensure no artefacts in the place of relocation. Otherwise any artefacts found must be collected, identified and then moved to the location identified by the DMM • That all the attributes of the Clock Tower which include the Clock and	• Approval for relocation plan by Department of Museums and Monuments • List of artefacts collected; • List of personnel involved in the relocation;	• Resident Engineer • Environmental Specialist • DMM	• Daily for relocation and weekly for documentation	• N/A	• N/A	Subject to Assessment by DMM

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		the bell will be available and kept intact; • The Contractor will continue working with the DMM to check the history of the Clock Tower's conservation, for example literature on all repairs, so as to understand whether there were any previous cracks or damages; • An architect must be procured before the relocation process to prepare details of the design of the replica concrete support structure and associated support structures and surrounding landscapes all to be submitted to the DMM; • The contractors design must be made in a way that protects the historical and original look of the tower while maintaining some of the aspects like the clock, steel ladders, original door, electrical fittings and the upper most part.					
24	Relocation of the Clock Tower: - ***(Managing Stakeholders expectation CT)***	• Already there has been intensive consultations and the relocation is accepted by all stakeholders although some have given conditions; • The Ministry of Foreign Affairs will handle the diplomatic fall out should it be an issue; • Continue to engage stakeholders during the construction and after; • Before the commencement of the relocation process, the Minister responsible for tourism and Antiquities will make a Public pronouncement regarding the Clock Tower relocation; • Increase recreational space as well aesthetic beauty of the surrounding environment;	• Minutes by MOFA; and • the copy of the ministerial announcement;	• Resident Engineer • Environmental Specialist • DMM	• Weekly during construction and quarterly afterwards	• N/A	• N/A	Subject to Assessment

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		• Ensure that access to the Monument is unrestricted for those wishing to enjoy it; • The Communication Strategy to put the relocation of PCRs on high priority.						
25	Pan African Park ***(Land take and removal of VIP trees)***	• Ensure that land take is minimized by taking the minimum as shown in the design; • The Ministry of foreign Affairs expected to handle any challenges arising out of Uganda's development efforts; • Resolve the landownership dispute at the Park (is it KCCA or the Global Pan African Movement) and compensate the right owner; • Replace the relocated trees in line with recommendations of the KCCA Landscaping Department; • For the CHOGM trees a minimum of three saplings of a specific species as agreed on by both KCCA and the care taker of the Park; • Contractor will ensure that the conditions in the KCCA Tree Cutting Licence / Permit are met to the full; • Preserve the carbon footprint through replanting in designated places;	• Amount paid for land compensation ; • Number of saplings planted; • Minutes kept by the MOFA about relocation;	• RE • UNRA • KCCA	• Weekly	• Hectares of land taken	• hectare	Subject to valuation Report
26	Byuma Bya Katwe Shrine ***(relocating one of the stones of the shrine)***	• Consultations with the Kingdom, care takers have been done and there is no objection to relocation; • Relocation of the stone must be done to within the shrine; • Before relocation engage the shrine caretakers to guide the teams so that the shrine is not desecrated; • At all times there must be continuous engagement with the caretakers and the Kingdom; • The chance of finding artefacts at the site is high, hence the conservator on	• Absence of presence of the stone	• RE • Cultural leader • KCCA	• Daily during relocation	• N/A	• N/A	Nominal

Item	Environmental Impacts	Environmental Management Plan (Mitigation Measures)	Monitoring Indicators	Monitoring (Who)	Frequency	Measurement Unit	Standard	Estimated cost in USD
		the team to be on standby during relocation of the Stone.						
	Others							
27	Other Impacts on Physical Cultural resources	• No ancillary works, borrow areas within 2km of an identified cultural site of importance; • The sculpture within Centenary Park will be ring fenced and left intact by the road works. •	• Presence of the stakeholders during relocation • Recorded notes of the materials and status of the monument	• Resident Engineer • Environmental & Social Specialist and • Department of Museums and Monuments	• Monitoring monthly	• N/A	• N/A	Within the BOQ
28	Impacts on landscaping and Aesthetics	• Implement the planned Environmental and Landscaping Master Plans in conjunction with the relevant Department within the KCCA.	• Number of trees planted versus the ones removed; • Species planted, • Volumes of soil moved •	• Resident Engineer • Environmental Specialist and • KCCA	• Weekly inspection	• Area planted in acres	• N/A	$16,500
29	Use of Centenary Park as stocking area	• Remove from Centenary Park the Monuments (under Supervision of KCCA and or DMM) and keep them in a safe environment in readiness for their replacement after the construction;	• Number of items removed; • Record of the removed items;	• Resident Engineer • Environmental Specialist and KCCA	• As discussed above	• N/A	• N/A	Within the BOQ
30		• Restore the Centenary Park to its position with appropriate improvements following the guidance from the relevant KCCA landscaping directorate;	• Numbers restored	• Environmental Specialist and • KCCA • DMM	• Towards end of the works	• N/A	• N/A	Within the BOQ
	Total excluding Land acquisition costs at exchange rate of 1 USD$ to Ugx 3650.00							**USD$ 289,500.**

9 CONCLUSIONS AND RECOMMENDATIONS

The purpose of the Environmental and Social Impact Assessment (ESIA) was to assess the potential impacts that the proposed road construction / upgrading Project will have on both the bio–physical and social environments.

After the preliminary design, there was a Design Change. The Design Change increased the cost of land acquisition due to the extra land area it took. Minimal encroachment has been proposed along the edges apart from the additional Nsambya road Link.

After the design Change however, the a detailed study to assess the impacts on the PCRs (Clock Tower, Byuma Bya Katwe, Pan African park and the Centenary Park was conducted. Key stakeholders agreed with the relocation and provided conditions to be followed while relocating. Among others the following are to be observed: -

An archaeological study was be conducted at the new place of Clock Tower relocation before the process takes place in line with the DMM recommendations;

An architect must be procured before the relocation process to prepare details of the design of the replica concrete support structure, associated support structures and surrounding landscapes which will be submitted to the DMM;

Documentation at all phases before and during relocation will have to be considered.

The team conducting the documentation exercise will comprise of at least one conservator from the DMM.

Before the commencement of the relocation process, the Minister responsible for tourism and Antiquities will make a public pronouncement of the Clock Tower relocation.

Regarding the Pan African park, Stakeholders agreed that the trees can be removed. While replanting at least three samplings for each tree should be replanted. The KCCA has given guidelines regarding the planting of trees.

The stone in the RoW at the shrine can be removed and relocated within the main shrine.

Regarding the Centenary Park Monument, the following are relevant: -

The Centenary Park monument should be removed, kept safely during construction and relocated within the park after construction;

During removal and packaging, KCCA and DMM will be involved;

Visibility of the monument will need to be improved;

To design the appropriate platform, the Contractor will engage the original architects; and

The restoration committee should include (if possible) the Artist who designed this monument [redacted] and [redacted]

However the noise forecast results show that the noise environment of the Project area will not be changed drastically. This is because the project will reduce traffic congestion which is a major source of noise. Solving traffic congestion by the Project will lead to a positive impact on noise environment around the Project area. Nonetheless, the noise barrier wall at Golf course, Kindergarten and Police quarters will need to be installed.

Regarding the Centenary Park, the land ownership needs to be harmonized so that the progress of the project is not impeded.monuments are rightly under the DMM.

While the noise forecast did not indicate a lot of future negative impacts, it is recommended that periodical monitoring of noise environment be conducted during the operational phase and constructional phases of the project. Depending on the results of the monitoring study, adequate mitigation measures for the Project area can

be developed and implemented by the Project teams.

Otherwise all baseline biophysical and socio-environmental conditions have been documented giving an indication of a largely urban environment with huge built up areas and few green spaces., the predominant land use within the project area is institutional with very few settlements.

The critical environmental aspects that were identified included the following:

- Water quality
- Biodiversity
- Air and Noise
- Vibrations
- Infrastructure and utilities
- Traffic
- Economic Activities amongst others.
- Physical Cultural Resources

Through field assessments and stakeholder consultations a number of environmental and social considerations were integrated into the design thereby reducing the project's footprint considerably. The design change did not increase the foot print appreciably. The considerations to reduce impacts have included the following:

- ***Avoiding of buildings, staff quarters for most of the police and major structures like Kitgum House in order to reduce the impacts of involuntary relocation and compensation;***

All these actions were undertaken with close reference to Uganda's applicable National Environmental and Social Legal and Policy Requirements as well as those of the Multilateral Lenders especially the JICA Guidelines for Environmental and Social Considerations (as translated) - April 2010 JICA.

Following the design change and integration of environmental and social considerations, the impacts discussed in this EIS did not present a very high risk since they will be managed during construction, operation and maintenance as already presented through mitigation and enhancement.

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ANNEX 1: LIST OF CULTURAL HERITAGES WITHIN KAMPALA CITY

SN	Name	Status
1	Independence Monument	Statue representing 1962 Independence Monument (An adult person lifting a new born infant (Uganda).
2	Independence Tablet	Commonwealth independence October 9 -1962, Jubilee park.
3	Kololo Monument	50 years of independence.
4	Kololo Hero Monument	Ignatius Musaazi independence liberation hero
5	Kololo/ceremonial grounds	Commemoration of independence/raisin g of Uganda's flagon the 9th 0ctober 1962.
6	Mackay Memorial, Natete	Anglican Church at the 1st site of occupation by the CMS missionaries in the country (1890), headed by Reverend Mackay.
7	Busega Martyrs Memorial	Rubaga, Three Anglican Martyrs were killed and buried here.
8	Bulange	Royal seat of the Buganda Kingdom.
9	Nagalabi Buddo	Coronation site for Buganda Kingdom Kings.
10	All Saints Church Kisozi	One of the first and oldest churches in Uganda.
11	Shree Shanathan Dharma	1954 Hindu Temple, original form, rich oriental architecture &traditional building skills.
12	Rubaga Cathedral	Head of the Catholic churches.
13	Namirembe Cathedral Hill	Head of Anglican Churches, historic cave and historic buildings by the missionaries. 1st cathedral was built in 1th march 1890-1894 made up of mud and wattle, and grass by architect Nicodemo Sebwato and opened by Bishop Alfred Tucker, collapsed after two years. THE SECOND CATHEDRAL WAS DESIGNED BY APPOLO Kagwa in 1894 opened 14th July 1895. In 1901 King Daudi Cwa laid foundation stone for the third Cathedral to begin, which was also destroyed by fire after lightning stroke In 1902.8th November 1915 Kabaka Daudi Chwa laid the foundation for the fourth cathedral and consecrated 13th September 1919 by Bishop Willis. In more permanent materials. It had three Chapels, Bishop Hannington chapel, Mary Nsubuga Chapel, and Cannon Apollo Kivebulaya. It acquired an organ in 1923 which is still used to date
14	Gadaffi Mosque	The main seat for the Chief Khadi of the Muslim faith Uganda.
15	Kibuli Mosque	Seat for the Muslim faith built in 1945 by the Aghakan and Prince of Buganda.
16	Bahai Temple	Seat for the Bahai Faith
17	Lusaze Lubya Church	Catholic mission of 1879 Kijukizo church
18	Fort Lugard, Old Kampala	Established by Captain Lugard1890 where he raised the British flag, served as and headquarters up to 1894 Survived by the first museum in the country and the Gaddaffi mosque.
19	Aghakan Mosque	Old Kampala
20	St Athanasius Bazzekuketta	Mengo Memorial, Catholic Martyr
21	St Matia Kalemba Mulumba	Site in memory of the oldest Martyr of the 22 catholic martyrs.
22	High Court building Nakasero	Seat of Highest Court building in the country.
23	The Parliamentary Building	Seat where the law makers of the country meet to transact business.
24	Uganda Bookshop	Oldest bookshop plot 4 Colville street 1927 publishing and printing house.

SN	Name	Status
25	Makerere University Building	Ivory Tower building as one of the oldest iconic education institutional seat.
26	Basiima Bakyagaya house	Late Sir Apollo, Kagwa's house, on Kabaka Njagala Road, built 1903.
27	Buganda court building	Mengo
28	Doset building	At Makerere university
29	Nagulu communications mast	Two national for television and radio
30	Uganda Museum	Oldest Museum in East Africa
31	National Theatre	National Culture Centre
32	Public Library	On Buganda Road House in an Indian Building.
33	Nommo Gallery	African village.
34	Tulifanya Gallery	Art gallery and craft shop.
35	St. Balikudembe (Owino) Market	Traditional market in centre of city.
36	Nakasero Market	Built in 1927.
37	Mulago hospital	National Referral Hospital. Old Mulago was founded in 1913 by Sir Albert Ruskin Cook, while the New Mulago facility was completed in 1962.
38	Musa body metal works	Katwe plant that fabricates oil refineries and brick making.
39	Twekobe Palace	Kabaka Mutesa II Residential palace
40	Buttikiro	Katikkiro of Buganda Official residence.
41	Kabaka lake	Man-made Cultural Water Body.
42	Kampala Club	At Sezzibwa road is the oldest club in Kampala
43	Kisingiris House	One of those historic buildings of the Kabakas Chiefs.
44	Tefio Kisonsokole	
45	Sir Albert cooks house	Makindye, Kabaka Birth place.
46	Kawutas house	Ring road.
47	CHOGM Monument	Officially known as the CHOGM monument, commemorates the hosting of the heads of government meeting in Uganda 2007. An imposing copper structure
48	**Clock Tower**	**Commemorating the queen visit in 1954 built within the Queen's Way.**
49	Kololo Airstrip	Monuments, burial for heroes, airstrip national functions.
50	Constitutional square	Upper part commemorates World war 2 victims, lower part is Monument of the constitutional square.
51	Kasubi Tombs	Grass thatched round house containing the tombs and insignia of Mutesa I, and three northern subsequent rulers of Buganda.
52	Kasubi Masgid Tawahud Mosque	Built by Mutesa I in 1870 when he first had his capital at Kasubi, Nabulagala.
53	Wamala Tombs	Grass thatched round hut very similar to Kasubi tombs, containing the tombs of Sunna II of the Buganda kingdom 1856.
54	Mapeera Bakateyamba, House Nalukolongo.	Established by Mapeera to treat the disabled and the elderly.

SN	Name	Status
55	Kiwewas Tombs	At Masanafu in Kampala is the Tombs of King Kiwewa.
56	Old railway house	Railways building –More information
57	GOU analytical lab	Built in 1992, a historical building
58	Corner House	Plot 44 Rashid Hamis road (historic buildings)
59	St Peters boys Nsambya	One of the first schools by the Hill Mill Fathers 1907
60	Nsambya convent	Several historic buildings(assign someone to take the history)
61	Musajalumbwa house	
62	Kisingiris house Mengo	Residential
63	Kakungulus house	
64	Gomboloa House	Balintuma road
65	Speke hotel	Built in 1920, historical and has maintained colonial look.
66	Port bell pier	1st- pier for large ships landing in Luzira
67	Granda imperial Hotel	One of the oldest hotels in Kampala Initially known as Grand hotel.
68	Ruparellia Building	Martin Road
69	Mawandas House	Salaama Road
70	Jimmy Purmas house	Salaama Road
71	**Centenary Monument**	**Monument commemorating 100 years**
72	Mutesa Monument	Located at Grand Imperial round about.
73	**Pan African Square**	**Beginning of African to fight for independence**
74	Nakasero Photo	Old military base for the British.

Source : Ministry of Tourism, Wildlife, and Antiquities

ANNEX 2A: LETTER OF CLOCK TOWER RELOCATION INSTRUCTIONS FROM THE DMM

Telephone/fax 256-41-232707
Email: mumod@mtti.go.ug
: rmwanja@mtti.go.ug

THE REPUBLIC OF UGANDA

MINISTRY OF TOURISM, WILDLIFE AND HERITAGE
Department of Museums and Monuments,
Plot No. 5 Kira Road,
P.O. Box 5718,
Kampala-Uganda.

MMD/ADIM/06

15th October 2015

The Executive Director
Uganda National Roads Authority.
Kampala

Dear Sir/Madam,

RE: CLOCK TOWER MONUMENT RELOCATION

The Department of Museums and Monuments has now accepted the relocation of the Clock Tower Monument following the new improved designs by UNRA and JICA. The designs have elaborated on :-

- Improved visibility, greater accessibility by the general public and tourists. The new location will be only 100 meter way from the Queens way, so the clock tower will still be in line with the history of queen's way Landscape. The two different histories of Pan Africanism and colonialism will not be juxtaposed as earlier designed.

However the following actions need to be followed.

1 Identify and earmark the site for the relocation from the Pan African square.
2 An archeological study to be conducted at the new place of relocation before the process takes place.

3 An architect be procured before the relocation process to prepare details of the design of the new replica concrete support structure and associated support structures and surrounding landscapes be submitted to the department.

4 Documentation at all phases, before and during relocation have to be considered. Amongst the team to conduct the documentation exercise should compose at least one (Conservator) from the Department of Museums and Monuments.

5 Before the commencement of the relocation process, the minister responsible for Tourism and Antiquities will make a public notice of the clock tower relocation.

Department of Museums
&
Monuments

[redacted]

ANNEX 2B: LETTER APPOINTING PERSONNEL FROM DMM TO WORK WITH CONTRACTOR

Telephone/fax 256-41-232707
Email:info@ugandamuseums.ug
mwanjankale@gmail.com

MMD/ADIM/06

THE REPUBLIC OF UGANDA

MINISTRY OF TOURISM,WILDLIFE & ANTIQUITIES DEPARTMENT OF MUSEUMS AND MONUMENTS, PLOT NO. 5 KIRA ROAD,
P.O. BOX 5718,
KAMPALA-UGANDA.

Date: 17th July 2019

RECEIVED
17 JUL 2019
Time: 17:05
Shimizu-Konoike Joint Venture

The Executive Director

Uganda National Roads Authority

Kampala

KAMPALA FLYOVER CONSTRUCTION AND UPGRADING PROJECT (KFCRUP)

Clock Tower and Monument Relocation

Reference is made to your letter ref no UNRA/ORBD/KFO/OTH/003 dated 26th June 2019. Please also refer to our letter dated 15th October 2015 where we gave a conditional acceptance on relocation of clock tower monument on Queens's way Entebbe road.

We had a meeting with your contractor M/s Shimizu-Konoike and we recommend that UNRA and Contractor work with our following staff on matters of relocation of clock tower.

1. Archaeological assessment- Mr Dismas Engwen, Senior Conservator, Sites and Monuments.
2. Issues to do with architectural plans of the replica, Mr Lukwago Denis (Architect/Conservator).
3. Documentation before, during and after relocation Mr Nassar Kibirige (Ass. Civil Eng and Conservator) will handle.

UNRA and M/s Shimizu-Konoike will cater for all the allowances required for the exercise.

Department of Museums

[redacted]

ANNEX 3: COPY OF NEMA ESIA CERTIFICATE OF APPROVAL

Original

0005186

THE REPUBLIC OF UGANDA

THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)
The National Environment Act Cap. 153
The Environmental Impact Assessment Regulations, S.I. No. 13 of 1998

Certificate of Approval of Environmental Impact Assessment

Certificate No. NEMA/EIA/ 5186

*This is to certify that the Project Brief/Environmental Impact Statement***
received from

M/s. UGANDA NATIONAL ROADS AUTHORITY (UNRA)

of P.O.BOX 28487, KAMPALA

submitted in accordance with the National Environment Statute to the National Environment Management Authority (NEMA) regarding:
THE GREATER KAMPALA ROADS IMPROVEMENTS – KAMPALA FLYOVER/

(Title of Project) ROAD PROJECT

briefly described as THE GREATER KAMPALA ROADS IMPROVEMENTS PROJECT

(Nature, Purpose)

located at FROM QUEENS WAY TO JINJA ROAD, KAMPALA DISTRICT

(District/Sub-county/City/Town/Ward)

has been reviewed and was found to:
** has been reviewed and was approved.
** have significant environmental impacts and the following appropriate mitigation measures were identified and made a condition precedent for approval and implementation:

=PLEASE TURN OVER=

(Attach relevant details where necessary)

Dated at KAMPALA on 28TH AUGUST, 2014 20

Executive Director (NEMA)

ORIGINAL: Developer; DUPLICA... Authority; QUADRUPLICATE: Any other relevant agency

** Delete whichever is not applicable

CONDITIONS OF APPROVAL

(Additional Information Sheet)

CONDITIONS OF APPROVAL FOR THE PROPOSED UPGRADE OF THE KAMPALA ROADS IMPROVEMENT PROJECT (GKRIP)

In addition to implementing the mitigation measures identified in the Environmental Management and Monitoring Plan, this Certificate of Approval for this project is granted on condition that the Developer, M/s UGANDA NATIONAL ROADS AUTHORITY, shall comply with the Approval Conditions stated below:

ADMINISTRATIVE CONDITIONS OF APPROVAL

1. **This Certificate of Approval is VALID for a period of 5 YEARS– the period which covers both the construction and operational phase of the project.**
2. **The project must commence within the FIRST 24 MONTHS (from the date of approval) of the validity period, failure of which, the Certificate may be varied, cancelled or otherwise dealt with by this Authority.**
3. **The Executive Director, NEMA should be NOTIFIED of any transfer of ownership, variation/alteration of the project design or components, or surrender of this Certificate of Approval.**

1.0 SPECIFIC CONDITIONS OF APPROVAL

(i) Seek consent and guidance from the relevant Lead Agencies on providing off-sets and compensation for inevitable loss of, for example, land, communities/public utilities, so as to minimise conflict amongst concerned parties.

Dated at **KAMPALA** on **28TH AUGUST, 2014** ~~20~~

Signed

Executive Director (NEMA)

Printed by Uganda Printing and Publishing Corporation

GREATER KAMPALA ROADS IMPROVEMENT - 2014 | CERT.NO.5186

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NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

CONDITIONS OF APPROVAL FOR ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR THE PROPOSED GREATER KAMPALA ROADS IMPROVEMENT - KAMPALA FLYOVER/ROAD PROJECT, IN KAMPALA CITY

1.0 SPECIFIC CONDITIONS OF APPROVAL (...cont/d)

(ii) Carry out separate environmental impact assessment (EIA) for sites identified for workers' camps and storage yards, construction material and for the material burrow site areas to be used for the project and submit to this Authority for review; and, ensure that no quarrying activities or excavation of road construction material is carried out in regulated areas including, wetlands, lakeshores, existing within the project area of influence without consent and approval by the relevant lead agencies, and this Authority.

(iii) Obtain a water abstraction permit from the Directorate of Water Resources Management (DWRM) for abstraction of any surface-water or ground-water for use during the road works as required under Regulation 3 of the Water Resources Regulations S.I. 152-1.

(iv) Consult with the Ministry of Tourism, Wildlife and Antiquities before relocation of major monuments such as Clock Tower Monument, located in the sections to be traversed by the road.

(v) Carry out annual environmental audits in accordance with the provisions of the National Environment (Audit) Regulations, 2006, and submit the **first Environmental Audit Report** to this Authority by **September, 2015**.

(vi) In accordance with section 22 (4) of the National Environment Act, Cap. 153 take any reasonable measures and mitigate any other undesirable environmental impacts that may arise due to implementing this project, but were not contemplated during the conduct of the environmental impact

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assessment and by the time of issuing this approval; and report on those measures to the relevant Lead Agencies and this Authority.

2.0 GENERAL CONDITIONS OF APPROVAL

(vii) Institute an STD and HIV/AIDS awareness and prevention program to sensitize (a) road construction related staff/workers; (b) the community residing and /or working in the road catchment areas; and (c) long distance lorry drivers, from the time of contractor mobilization through the defects-liability period; and, liaise with the non-governmental organizations engaged in HIV/AIDS programmes, to ensure proper implementation of the awareness and prevention programme.

(viii) Ensure that the recruitment of workers for the road construction is done in close collaboration with the local leaders to ensure that the local population is given first priority as much as possible, to minimize on the influx of people into the area and the associated disruption of the social setting of communities within the project area, or other undesirable impacts.

(ix) Ensure that licensed waste handlers are contracted to collect, treat and dispose of hazardous wastes generated during project implementation in observance of health, safety and environment requirements; and that the storage and transportation of hazardous waste at the sites complies with the National Environment (Waste Management) Regulations 1999.

(x) Carry out awareness among the communities likely to be affected negatively by the proposed upgrade works, in close collaboration with the local leadership of the area and other relevant Lead Agencies, to assist in linking the contractors with the affected communities to be compensated and/or resettled and for provision of relevant information on certain aspects as may be required during the road works from time to time.

(xi) Obtain approval (license) from the department of petroleum Supply (Ministry of Energy and Mineral Development) for sites designated for storage of fuel to be used during project implementation.

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(xii) Put in place measures to mitigate construction phase impacts such as dust emission and excessive noise generation, so as to minimize adverse impacts on workers and the neighbouring communities; and should include use of water sprinklers to control dust emissions during the upgrading of the road.

(xiii) Put in place appropriate safety procedures and occupational health and safety measures (including provision of first-aid kits) for the work-force; and, ensure that the work-force is provided/equipped with appropriate protective gear (over-coats, hand-gloves, respiratory-masks, safety gum-boots, helmets, eye-goggles, etc), to guard against occupational hazards associated with road construction activities.

(xiv) Ensure that any camp sites for construction workers are located away from ecologically sensitive areas such as riverbanks and wetlands or any other prohibited areas.

(xv) In accordance with the National Environment (Waste Management) Regulations, 1999, ensure that all solid waste including construction debris is properly collected and disposed of in sites outside regulated ecosystems that have been approved by the Kampala Capital City Authorities.

(xvi) Install fire-fighting equipment for control of any fire risks/hazards that could occur at the office premises, fuel pump, maintenance workshops and workers camps and ensure that all the workers are trained in aspects of fire control and management.

(xvii) Implement environmental pollution control measures to manage waste oil or oil/ fuel spills resulting from reconstruction operations; and, ensure that proper clean-up operations are instituted where oil/fuel spills occur, and waste is collected and disposed of by an authorized agent.

(xviii) Ensure that the contractors adhere to and implement contractual obligations pertaining to solid waste and sanitary waste (sewage, etc) management and disposal, and that no such waste is dumped into sites not designated as dump-sites including regulated areas such as rivers and wetlands.

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(xix) Install culverts of appropriate size at all recommended bridges and road crossing areas including wetland areas so as to minimize interference with drainage systems, control floods or siltation of water sources in the surrounding areas fringing the road.

(xx) Ensure that this Certificate of Approval is displayed in selected locations of the different project sites and available at all times during execution of the project.

(xxi) Implement the Environmental Management and Monitoring Plan as indicated in the EMMP, and ensure record keeping as required under Section 77 of the National Environment Act, Cap.153, and their transmission to this Authority as required under Section 78 of the Act.

(xxii) Fulfill any other conditions and requirements as may be prescribed from time to time by the Kampala Capital City Authority, the Ministry of Works and Transport (MOWT), the National Environment Management Authority (NEMA), and any other Lead Agency.

3.0 CONSTRUCTION PHASE CONDITIONS OF APPROVAL

(xxiii) Put in place a road safety awareness program to educate the general public within the road catchment areas about road safety during the upgrade and improvement of the roads.

(xxiv) Liaise with the various utility providers including National Water and Sewerage Corporation, UMEME and Telecom companies among others) for relocation of utility lines to ensure minimum interference with the utility services during the road construction works.

(xxv) Ensure that traffic is regulated and appropriate and clear road signage are installed at various points and road junctions and access roads leading to and from the main roads being upgraded, to alert road users of ongoing

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road works that are likely to impact on traffic, in order to minimize accidents.

(xxvi) Impose speed limits on trucks ferrying construction material for the project to avoid accidents and ensure that the trucks are covered with tarpaulins to prevent spillage and littering of the materials, and ensure that maintenance services on construction vehicles, machinery/equipment is carried out in designated areas to reduce incidences of soil and water pollution.

(xxvii) Put in place measures to control soil erosion during road works and post-construction period, and that appropriate and adequate drainage systems are put in place along the entire lengths of the various roads to handle storm-water run-off and control flooding; including use of appropriate soil erosion control measures that will minimize accumulation of sediments in the main drainage channels.

4.0 OPERATIONAL PHASE CONDITIONS OF APPROVAL

(xxviii) Install and regularly maintain standard guard rails on the upgraded roads for safety mitigation in areas of sharp bends and tight corners, and as well include various stop over points in the road design to enable easy stopovers by road users as may be required.

(xxix) Ensure regular inspection and maintenance of the roads to the required standards to sustain their functionality.

5.0 NOTIFICATION CONDITIONS OF APPROVAL

(xxx) Seek written approval from this Authority for any operational changes under this Certificate.

(xxxi) Ensure that this Authority is notified of any malfunction of any system within 12 hrs and the mitigation measures put in place.

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THE REPUBLIC OF UGANDA

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

(xxxii) Notify this Authority of the intent to decommission the project components three months in advance in writing.

6.0 RESTORATION AND DECOMMISSIONING PHASE CONDITIONS OF APPROVAL

(xxxiii) Restore all sites where construction materials will be excavated, including burrow-pits, murram-pits, quarry areas, and any other excavated areas, by re-filling them, re-vegetation and/or landscaping, and this should be in close consultation with the relevant District and sub-county Authorities, and/or relevant lead agency.

(xxxiv) Ensure that a decommissioning plan is submitted to this Authority for approval at least three (3) months prior to decommissioning of the project components.

(xxxv) Undertake to decommission the project components when their life-span come to an end as per the decommissioning plan, or as will be prescribed by the relevant Lead Agencies.

(xxxvi) Ensure that all pollutants and polluted material is contained and adequate mitigation measures provided during this phase.

7.0 SUSPENSION / WITHDRAWAL / CANCELLATION CONDITIONS

(xxxvii) This Certificate of Approval may be withdrawn or cancelled due to the following:

(a) if there is no compliance with any of the **Specific Conditions** set out in this EIA Certificate in **Section 1.0 above**;

(b) where there is a substantial modification of the project implementation or operations which may lead to un-assessed adverse environmental impacts that were not evaluated at the time of issuing this Certificate of Approval; and

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Plot 17/19/21 Jinja Road
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Website:www.nemaug.org

GREATER KAMPALA ROADS IMPROVEMENT - 2014 | CERT.NO.5186

THE REPUBLIC OF UGANDA

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

(c) where there arise substantive undesirable effects that were not contemplated during the issuance of this Certificate of Approval.

DATED AT KAMPALA ON 28TH AUGUST, 2014

Signed:

EXECUTIVE DIRECTOR (NEMA)

c.c: The Permanent Secretary
Ministry of Works and Transport
ENTEBBE.

c.c: The Permanent Secretary,
Ministry of Gender, Labour and Social Development,
KAMPALA.

c.c: The Director,
Directorate of Water Resources Management,
ENTEBBE.

c.c: The Commissioner,
Department of Occupational Safety and Health,
Ministry of Gender, Labour and Social Development,
KAMPALA.

c.c: The Executive Director,
Kampala Capital City Authority,
KAMPALA.

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GREATER KAMPALA ROADS IMPROVEMENT - 2014 | **CERT.NO.5186**

THE REPUBLIC OF UGANDA

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

c.c The Director,
Directorate of Physical Planning,
Kampala Capital City Authority,
KAMPALA.

c.c The Director,
Directorate of Public Health and Environment,
Kampala Capital City Authority,
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ANNEX 4: LIST OF ADD[redacted]OLDERS INTERVIEWED AFTER DESIGN CHANGE

RWENZO GREEN ASSOCIATES

REVIEW OF THE ENVIRONMENT AND SOCIAL IMPACT STUDY FOR THE PROPOSED KAMPALA FLYOVER PROJECT, KAMPALA CAPITAL CITY

List of Contacted Persons

DATE: 19-Oct 2017

LEAD AGENCY/KEY STAKEHOLDER

5							
6							
7							
8							
9							
10							

RWENZO - GREEN ASSOCIATES: - "Preserving the Environment and Sustaining Development through Environment, Social and Climate Impacts Assessments"

RWENZO GREEN ASSOCIATES

REVIEW OF THE ENVIRONMENT AND SOCIAL IMPACT STUDY FOR THE PROPOSED KAMPALA FLYOVER PROJECT, KAMPALA CAPITAL CITY

List of Contacted Persons

DATE: 17/06/2019 DISTRICT: KCCA.

[redacted]

6							
7							
8							
9							
10							

GREATER KAMPALA ROAD NETWORK AND TRANSPORT IMPROVEMENT
CONSULTANCY SERVICES FOR ENVIRONMENTAL ASSSESMENT (EA) AND RESETTLEMENT ACTION PLAN (RAP) BY RWENZO GREEEN ASSOCIATES LTD ON BEHALF OF JICA
List of Contacted Persons

DATE: LEAD AGENCY

[redacted]

7						
8						
9						
10						

GREATER KAMPALA ROAD NETWORK AND TRANSPORT IMPROVEMENT
CONSULTANCY SERVICES FOR ENVIRONMENTAL ASSSESMENT (EA) AND RESETTLEMENT ACTION PLAN

[redacted]

5										
6										
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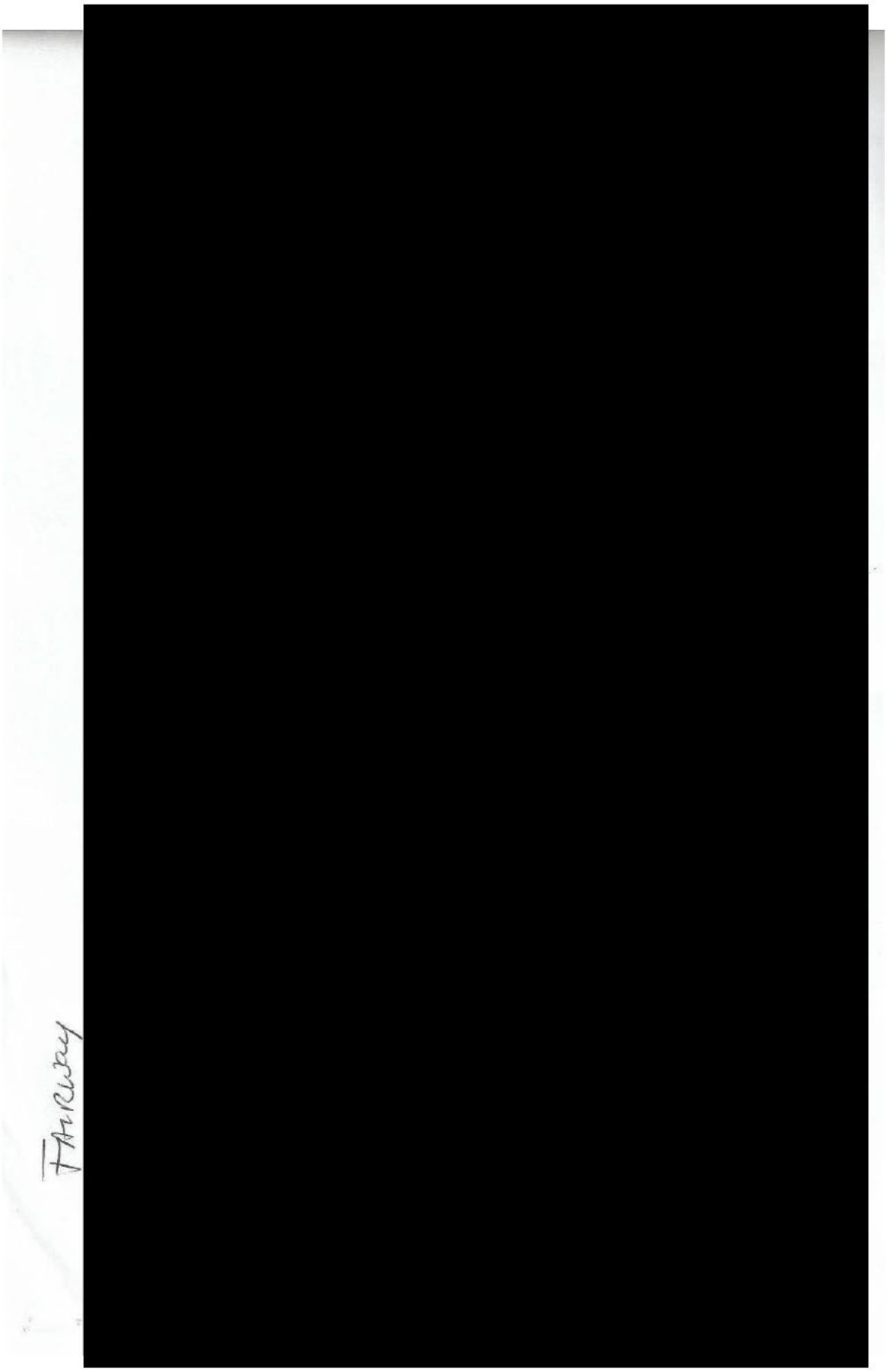
9										
10										

RWENZO - GREEN ASSOCIATES; - "Preserving the Environment and Sustaining Development through Environment, Social and Climate Impacts Assessments"



ANNEX 5: MINUTES OF SUBSQUENT MEETINGS AFTER DESIGN CHANGE

RECORDS OF A MEETING HELD BETWEEN STAKEHOLDERS AND RWENZO GREEN ASSOCIATES (FOR ICS) IN RESPONSE TO DESIGN CHANGE FOR THE KAMPALA FLY OVER PROJECT.		
Composition, activity, or Issues	**Concerns, comments, Observations**	**Responses, Remarks**
General observations of the meetings: They were one on one meetings to review the changes in the status of monuments following the design change for the KFO		
PRESENT IN MEETING	[redacted]	N/A
Purpose of the meeting.	To discuss the implications of design change to the guidelines that had been provided by the Department of Museums and Monuments.	N/A
Date	• **Monday, 17 June, 2019**	
General discussion	The team leader introduced the subject by detailing the proposed design changes and the likely impacts if any. In particular, that there was little change at the Clock Tower monument, while at the Centenary monument, the design had changed quite a bit to allow for the BRT. **The Principal Conservator** guided as follows: - - That the land to where the Statute is to be moved will need to be passed on to the Uganda land Commission to enable the DMA&A control the Monument. - That KCCA should pass on the land where the monument is located to ULC and this is the reason why the Minister has to gazette this land. - Alternatively, KCCA and the department are to into an MOU regarding monuments in the city. These monuments would be specifically mentioned; - On removal of the Monument, she proposed that if possible the monument should be carried in one piece. Otherwise it can be cut into pieces, but this should be after stakeholders have agreed on the methodology; **The Commissioner** guided as follows - That the guidelines given were OK, but she was waiting for a letter from UNRA requesting for staff. - That it will be better to expand the committee relocating by including more stakeholders. - She observed that since the monument at the centenary park was small, the design change was going to impact on it greatly. - It should be removed and kept safely during construction and should be returned after;	

RECORDS OF A MEETING HELD BETWEEN STAKEHOLDERS AND RWENZO GREEN ASSOCIATES (FOR ICS) IN RESPONSE TO DESIGN CHANGE FOR THE KAMPALA FLY OVER PROJECT.		
Composition, activity, or Issues	**Concerns, comments, Observations**	**Responses, Remarks**
	- During removal and packaging, KCCA should be involved; - On replacement, we need to improve its visibility by putting it on a raised platform. - To design the appropriate platform, we should engage the original architects who are still around; - The committee should include the Artist who designed it (Ms Sylivia Nabiseeka) and Mr George Kyeyune (Head of the school of fine Art)	
Date	Wednesday, June 26, 2019	
Present in Meeting	[redacted]	
Purpose of Meeting	To discuss issues concerning Flower bed attendants who are on the LHS of the proposed road	
General Discussion	- It was put to the chairman that there are rumors that his members who had been compensated on the LHS had relocated to the LHS. He said there are a few such people many of whom had plots on both sides of the road. However, they can be identified when the need arises. - In addition, the chairman claimed that his members had been there all along, but from past surveys, this side had few or none of the attendants many of whom have moved there after the initial survey. - He informed the team that they have not been paying any royalties / taxes to KCCA except that sometimes KCCA gets plants from them as part of their contribution to beautification of the city; - On where they would like to go when the road project commences, he says that they would prefer KCCA to allocate them another place. It is better for them to move as a group otherwise if each of the attendants moves to some location, the business may collapse. - They would prefer to be given due notice of at least six months.	

ANNEX 6: MINUTES OF MEETING WITH UNRA ENVIRONMENT SPECIALIST AFTER DESIGN CHANGE

NOTES TAKEN AT MEETING BETWEEN UNRA ENVIRONMENT SPECIALISTS AND THE PROPOSED ICS ENVIRONMENTALIST, 14th May 2019 at UNRA Headquarters

Present at meeting

[redacted]

The agenda of the meeting was to discuss the design change report to the ESIA that had been prepared in respect of the KFO Project. The main discussed were under the following subheadings

1. General
2. OSH: and
3. UNRA's Environment and social management system

A. General: UNRA acknowledged receipt of the addendum and highlighted the need to remodel it so that it can be used to apply for the extension of the Certificate of Approval by NEMA. General changes to include: -

- UNRA Specialists to work closely together with the Consultant;
- Change the name from addendum to Something like **"Design Change Environment Impact Assessment Report"**
- Highlight the Category of the design change according to JICA classification;
- To ensure factors of Occupational Safety and Health are well factored in;
- To plan for the safety of both the workforce and the community during night activities;
- Issues of workers' camp if any;
- Contractor to be conversant with

For the revised document, the following will be clear: -

Issues surrounding the Clock Tower Relocation;

- OSH activities
- Traffic management Planning
- Safety of Idlers around the working area;
- Safety during Night operations;
- The concerns about the storm water volumes during the construction and after;
- Issues of siltation of the water channels as well as waste;

B. OSH Activities

The UNRA OSH specialist explained further some of key aspects during project implementation which must be brought to the attention of the Contractor. These include the following: -

- The Contractor must prepare a work permit which will be approved by the Consultant which work permit will be the guiding implementation document for each task to be commenced. It will be approved by the engineer. Within the work permit, the Contractor will include both the method statement as well as the risk assessment. The operational work Permit to be sent to UNRA will be signed by the Consultants Safety Person, the Consultant's Environment Specialist as well as the Engineer himself.
- Night activity: - the Contractor to ensure that the noise levels are minimized and Contractor equipment should have warning signs / beacon lights, Reverse lights, First Aid kits and fire extinguishers at minimum;
- Where night activities are considered and this is outside the Certificate of EIA Approval for Works, an application for variation of the Work Schedules should be done to NEMA.
- Night works to be preceded by adequate lighting of the project site to increase illumination and therefore visibility of the working area for safety of workers.
- All equipment to be inspected at the beginning by a representative from UNRA / Ministry of works in addition to the mandatory statutory inspections from the Department of Occupational Safety and Health from the Ministry of gender.
- Appropriate PPE must be in use at all times while in the field, there will be toolbox discussions / training regularly where safety will have emphasized. In addition, safety warnings and signage inclusive of reflective warning signs to be put at appropriate places. Warning signs will be of standard size.
- Contractor to be conversant with the OSH Act.
- In case of meeting a rock, the risk will be assessed and the work permit amended accordingly to accommodate the method statement of how to handle the rock.
- Utility Lines: - These must be included in the work permit. They are to be mentioned in the work permit especially the risk analysis which will cover sewerage lines, water lines, power and communications lines. In case of overhead power lines, the risk to be assessed before construction of flyovers.
- Contractor to form a Safety Committee to conduct regular inspection of safety performance of the project and assess any performance gaps.

C. UNRA Environment and social management system

The Contractor will be required to be conversant with the UNRA Environment and Social Management System. The Consultant to communicate to the Contractor and ask them to undertake the following in line with the Template Plan below: -

a) **Sign the Code of Ethical Conduct to Implement E&S safeguards**
b) Develop E&S management plans and procedures in line with the UNRA ESMS e.g. Environment and Social Implementation Plan, Risk Assessment and OSH Mgt Plan, Restoration plans, Gender, HIV, Blasting etc.
c) Develop Code of conduct for the Workers
d) Develop Project Briefs/EIAs for all project support infrastructure including Borrow pits
e) Support the HIV Nominated service provider to implement the HIV program
f) Recruit Competent and Qualified Staff (for E&S implementation) including a Community Liaison Officer.
g) Employ Local persons on the project.
h) Provide measures for addressing Worker welfare issues e.g. Insurance, Contracts, feeding, transport, overtime, etc.
i) Develop a Grievance redress mechanism
j) Undertake Incident reporting and Investigation as specified in the ESMS manual.
k) Conduct Monthly and quarterly reporting on implementation of E&S safeguards on projects as specified in the ESMS manual.
l) Conduct Training and sensitization of all workers & the Community: and
m) Acquire all consents and permits required for the project

Others include the following: -

- The Consultant to ensure that the community is continuously engaged and that the Grievance Redress Mechanism is appropriate for the City Road.
- Consultant and the Contractor to study the revised **Environmental Law** in Uganda.

Annexes CT 2 to CT 12

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ANNEX CT2: TREE SPECIES AND NUMBERS TO BE AFFECTED BY RELOCATION

Table: Carbon Foot Print of the Trees to be removed from the Park

Tree No	Species	Common Name	Diam (cm)	Total Vol (m^3)	Above Ground Biomass (ton)	Below Ground Biomass (ton)	Total Biomass (ton)	Total Carbon (ton)	CO2 Equivalent (ton)
1	Persea americana	Avacodo	14.4	0.0594441	0.0552807	0.0132674	0.068548	0.034274	0.1257857
2	Grevillea robusta	silk oak	44.8	1.4975128	1.2888575	0.3093258	1.5981834	0.7990917	2.9326664
3	Aleurites moluccana	candlenut	36.5	0.5336381	0.4707997	0.1129919	0.5837916	0.2918958	1.0712576
4	Khaya anthotheca	East African Mahogany	38.2	0.8710262	0.7594755	0.1822741	0.9417496	0.4708748	1.7281105
5	Prunus africana	African Cherry	15.3	0.1103126	0.1010754	0.0242581	0.1253334	0.0626667	0.2299869
5	Prunus africana	African Cherry	14.4	0.0977163	0.0897948	0.0215508	0.1113456	0.0556728	0.2043191
5	Prunus africana	African Cherry	15.2	0.1088753	0.0997898	0.0239496	0.1237394	0.0618697	0.2270618
6	Jacaranda mimosifolia	Jacaranda	28.8	0.355036	0.3163072	0.0759137	0.392221	0.1961105	0.7197255
6	Jacaranda mimosifolia	Jacaranda	19.6	0.164437	0.1492309	0.0358154	0.1850463	0.0925232	0.33956
7	Delonix regia	Flamboyant	23.3	0.1172561	0.1072802	0.0257472	0.1330274	0.0665137	0.2441053
8	Tectona grandis	Teak	22.4	0.1753666	0.1589042	0.038137	0.1970413	0.0985206	0.3615707
9	Mangifera indica	Mango	12.3	0.0267352	0.0253441	0.0060826	0.0314267	0.0157133	0.057668
9	Mangifera indica	Mango	14.0	0.0346361	0.0326305	0.0078313	0.0404619	0.0202309	0.0742475
9	Mangifera indica	Mango	11.2	0.0098521	0.0095659	0.0022958	0.0118617	0.0059309	0.0217662

Tree No	Species	Common Name	Diam (cm)	Total Vol (m^3)	Above Ground Biomass (ton)	Below Ground Biomass (ton)	Total Biomass (ton)	Total Carbon (ton)	CO2 Equivalent (ton)
9	Mangifera indica	Mango	12.0	0.025447	0.0241515	0.0057964	0.0299478	0.0149739	0.0549543
10	Mangifera indica	Mango	16.6	0.0670917	0.0622117	0.0149308	0.0771425	0.0385712	0.1415565
10	Mangifera indica	Mango	15.3	0.0569948	0.0530565	0.0127336	0.0657901	0.032895	0.1207248
11	Milicia excelsa	Mvule	21.8	0.1493014	0.1358093	0.0325942	0.1684036	0.0842018	0.3090206
12	Canarium schweinfurthii	African Olive	13.1	0.0566086	0.0527056	0.0126493	0.065355	0.0326775	0.1199264
13	Tectona grandis	Teak	27.5	0.374194	0.3329552	0.0799092	0.4128644	0.2064322	0.7576062
14	Tabebuia pentaphylla	Pink Trumpet Tree	25.0	0.1300819	0.1187186	0.0284925	0.1472111	0.0736055	0.2701324
15	Araucaria cunninghamii	Monkey Puzzle tree	23.0	0.265905	0.2385483	0.0572516	0.2957999	0.1479	0.5427929
16	Roystonea regia	Royal palm	28.2	0.1592683	0.144651	0.0347162	0.1793673	0.0896836	0.3291389
17	Ficus benjamina	Weeping fig	15.6	0.0506508	0.0472845	0.0113483	0.0586328	0.0293164	0.1075912
17	Ficus benjamina	Weeping fig	14.4	0.043158	0.0404449	0.0097068	0.0501517	0.0250758	0.0920283
18	Khaya anthotheca	East African Mahogany	29.0	0.3599842	0.3206091	0.0769462	0.3975553	0.1987777	0.729514
19	Tabebuia pentaphylla	Pink trumpet tree	25.8	0.2300292	0.2070825	0.0496998	0.2567823	0.1283912	0.4711956
20	Delonix regia	Royal palm	36.5	0.3976127	0.3532779	0.0847867	0.4380646	0.2190323	0.8038485

Tree No	Species	Common Name	Diam (cm)	Total Vol (m^3)	Above Ground Biomass (ton)	Below Ground Biomass (ton)	Total Biomass (ton)	Total Carbon (ton)	CO2 Equivalent (ton)
21	Terminalia catappa	Country almond	28.8	0.3582932	0.3191392	0.0765934	0.3957326	0.1978663	0.7261693
22	Mangifera indica	Mango	16.5	0.0620093	0.0576078	0.0138259	0.0714336	0.0357168	0.1310807
22	Mangifera indica	Mango	16.5	0.0620093	0.0576078	0.0138259	0.0714336	0.0357168	0.1310807
22	Mangifera indica	Mango	14.5	0.0478878	0.0447654	0.0107437	0.0555091	0.0277546	0.1018593
23	Callistemon citrinus	Bottle brush	14.0	0.0446421	0.0418017	0.0100324	0.0518342	0.0259171	0.0951157
24	Callistemon citrinus	Bottle brush	17.3	0.0869731	0.0801462	0.0192351	0.0993813	0.0496906	0.1823646
24	Callistemon citrinus	Bottle brush	19.9	0.0886425	0.0816473	0.0195953	0.1012426	0.0506213	0.1857802
25	Albizia coriaria	Mugavu	22.0	0.1083381	0.0993092	0.0238342	0.1231435	0.0615717	0.2259682
25	Albizia coriaria	Mugavu	20.0	0.0691152	0.0640423	0.0153702	0.0794125	0.0397062	0.1457219
	Total			**7.4560825**	**6.6419101**	**1.5940584**	**8.2359686**	**4.1179843**	**15.113002**

ANNEX CT2.2: TREE SPECIES AND NUMBERS IN THE WHOLE OF PAN AFRICAN PARK

ANNEX CT2.2: TREE SPECIES AND NUMBERS IN THE WHOLE OF PAN AFRICAN PARK

TreeNo	Species	Common Name	Diam (cm)	Bole Height	Total Height	Bole Vol (m3)	Total Vol (m3)	AGB (ton)	BGB (ton)	Total Biomass (ton)	Total Carbon (ton)	CO2-e (ton)
1	Grevillea robusta	silk oak	14.3	2.0	10.6	0.0137	0.0724	0.0785	0.0392	0.1177	0.0589	0.2160
2	Milicia excels	Mvule	12.5	2.0	6.2	0.0104	0.0323	0.0358	0.0179	0.0536	0.0268	0.0984
3	Ficus benjamina	Weeping fig	17.3	1.5	8.0	0.0150	0.0799	0.0865	0.0432	0.1297	0.0649	0.2380
4	Ficus benjamina	Weeping fig	7.8	2.5	8.0	0.0051	0.0162	0.0183	0.0091	0.0274	0.0137	0.0503
5	Terminalia ivorensis	Black Afara	29.4	2.5	7.8	0.0721	0.2250	0.2375	0.1188	0.3563	0.1782	0.6538
6	Khaya anthotheca	East African Mahogany	26.5	1.6	12.1	0.0375	0.2836	0.2977	0.1489	0.4466	0.2233	0.8195
7	Tectona grandis	Teak	15.7	1.5	7.5	0.0123	0.0617	0.0672	0.0336	0.1008	0.0504	0.1849
8	Roystonea regia	Royal palm	52.3	9.7	15.8	0.8856	1.4426	1.4563	0.7282	2.1845	1.0922	4.0085
9	Podocarpus usambarensis	African Yellow Wood	22.8	2.5	10.1	0.0434	0.1753	0.1861	0.0931	0.2792	0.1396	0.5122
10	Ficus benjamina	Weeping fig	12.7	1.8	6.0	0.0097	0.0323	0.0357	0.0179	0.0536	0.0268	0.0983
11	Ficus benjamina	Weeping fig	11.9	1.8	6.0	0.0085	0.0284	0.0315	0.0157	0.0472	0.0236	0.0866
12	Ficus benjamina	Weeping fig	12.5	1.8	6.0	0.0094	0.0313	0.0346	0.0173	0.0519	0.0260	0.0953
13	Ficus benjamina	Weeping fig	9.0	1.8	6.0	0.0049	0.0162	0.0182	0.0091	0.0274	0.0137	0.0502
14	Tectona grandis	Teak	23.3	3.5	12.0	0.0634	0.2175	0.2297	0.1149	0.3446	0.1723	0.6323
15	Roystonea regia	Royal palm	50.4	9.5	14.7	0.8055	1.2464	1.2627	0.6313	1.8940	0.9470	3.4755
16	Khaya anthotheca	East African Mahogany	18.7	4.0	11.8	0.0467	0.1377	0.1471	0.0736	0.2207	0.1103	0.4049
17	Terminalia ivorensis	Black Afara	24.0	4.0	10.2	0.0769	0.1961	0.2077	0.1038	0.3115	0.1558	0.5717
18	Terminalia ivorensis	Black Afara	43.0	2.5	13.0	0.1543	0.8023	0.8215	0.4107	1.2322	0.6161	2.2611
19	Persea americana	Avacado	14.5	1.5	6.1	0.0105	0.0428	0.0470	0.0235	0.0705	0.0353	0.1294
20	Tectona grandis	Teak	10.8	1.4	4.4	0.0055	0.0171	0.0192	0.0096	0.0289	0.0144	0.0529
21	Terminalia ivorensis	Black Afara	31.6	4.0	7.5	0.1333	0.2500	0.2632	0.1316	0.3948	0.1974	0.7245

22	Khaya anthotheca	East African Mahogany	23.0	4.0	18.7	0.0706	0.3302	0.3453	0.1727	0.5180	0.2590	0.9506
23	Terminalia ivorensis	Black Afara	29.9	3.0	6.9	0.0895	0.2059	0.2178	0.1089	0.3267	0.1634	0.5995
24	Delonix regia	Flamboyant	27.0	2.0	5.0	0.0487	0.1217	0.1303	0.0652	0.1955	0.0978	0.3587
25	Terminalia ivorensis	Black Afara	24.0	2.0	6.0	0.0385	0.1154	0.1237	0.0619	0.1856	0.0928	0.3406
26	Citrus sinensis	Orange	11.0	1.6	3.0	0.0065	0.0121	0.0137	0.0069	0.0206	0.0103	0.0378
27	Milicia excels	Mvule	26.0	1.8	10.0	0.0406	0.2256	0.2382	0.1191	0.3572	0.1786	0.6555
28	Roystonea regia	Royal palm	19.3	3.0	5.0	0.0373	0.0622	0.0677	0.0338	0.1015	0.0508	0.1863
29	Tabebuia pentaphylla	Pink trumpet tree	12.5	2.0	5.5	0.0104	0.0287	0.0318	0.0159	0.0477	0.0239	0.0876
30	Terminalia ivorensis	Black Afara	22.8	5.0	11.5	0.0868	0.1995	0.2112	0.1056	0.3169	0.1584	0.5814
31	Tectona grandis	Teak	11.4	5.0	10.0	0.0217	0.0434	0.0476	0.0238	0.0715	0.0357	0.1311
32	Tectona grandis	Teak	8.5	1.4	8.0	0.0034	0.0193	0.0216	0.0108	0.0324	0.0162	0.0595
33	Terminalia ivorensis	Black Afara	26.0	4.0	10.0	0.0903	0.2256	0.2382	0.1191	0.3572	0.1786	0.6555
34	Terminalia ivorensis	Black Afara	26.6	5.0	9.0	0.1181	0.2126	0.2247	0.1123	0.3370	0.1685	0.6184
35	Terminalia ivorensis	Black Afara	23.5	4.0	8.0	0.0737	0.1475	0.1572	0.0786	0.2359	0.1179	0.4328
36	Melia azedarach	Lira/Chinaberry	11.8	1.8	5.5	0.0084	0.0256	0.0284	0.0142	0.0426	0.0213	0.0782
37	Roystonea regia	Royal palm	17.3	2.5	5.0	0.0250	0.0500	0.0547	0.0273	0.0820	0.0410	0.1505
38	Roystonea regia	Royal palm	27.0	4.0	7.0	0.0973	0.1703	0.1810	0.0905	0.2715	0.1358	0.4982
39	Terminalia ivorensis	Black Afara	38.7	5.0	12.0	0.2500	0.5999	0.6185	0.3092	0.9277	0.4639	1.7024
40	Roystonea regia	Royal palm	48.6	7.5	12.0	0.5913	0.9461	0.9648	0.4824	1.4472	0.7236	2.6556
41	Grevillea robusta	silk oak	51.8	7.0	15.0	0.6270	1.3435	1.3586	0.6793	2.0379	1.0189	3.7395

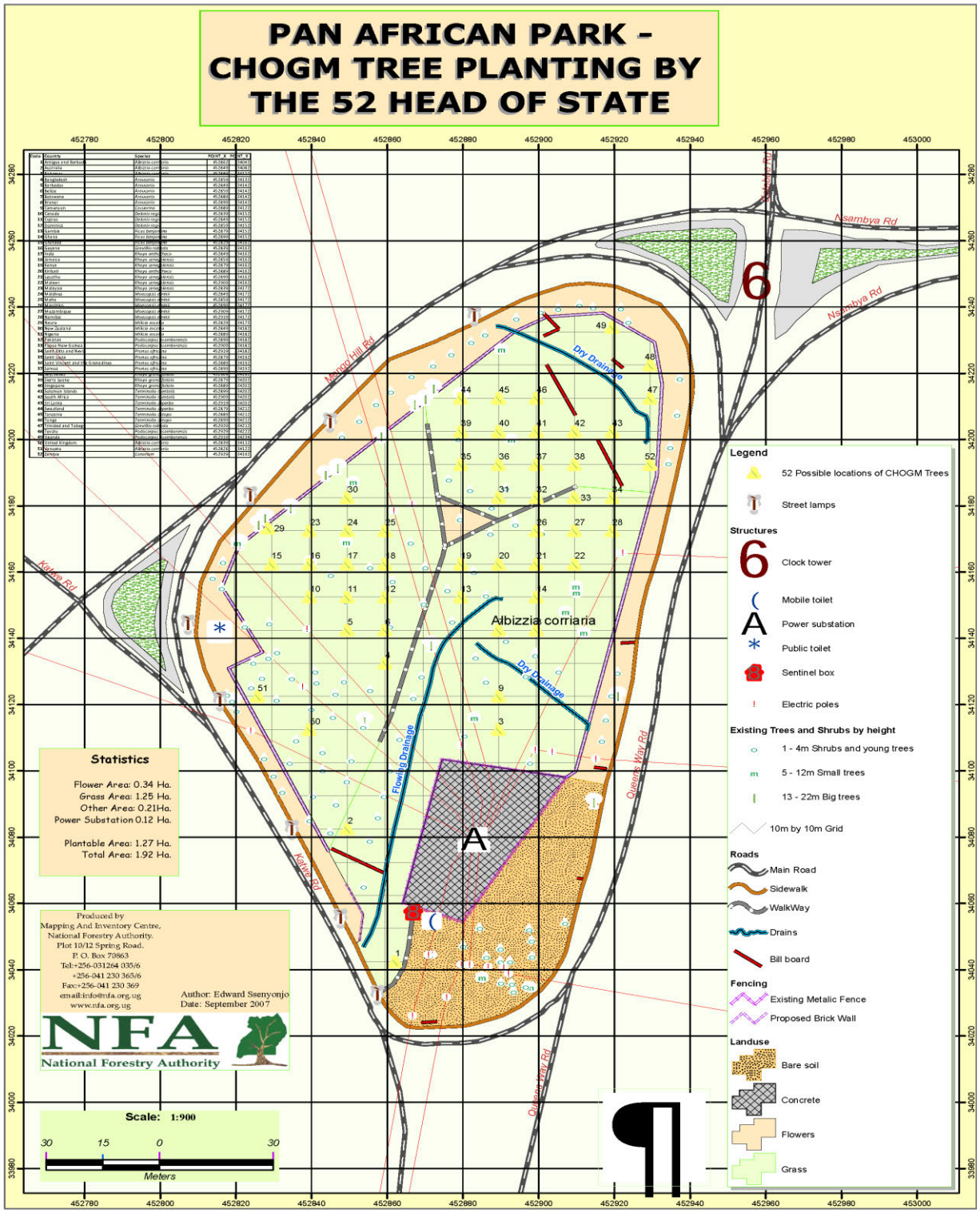
42	Casuarina equisetifolia	She-Oak	49.5	9.0	17.0	0.7361	1.3904	1.4049	0.7024	2.1073	1.0536	3.8669
43	Casuarina equisetifolia	She-Oak	48.5	10.0	17.0	0.7852	1.3348	1.3500	0.6750	2.0250	1.0125	3.7159
44	Casuarina equisetifolia	She-Oak	38.2	7.0	15.0	0.3410	0.7306	0.7497	0.3749	1.1246	0.5623	2.0636
45	Roystonea regia	Royal palm	52.1	7.0	12.0	0.6342	1.0873	1.1051	0.5525	1.6576	0.8288	3.0417
46	Terminalia superba	Shinglewood	18.3	6.0	11.0	0.0671	0.1230	0.1317	0.0658	0.1975	0.0988	0.3625
47	Casuarina equisetifolia	She-Oak	56.7	10.0	17.0	1.0731	1.8243	1.8313	0.9156	2.7469	1.3735	5.0406
48	Grevillea robusta	silk oak	11.4	3.0	7.0	0.0130	0.0304	0.0336	0.0168	0.0504	0.0252	0.0926
49	Khaya anthotheca	East African Mahogany	27.7	5.0	12.0	0.1281	0.3073	0.3220	0.1610	0.4830	0.2415	0.8863
50	Terminalia ivorensis	Black Afara	27.0	4.5	10.0	0.1095	0.2433	0.2564	0.1282	0.3846	0.1923	0.7057
51	Khaya anthotheca	East African Mahogany	9.6	6.0	9.0	0.0185	0.0277	0.0307	0.0154	0.0461	0.0230	0.0846
52	Khaya anthotheca	East African Mahogany	10.0	6.0	9.0	0.0200	0.0300	0.0333	0.0166	0.0499	0.0250	0.0916
53	Casuarina equisetifolia	She-Oak	42.2	7.0	17.0	0.4161	1.0105	1.0289	0.5145	1.5434	0.7717	2.8321
54	Mangifera indica	Mango	5.0	2.0	3.5	0.0017	0.0029	0.0034	0.0017	0.0051	0.0026	0.0094
55	Mangifera indica	Mango	5.0	1.6	3.5	0.0013	0.0029	0.0034	0.0017	0.0051	0.0026	0.0094
56	Tabebuia pentaphylla	Pink trumpet tree	51.5	1.8	14.0	0.1594	1.2394	1.2558	0.6279	1.8837	0.9418	3.4565
57	Prunus africana	African Cherry	17.6	3.5	9.0	0.0362	0.0931	0.1003	0.0502	0.1505	0.0752	0.2762
58	Terminalia ivorensis	Black Afara	39.2	4.0	9.0	0.2052	0.4616	0.4789	0.2395	0.7184	0.3592	1.3183
59	Delonix regia	Flamboyant	34.0	3.5	10.0	0.1351	0.3859	0.4021	0.2010	0.6031	0.3015	1.1067

60	Podocarpus usambarensis	African Yellow Wood	12.9	5.0	8.0	0.0278	0.0444	0.0488	0.0244	0.0732	0.0366	0.1342
61	Terminalia ivorensis	Black Afara	42.1	5.0	9.0	0.2958	0.5325	0.5505	0.2753	0.8258	0.4129	1.5154
62	Atocarpus heterophyla	Jack fruit tree	10.0	2.0	5.0	0.0067	0.0167	0.0188	0.0094	0.0281	0.0141	0.0516
63	Terminalia ivorensis	Black Afara	36.8	5.0	12.0	0.2260	0.5424	0.5606	0.2803	0.8409	0.4205	1.5431
64	Annona morucata	Sour sop	16.6	2.5	5.5	0.0230	0.0506	0.0553	0.0277	0.0830	0.0415	0.1523
65	Roystonea regia	Royal palm	61.5	10.0	17.0	1.2625	2.1462	2.1461	1.0730	3.2191	1.6096	5.9071
66	Mangifera indica	Mango	10.9	2.0	5.0	0.0079	0.0198	0.0222	0.0111	0.0333	0.0166	0.0611
67	Citrus lemonia	Lemon	4.6	3.5	4.0	0.0025	0.0028	0.0033	0.0017	0.0050	0.0025	0.0091
68	Khaya anthotheca	Mango	38.1	5.0	16.0	0.2423	0.7753	0.7944	0.3972	1.1916	0.5958	2.1866
69	Ficus benjamina	Weeping fig	6.3	2.5	5.0	0.0033	0.0066	0.0076	0.0038	0.0114	0.0057	0.0209
70	Ficus benjamina	Weeping fig	14.8	2.0	6.0	0.0146	0.0439	0.0482	0.0241	0.0722	0.0361	0.1326
71	Ficus benjamina	Weeping fig	11.0	2.0	5.0	0.0081	0.0202	0.0226	0.0113	0.0339	0.0169	0.0622
72	Ficus benjamina	Weeping fig	10.1	3.0	5.0	0.0102	0.0170	0.0191	0.0096	0.0287	0.0143	0.0526
73	Roystonea regia	Royal palm	62.5	10.0	16.0	1.3039	2.0862	2.0875	1.0437	3.1312	1.5656	5.7458
74	Terminalia ivorensis	Black Afara	39.9	5.0	15.0	0.2657	0.7971	0.8162	0.4081	1.2243	0.6122	2.2467
75	Roystonea regia	Royal palm	63.1	10.0	16.0	1.3290	2.1265	2.1268	1.0634	3.1902	1.5951	5.8540
76	Mangifera indica	Mango	20.2	1.4	6.0	0.0191	0.0817	0.0884	0.0442	0.1326	0.0663	0.2433
77	Prunus africana	African Cherry	20.9	4.5	14.0	0.0656	0.2041	0.2160	0.1080	0.3240	0.1620	0.5945
78	Roystonea regia	Royal palm	62.5	7.0	16.0	0.9127	2.0862	2.0875	1.0437	3.1312	1.5656	5.7458
79	Ficus benjamina	Weeping fig	24.6	1.5	6.0	0.0303	0.1212	0.1298	0.0649	0.1948	0.0974	0.3574
80	Prunus africana	African Cherry	12.0	2.5	8.0	0.0120	0.0385	0.0423	0.0212	0.0635	0.0318	0.1166
81	Ficus benjamina	Weeping fig	21.0	1.4	6.0	0.0206	0.0883	0.0953	0.0477	0.1430	0.0715	0.2624
82	Ficus benjamina	Weeping fig	9.4	2.0	6.0	0.0059	0.0177	0.0199	0.0099	0.0298	0.0149	0.0547
83	Milicia excels	Mvule	18.6	2.0	8.0	0.0231	0.0924	0.0996	0.0498	0.1494	0.0747	0.2742

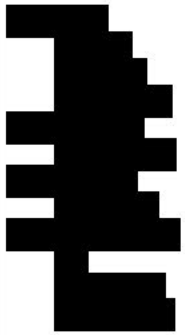
84	Roystonea regia	Royal palm	54.5	7.0	12.0	0.6940	1.1897	1.2066	0.6033	1.8099	0.9050	3.3212
85	Albizia coriaria	Mugavu	31.0	3.0	12.0	0.0962	0.3849	0.4011	0.2006	0.6017	0.3008	1.1041
86	Albizia coriaria	Mugavu	29.0	2.0	10.0	0.0561	0.2807	0.2947	0.1474	0.4421	0.2211	0.8113
87	Roystonea regia	Royal palm	47.5	7.0	12.0	0.5272	0.9037	0.9226	0.4613	1.3840	0.6920	2.5396
88	Roystonea regia	Royal palm	62.3	8.0	15.0	1.0364	1.9433	1.9478	0.9739	2.9218	1.4609	5.3614
89	Ficus benjamina	Weeping fig	28.8	1.4	6.0	0.0388	0.1661	0.1766	0.0883	0.2649	0.1325	0.4862
90	Roystonea regia	Royal palm	57.8	7.0	15.0	0.7806	1.6727	1.6827	0.8413	2.5240	1.2620	4.6315
91	Roystonea regia	Royal palm	59.5	8.0	15.0	0.9454	1.7726	1.7806	0.8903	2.6709	1.3355	4.9011
92	Mangifera indica	Mango	14.1	1.5	5.0	0.0100	0.0332	0.0367	0.0183	0.0550	0.0275	0.1009
93	Roystonea regia	Royal palm	43.0	8.0	12.0	0.4937	0.7406	0.7597	0.3799	1.1396	0.5698	2.0912
94	Mangifera indica	Mango	17.5	1.5	5.0	0.0153	0.0511	0.0559	0.0280	0.0839	0.0419	0.1539
95	Prunus africana	African Cherry	19.9	2.5	12.0	0.0330	0.1586	0.1688	0.0844	0.2533	0.1266	0.4647
96	Prunus africana	African Cherry	20.0	3.0	12.0	0.0401	0.1602	0.1705	0.0853	0.2558	0.1279	0.4693
97	Prunus africana	African Cherry	16.0	1.8	10.0	0.0154	0.0855	0.0923	0.0462	0.1385	0.0692	0.2541
98	Mangifera indica	Mango	10.3	1.5	4.0	0.0053	0.0142	0.0160	0.0080	0.0240	0.0120	0.0440
99	Mangifera indica	Mango	15.7	1.4	5.0	0.0115	0.0411	0.0452	0.0226	0.0678	0.0339	0.1245
100	Mangifera indica	Mango	13.4	1.4	5.0	0.0084	0.0300	0.0332	0.0166	0.0498	0.0249	0.0914
101	Mangifera indica	Mango	13.3	2.0	5.0	0.0118	0.0295	0.0327	0.0164	0.0491	0.0245	0.0901
102	Roystonea regia	Royal palm	46.0	7.0	12.0	0.4944	0.8476	0.8666	0.4333	1.2999	0.6500	2.3854
103	Roystonea regia	Royal palm	54.9	7.0	12.0	0.7042	1.2073	1.2240	0.6120	1.8360	0.9180	3.3690
104	Roystonea regia	Royal palm	53.1	6.0	11.0	0.5647	1.0353	1.0535	0.5267	1.5802	0.7901	2.8997
105	Roystonea regia	Royal palm	48.3	5.0	7.0	0.3894	0.5451	0.5633	0.2816	0.8449	0.4225	1.5504
106	Roystonea regia	Royal palm	44.5	5.0	9.0	0.3305	0.5949	0.6135	0.3067	0.9202	0.4601	1.6885
107	Eucalyptus grandis	Eucalyptus	48.5	2.0	15.0	0.1570	1.1778	1.1948	0.5974	1.7921	0.8961	3.2886
108	Roystonea regia	Royal palm	66.1	10.0	15.0	1.4584	2.1876	2.1865	1.0932	3.2797	1.6399	6.0183
109	Casuarina equisetifolia	She-Oak	51.7	6.0	15.0	0.5353	1.3383	1.3535	0.6767	2.0302	1.0151	3.7254
110	Casuarina equisetifolia	She-Oak	56.3	5.0	17.0	0.5290	1.7986	1.8062	0.9031	2.7092	1.3546	4.9715

111	Casuarina equisetifolia	She-Oak	41.2	10.0	15.0	0.5666	0.8499	0.8689	0.4345	1.3034	0.6517	2.3918
	Total					**26.3067**	**54.0164**	**55.0402**	**27.5201**	**82.5602**	**41.2801**	**151.4980**

ANNEX CT 3: ORIGINAL MAP OF THE CHOGM TREE PLANTING AT THE PAN AFRICAN PARK



ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
UNRA	The main client and the Developer of the KFO project;	High	Safeguard the development project in line with national laws and industry best practices and environmental and social consideration of JICA (High)	Formal meetings on progress, technical planning **Workshop + meetings**	In workshop and thereafter on call	Various to include 	Consultant / UNRA
KCCA	In charge of planning and administration of the KCCA's physical plans	Different departments that can be engaged with during implementation as well as the Kampala master plan	The projects are implemented in KCCA All the relevant DEPARTMENTS OF KCCA require on going engagements throughout all stages of the project.	**Workshop + meetings**	In workshop and thereafter on call / weekly (throughout all stages).	1. Director, Physical Planning KCCA 2. Head, Tourism KCCA; 3. Head, Environment KCCA. 4. Director Public Health	Consultant / UNRA

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder
						Services and Environment; Director Gender and community services (aspects of PCR are under this docket)	
National Environment Management Authority (NEMA) regulators – can list them	Ensures Environmental Compliance and regulates activities that affect the environment;	These are mainly government authorities, department or organizations who have the power to influence the project in terms of	Environmental impact assessment and audit requirements for the project	Formal meetings	In workshop and thereafter monthly (at site meetings)	Director, Environmental Monitoring and Compliance, NEMA	Consultant / UNRA (Developer)

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder
		the approval process, ensuring compliance with Ugandan laws throughout all stages of the project life cycle including planning, construction, operation sand decommissioning.					
Department of Museums and Monuments	To take care of any Artefacts and findings of archaeological or	Minimizing the impact on clock tower and ensuring	Selection of the best option and proposals for mitigation	**Workshop + Face to Face meetings**	In workshop and thereafter daily during relocation.	1 Commissioners/department - Museums and Monuments;	Consultant

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
	Cultural Significance	that the national asset is not compromised				2 The Conservator, DMM; 3 Engineer, DMM	
Ministry of Lands, Housing and Urban Development;	Survey and Valuation of properties and or compensation	Facilitates land transfer and compensation if necessary	Various legislation including the Land Act Cap 227, Constitution, and Compensation Policy	**Workshop + Face to Face meetings**	In workshop and thereafter on quarterly	1. Chief Government Valuer-MoLHUD 2. Commissioner, Physical Planning-MoLHUD 3. Commissioner, Urban Development-MoLHUD	Consultant / Developer
Ministry of Water and Environment	Responsible for the environmental concerns including wetlands, water bodies, forests	Will support environmental compliance	Blind application of the law without considering mitigation factors	**Workshop + meetings**	In workshop and thereafter on quarterly	1. Director, Directorate of Environm	Consultant

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
	and Natural resources; Initiated and pursued the CHOGM tree plantings with several conditions	for the benefit of all stakeholders				ent Affairs, MoW&E 2. Commissioner Forestry, Sector Support Department;	
Project Affected People (PAP) due to Clock Tower relocation.	This includes most of the local community who may be affected either positively or negatively.	▪ They receive impacts as a result of the project activities. ▪ They understand the environment	Temporary disruption during construction	**Workshop + Face to Face meetings**	Workshop and thereafter daily	1. [redacted];	Consultant

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
		and social aspects of their area. They have a right to participate and express their views on the project				(the relocation activity may interfere with operations during that day the relocation shall be undertaken)	
MGLSD 1 Department of Occupational Safety and Health Department of culture and family affairs	Workforce could be at Risk due to construction activities	Workforce and nearby communities may be exposed to risks as they relate to both construction and operations activities Regarding the Department of Culture	Design considerations to take relevant precautions could lead to serious injury or work-related sicknesses	**Face to Face meetings except for Department of culture to be invited for workshop**	Workshop and thereafter monthly	Commissioners for: 1. Labor Occupational Health and Safety	Consultant

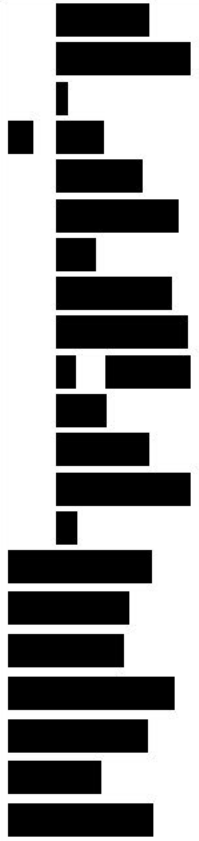
ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
		and family affairs, it is the key department for the shrine and monuments					
Local leaders and opinion leaders	Responsible to shape and influence the general opinion of impacted communities	These act as representatives of the communities in their areas of jurisdiction. They are points of entry to a community	Their rejecting of project can lead to project failure	Workshop or person to person meetings	Workshop and thereafter monthly	1. Hon. Member of Parliament, Kampala Central Division. 2. [redacted]	Consultant

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder	Stakeholder
						3. Hon. Member of Parliament, Makindye Division. 4. Mayor Central and Makindye Divisions 5. [redacted]	

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
						LC1 Chairperson, Clock Tower Zone	
Parliament of Uganda (Natural Resources committee and Tourism, Trade Committee)	The natural Resources committee is responsible for guiding on the development and is a representative of the wider community	Oversite during the project implementation	Impact on the community and natural resources	Formal meetings with Chairperson + workshop if available	Monthly	1. Hon. Member of Parliament and Chairperson Committee on Tourism Trade and Industry, Parliament of the Republic of Uganda Hon. Member of parliament and Chairperson, The natural Resources Committee of parliament	Consultant

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
British High Commission/ British Council	The Clock tower is their Relic and may have the design diagrams.	Bilateral dialogue	Their non conformity could impact on British / Uganda relations.	**Workshop + Face to Face meetings** as appropriate	Workshop and thereafter quarterly	1. Cultural Attaché, British Council, Plot 4, Windsor Loop, Off Kira Rd, Kamwoky a-KAMPALA , Uganda+256 312 560 800	Consultant and Ministry of Foreign Affairs
Ministry of Foreign Affairs	The Tress in the pan African park have been planted by different countries of Africa &	Linkage with the impacted nations	Non conformity might impact relations	Face to face Meeting or Workshop to be represented	Quarterly	Permanent Secretary, Ministry of Foreign Affairs	Consultant

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
	intentional CHOGM States						
Uganda Police esp. Fire and Rescue Services Directorate	They are located nearest to the monument	Daily interaction	Concerned with community reaction and traffic management	**Workshop + Face to Face meetings**	Daily	1. Director, Fire and Rescue Services, Uganda Police Force 2. Director, Traffic Uganda Police Force 3. District Police Commander, Katwe Division OC, Central Police Station, Kampala	Consultant
Global Pan African Movement	They are the current owners of the Park	Relocation would directly impact on them	Their refusal may interrupt the project	Formal Meetings with Chairman and **Workshop +**	Workshop Thereafter daily during relocation	[redacted]	Consultant / Developer

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
				Face to Face meetings for the rest			
Traditional Institutions including	They have a cultural interest	Their Subjects interact daily with	If public does not buy in, then project might be interrupted	Meetings-face to face discussions	Monthly		Consultant

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
Buganda Kingdom		the monument				[redacted]	

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
Management of Hindu Temple	Close neighbours to the Monument	Near daily interaction	Concerned with community reaction and traffic management	**Workshop + Face to Face meetings**	Quarterly	[redacted]	Consultant
Tabliq Muslim Community	Close neighbours to the Monument	Near daily interaction	Concerned with community reaction and traffic management	**Workshop + Face to Face meetings**	Quarterly	[redacted]	Consultant
Uganda Land Commission	Charged with keeping the Public lands	Formalising land registration	In case of dispute on land owned for the monument relocation	**Workshop + Face to Face meetings**	Quarterly	Secretary, Uganda land Commission	Consultant / Developer
Utilities and other service providers	Some of their lines do cross the Pan African park	Service provision	Excavations could lead to disruption	**Workshop**	Monthly	1. Managing Director, UTCL; 2. Managing Director, Airtel Kampala; Managing Director MTN, Kampala	Consultant

ANNEX CT 4: STAKEHOLDER MAPPING AND STAKEHOLDER ANALYSIS MATRIX							
	Stakeholder Analysis Matrix						
Stakeholder	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**	**Stakeholder**
Relevant members of Academia	History and archaeology academics may contribute to monument profiling	lecturers	Provide expertise and knowledge	Workshops	Quarterly	1. Head of Department, History Department, Makerere University, Kampala; 2. Principal, College of Design, Art and Technology, Makerere University	Consultant

ANNEX CT 5: MINUTES OF THE CONSULTATION MEETINGS

General Agenda of Meetings

The following agenda was adopted for all the meeting:

1. Communication from Team leader
2. Matters arising
3. AOB and closing remarks

Minutes / Comments of Stakeholders

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
1.	[redacted] **BAPs Swaminarayan Temple** ➢ He stated the relocation of the Clock Tower was okay as long as it improved the traffic flow of vehicles. ➢ They were happy with the compensation package in regard to the flyover project. ➢ They were also happy with the decision to make Ben Kiwanuka Street a one-way traffic flow. ➢ They indicated that they would be happy to participate in the stakeholder's workshop.	✓ They are happy with relocation and the compensation was okay
2.	[redacted] **– Operations Officer** **Directorate of Fire and Rescue Services- Uganda Police Force** ➢ He stated that heavy traffic affects the operations and that relocation of the Clock Tower monument would ease the operations.	✓ The transfer of the Clock Tower monument should cater for the outlets for rescue and response. ✓ The trees on the land on which the Clock Tower it is to be relocated should be taken care of or replanted.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He stated that the advertisement's around the Clock Tower was also a destruction to the traffic flow since drivers would be destructed by these very bright electronic bill boards and hence cause accidents. ➢ In the event of the transfer of the Clock Tower, the outlets for rescue and response should be taken care of by the design team. ➢ The floods within the Clock Tower area should be taken care of including the drainage. ➢ The trees that are going to be cut down in the Pan African freedom square where the clock is being transferred should be replanted elsewhere to help in curbing pollution around the Clock Tower area.	
3.	[redacted] [redacted] **Services –** **Directorate of Public Health Services and Environment - Kampala Capital City Authority** ➢ Needs Concept Note about the design of the entire project from its inception in the year 2014. ➢ He could not be able to provide input about the units and actual cubic metres for the spoil/stockpile area at the centenary park. ➢ He was not aware of the project and seemed not have information about it.	✓ Needs Concept Note about the design of the entire project from its inception in the year 2014.
4.	[redacted] **Environment Management Unit- Directorate of Public Health Services and Environment - Kampala Capital City Authority** ➢ She stated that she has not seen any Environment and Social Impact Assessment report for the entire project area.	✓ Needs consent Letter from Department of Museums and Monuments. ✓ Needs Concept Note about the design of the entire project from its inception in the year 2014.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ She needs a consent letter from the Department of Museums and Monuments in order to respond since it was not in their docket ➢ She needs a separate letter written to the Directorate of Public Health Services and Environment in order to respond to the matter ➢ Needs a concept note regarding the entire project from its inception in the year 2014. ➢ She is not aware of the project and seemed not have information about it. ➢ The Monuments People are complaining.	
5.	[redacted] **Directorate of Gender and Community Services and Production - Kampala Institutional and Infrastructure Development Project** **[KIIDP2] - Kampala Capital City Authority** ➢ He stated that the Centenary monument would be dwarfed by the double decker flyover and suggested that during the restoration the monument and its surrounding area should be made more prominent so that it is enjoyed by the users of the Centenary park. ➢ There would be a better aerial view of the Centenary monuments if they improve on the lighting and the green vegetation in case of improvements. ➢ In addition, He stated that the history surrounding the Centenary Monument should be put in place as away of preservation. ➢ He stated that they would be a better aerial view of the Centenary monuments if they improve on the lighting and the green vegetation in case of improvements. ➢ He suggested that the Centenary Monument could be cordoned off during the construction activities instead of shifting it	✓ The Centenary monument should be made more attractive and prominent while preserving its original concept. ✓ The Clock Tower Monument should have its original concept maintained and made more accessible by the users. Its visibility, accessibility and utilisation should be of prominence. ✓ The Contractor should take care of all the safety aspects before, during and after the construction phase. ✓ The Public should be sensitised.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He had no knowledge about the pillars that were next to the centenary monument. ➢ He wanted to know whether the original material for the Clock Tower was going to be used for reconstruction the monument or some other material would be used. The necessary tests should be done for these materials. ➢ He emphasised on preserving the integrity and history of the Clock Tower monument. He rejected the addition of colours that was not originally on the Clock Tower monuments. ➢ He stated that the Clock Tower relocation plan should be done in consultation with Department of Museums and Monuments. ➢ He wanted to know what the visibility, access and utilisation of the Clock Tower monument would entail. ➢ He also stated that the Clock Tower monument should have a foundation station having history and its importance to promote local tourism. This was in line with the Monuments Act. ➢ He suggested that there could be recorded messages which would be at the heart of the Clock Tower so that people learn more about its importance and its history like it was done at the genocide graves in Rwanda ➢ He did not know much about the Byuma Katwe Shrine but requested that more consultations should be done with the Buganda Kingdom. ➢ He stressed that during the construction of the flyover project and particularly during the relocation of the Clock Tower, there should be enough lighting and signage to take care of pedestrian movements in the Clock Tower area. ➢ He stated that the taxi drivers and the entire public should be sensitized since this was a big problem of traffic on roads in Kampala which ae being worked on at the same time. ➢ He stated that the traffic management plans needed to be done in consultation with the Directorate of Traffic Police. ➢ The area of the Clock Tower was a very sensitive route since it's a gateway for Very Important Persons	

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ There should be redirecting of traffic flow and suggested that works would be carried out in the night to reduce on the impact. ➢ Security and safety of the vehicles and people should be taken care of like he hawkers on the street at that give time. ➢ He stated that he was part of the management team for the construction of the Kampala Flyover project.	
6	[redacted] **Directorate of Public Health Services and Environment –** **Kampala Institutional and Infrastructure Development Project** **[KIIDP2] - Kampala Capital City Authority** ➢ What would it mean for the clocktower demolition and relocation in terms of traffic flowing during the construction of the road project? ➢ He stated that there was need to organise traffic during construction and relocation of the clocktower and other monuments to avoid a deadlock. ➢ The route of the Clock Tower was a sensitive route since it is being used by the President and other dignitary motorcades. ➢ The Clock Tower relocation should be further discussed with the Directorate of Traffic Police who will discuss with the Presidents Security detail. ➢ He also emphasised on the safety of the area during the relocation of the Clock Tower to avoid accidents such as falling debris on the pedestrians and vehicles. ➢ He stated that in addition to the health and safety and traffic management plans, the relocation plan for the Clock Tower monument should be taken care off by the contractor.	✓ Ensure that all conditions within the certificate of approval of the Flyover project are met including additional conditions for the relocation of Monuments.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He stated that best schedule for working in such areas would be the night There should be room for works to be carried out in the night with the necessary approvals from the National Environment Management Authority ➢ There should be adequate lighting during the construction phases in the night to avoid theft a of Contractors equipment and other possible security threats. In addition, he emphasised that the contractor should display adequate signage and that the area should be cordoned off to avoid hawking. ➢ There should be deployment of Safety Officers. This should entail their full-time service. ➢ The should be gazetted sites for disposal of material in accordance with the conditions given in the approved permits for various works during the construction of the flyover project. ➢ He stated that some of the components of steel could be reused if necessary ➢ The trees in the Pan African Freedom Square to be displaced by the Clock Tower should be compensated and replanted anywhere else in the same park. ➢ There is need to revisit t the sites to further attain the right guidance. ➢ There should be no construction activities beyond 10pm of the night. Transportation of Material should not be overloaded. ➢ There will be need to harmonise the traffic management plan with other the traffic control mechanisms. ➢ There is need to ascertain the stock piling material at the proposed Stock pile are in the Centenary Park. ➢ Equipment should not be parked at the Pan African Freedom Square but only in the Contractors' designated area of work	

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
7	[redacted] **Directorate of Public Health Services and Environment –** **Kampala Capital City Authority** ➢ The Conditions within the Main ESIA Certificate of Approval for the road project should be followed and observed.	✓ Ensure that all conditions within the certificate of approval of the Flyover project are met including additional conditions for the relocation of Monuments.
8	**Secretary to the Director of Physical Planning – Directorate of Physical Planning- Kampala Capital City Authority**	✓ To be consulted on the relocation of the Clock Tower and the Centenary Monuments and the Byuma Katwe Shrine respectively.
9	[redacted] **Directorate of Protocol and Public Diplomacy** **Ministry of Foreign Affairs** ➢ He stayed that the Ministry does not have any information regard to the CHOGM trees in the Pan African Freedom Square. ➢ He stated that the information would be got from the Global Pan African Movement and consequently referred the Consultancy team to the lady in charge of the Pan African Women Group for more information.	✓ Lacked information on the trees planted in the Pan African Freedom Square and preferred that the matter be handled by the Global Pan Africa Movement. ✓ He was left with the introductory letter to do more consultations.
10	[redacted] **Central Police Station - Uganda Police Force** ➢ He was happy with the road project and stated that it would help in reducing the traffic within the Central Business district	✓ He welcomed the development of the project and that he will need reinforcement to ensure prevailing security within the project area.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ It would help in reducing commotion and criminality within the project area. ➢ He stated that the Contractor and the general public should take care of the possible increase in criminal activity in isolated areas of the project which would stretch the security during deployment. ➢ He advised that the Contractor should deploy additional security for the equipment and the various sites so that they can totally dedicated to the safety of the equipment in the project area. He stressed that the Private security normally relaxes leaving the entire burden to the Police force on deployment. ➢ He stated the in his area of jurisdiction there would not be much of a problem during the construction since it covered Nakasero Market area. ➢ He stated that during the relocation of the Clock Tower and the entire project area, there would be an influx of the motorcyclists ➢ He also stressed that the Spokesperson or Public Relations Person of the Contractor should work hand in hand with the Police Force and the local People. Out of experience the Spokes persons of the contractor tend to distance themselves from the Police. ➢ The Politicians or Opinion Leaders need to be sensitised to avoid politicising the situation. They could take advantage of the situation by making it seem like political capital for the forth coming general elections. ➢ Being an entry point and exit point for the Central Business District to the South of Kampala, there is need to provide alternative routes during the construction phase.	
11.	[redacted]	✓ The Projects Traffic Management Plan should be

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	Kampala metropolitan traffic commander – Uganda Police Force ➢ He stated that the Directorate of Traffic Police is supporting the new project and welcomed it. ➢ He stated that roads were narrow and hence needed to be widened in Kampala which would help in decongesting the City. ➢ The Clocktower monument covered a big area which has been a obstruction to traffic flow and they agreed with its relocation to the new area. ➢ He noted that at the Clocktower monument, it was a meeting point for inlets of roads i.e. Entebbe Road, Nsambya and the City Centre. Which creates a traffic jam due to the influx of vehicles and pedestrians. ➢ He recommended that the Traffic Police should be engaged before the start of serious works in order to have the Projects traffic management plan Traffic Masterplan incorporated into that Traffic Master Plan. ➢ He recommended alternative routes during the construction phase of the project. ➢ He stressed that there should be a proper traffic management plan which would help in redeployment of the necessary traffic resources. ➢ He stated that there should be a supervisory role in manning the traffic management plan ➢ He also emphasised that the Project Manager should be flexible enough and ready to adjust to changes within the traffic regulations in the project area. ➢ The Presidents Principal route must be preserved as it is also used by other dignitaries ➢ The Special Forces Command should be involved on the security matter.	incorporated into the Traffic Master Plan in order to ensure harmony in the traffic flow.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ The Public Should be sensitised and showed alternative routes in advance. ➢ He stated that the morning and evening hours were peak hours for traffic and therefore advised that there should be an alternative of working hours in the night to allow continuous flow of traffic. The relocation of the Clock Tower would definitely interfere with the traffic flow. ➢ The Project should cater for project allowances for Traffic Police Officers working beyond the schedule in the project area.	
12.	[redacted] ➢ He stated that the Katwe Police Station would ensure general security of the area. ➢ He promised cooperation and supports the project. ➢ The congestion caused by the motorcyclists [Bodaboda] would be reduced in the event of the relocation of the Clock Tower. ➢ The project should provide alternative emergency routes for the Very Important Persons and Other emergencies. ➢ Flooding should be taken care of especially at the Clock Tower during the construction phase because it can be a hinderance to traffic flow. ➢ Emphasised that the public should continue to be sensitised on the upcoming changes.	✓ The Katwe Police Station promises cooperation and general security within the project area.
13.	[redacted] **Katwe Central Police Station - Uganda Police Force** ➢ He stated that the Safety Officers needed to work hand in hand with the Traffic Police at the Clocktower and the KCCA Traffic Wardens.	✓ The Katwe Police Station promises cooperation and general security within the project area.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He noted that the centre for traffic wardens at the Clock Tower would be removed. ➢ He stated that the improvements in the traffic flow would reduce crime that is usually committed in the traffic jam at peak hours. ➢ He made emphasis on sensitising the general public within the project area.	
14.	[redacted] ➢ The project was very good and would help in further opening up of the USAFI market to the public. ➢ He stated that the Clock Tower should remain a pillar of direction to the people locating the USAFI Park and Market. ➢ He also stated that there should be a route for pedestrians in order for them to access the USAFI Park and Market. ➢ He stated that the market leadership and the KCCA management always work together in such matters of development. ➢ He promised mobilisation for the upcoming meetings.	✓ Promised Cooperation in mobilising the Stakeholders of the USAFI Market and Park.
15.	[redacted] ➢ The project was very good and would help in further opening up of the USAFI market to the public. ➢ He welcomed the additional consultations and re-echoed that it was a good practice in order to fulfil the social safe guard conditions by the different funders for such road projects. ➢ He stated that he would encourage the leadership to look at the relocation of the Clock Tower as a positive attribute to the development of the USAFI Market and Park.	✓ Promised Cooperation in mobilising the Stakeholders of the USAFI Market and Park.
16.	[redacted] ➢ The project was very good and would help in further opening up of the USAFI market to the public.	✓ Promised Cooperation in mobilising the Stakeholders of the USAFI Market and Park.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ She stated that the USAFI Market and Park Association is committed to development of any project which is in the national interest.	
19.	[redacted] **Head Planning – Uganda Land Commission** ➢ He stated that the land at the Pan African Freedom Square Park belonged to Uganda Land Commission ➢ He also stated that the Uganda Land Commission only allocates it to the users for the approved land use. ➢ He stated that with the upcoming developments, the traffic jam would have been reduced and help in decongesting the city centre. ➢ He stated that the Clock Tower Monument should maintain its integrity and that since it was a national monument, transferring it to the same locality should not be a challenge. ➢ He stated that the fight over the Pan African Park had been resolved. ➢ The wetlands in the are managed by the Ministry of Water and Environment and its specialised Agencies and Authorities. ➢ He emphasised that Uganda Land Commission would have no problem with the development as long as the compensation for the various Project affected persons and properties was done well. ➢ He stated that the Physical Plan for the relocation of the area should have been approved for the current use. ➢ He also inquired on whether the design change had affected the Electoral Commission. ➢ He also stated that the Centenary park belonged to Uganda Land Commission and the user Department was Kampala Capital City Authority. He was okay with the temporary removal of the Centenary Monument for purposes of stock piling.	✓ All the Government Land belongs to Uganda Land Commission and that the Commission only gives it out to user Ministry's, Departments and Agencies for specific use in accordance with the approved physical plan for a given area. ✓ Uganda Land Commission is happy with the project and is ready to provide any assistance where necessary to ensure that the project is successful.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He said that Uganda Land Commission is committed to providing any assistance to ensure that the project is implemented successfully. ➢ He also stated that the flyover project would help in easing the congestion within the city centre and other outlets to the East and South of Kampala City.	
20.	[redacted] [redacted] ➢ He stated that Seroma Limited should be given an alternative road to access their land on the Nsambya side. ➢ He said that the land next to the Clock Tower in which their office was situated belonged to Uganda Railways Corporation and that they were only Tenants. ➢ He was happy with the new developments and stated that the removal of the Clock Tower would further help in decongesting the city centre in addition to turning the Ben Kiwanuka Street into a one-way route ➢ Seroma Limited promised their usual cooperation on the project.	✓ Promised cooperation during the implementation of the project. Maintain the original Concept;
21.	**USAFI Market Vendors Association and USAFI Taxi Park Operators Association.** ➢ The USAFI Park and Market have no challenges with the Clock Tower relocation, they only want people to be able to access the Market and Park when the Clock Tower monument is relocated. ➢ The Kampala Capital City Authority and the Uganda National Roads Authority should relocate all the commuter taxis and food vendors around the Clock Tower and the Contractors camp to USAFI Taxi Park and USAFI Market respectively in order to ease on the congestion along the Queens way and also help in marketing the USAFI Market and Taxi Park respectively.	✓ USAFI Market Vendors Association and Taxi Park Operators want the Clock Tower Monument to become a landmark or symbol of direction to the market and park respectively. ✓ Relocate all Public Transport [Commuter Taxis and Motorcycle stages] and Food Vendors from the Clock Tower monument and the Contractors Camp to USAFI

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ They suggested that they needed to visit the road corridor to ascertain the facts on the ground surrounding these monuments and shrine. ➢ There is need to ensure that the safety signage is put in place especially for the pedestrians accessing the USAFI Market and USAFI Taxi Park at peak hours. ➢ There is need to consult the Buganda Kingdom Cultural Ministry on matters concerning the Byuma Katwe Shrine. ➢ The Clock should retain its name as 'Sawa Ya Kwini' as it is seen as a landmark for directing the people to the USAFI Market and Taxi Park. ➢ There should be continuous stakeholder engagement with the local people and road users to avoid catastrophic accidents during the construction of the flyover. ➢ They stated that they are generally happy with the road project.	Taxi Park and Market respectively.
22.	[redacted] **Kampala Operational Taxi Stages Association [KOTSA] Old Park** ➢ He stated that there was need to work on Kafumbe Mukasa Road to join Nakivubo Roads between Nakivubo Stadium and Owino Market since the roads leading to the clocktower monument would be closed during construction of the flyover and relocation of the Clock Tower. ➢ He stated that there was need to unblock Luwum Street by removing the ➢ He also suggested that Burton Street to Ben Kiwanuka road at the Shoprite Junction should be opened to ease on the traffic jam around Nakasero Market. ➢ He suggested that the authorities should unblock Luwum Streest to the Middle lane to join the Pioneer mall ➢ He stated that hawkers on Luwum Street and around the Clock Tower increase on pedestrian traffic and traffic jam. He advised	✓ Alternative routes need to be created during the Clocktower relocation to ease on the traffic jam within the city centre and other outlets to the South and East of Kampala City. ✓ Remove all illegal motorcycle and commuter taxi stages involving for the around the construction area to help during the construction of the flyover.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	that these illegal activities should be removed by the relevant authorities to improve the situation at luwum street and around the Clock Tower. ➢ Allow diversions and alternative routes to enable the construction activities go on smoothly. ➢ There should be roper lighting on the diversions or security lights. ➢ He also welcomed the relocation of the Clock Tower monument which would help in the increased flow of vehicles along Entebbe Road and the Queensway.	
21.	[redacted] **Kampala Operational Taxi Stages Association [KOTSA] Old Park** ➢ He stated that there are illegal stages created by the motorcycle influx [Boda boda stages] and the commuter taxis at Miniprice, Burton Street, Entebbe Road, Nasser Road, Nkurumah Road, Mutasaasa Kafeero building and the Clock Tower. That the Kampala Capital City Authority should remove these because they are part and cause of the congestion problem in the city centre. They increase the s jam along the Luwum Street, which brings more pressure on other roads leading out of the city centre. ➢ He further stated that works should be done at night to avoid on increasing jam at the peak hours ➢ Lack of sensitisation of the local population on the projects at hand are hurting the local people and advised that the public should continuously be engaged on the ongoing activities so that they are able to plan their movements in advance basing on the Contractors Plans.	✓ Alternative routes need to be created during the Clocktower relocation to ease on the traffic jam within the city centre and other outlets to the South and East of Kampala City.
22.	[redacted] **Directorate of Environment Monitoring and Compliance -**	✓ Handed over the team to the Department of Infrastructure.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	National Environment Management Authority [NEMA]- ➢ He stated that he had received the communication earlier and had instructed the team in charge of infrastructure at the Directorate of Environment Monitoring and Compliance to give their views on the subject matter. ➢ He was aware that the project was ongoing.	
23.	[redacted] **Department of Infrastructure** **Directorate of Environment Monitoring and Compliance -** **National Environment Management Authority [NEMA]-** ➢ She welcomed the team to the National Environment Management Authority. ➢ She stated that the monuments and shrines was a matter under the Ministry of Tourism, Wildlife and Antiquities' and particularly under the Department of Museums and Monuments. ➢ She stated that there was need to do a detailed study on the culture and monuments on the entire project change. This is a requirement in the National Environment Act. ➢ She stated that the Project Affected Persons and other stakeholders are highly informed and therefore advised the team to fully engage them in the study to avoid red flags during the project implementation. ➢ She stated that the culture and monuments study should be done separately showing the difference on each of the affected monuments and shrine. It is key to them in the literature review. ➢ She also stated that while doing the stakeholder consultations, the ESIA team should be able to collect responses from the stakeholders consulted to shorten the time for the approval process. This will be an indication that the lead stakeholders	✓ Work with the Department of Museums and Monuments to ensure to collect as much information as possible surrounding the monuments and shrines. ✓ Ensure that the conditions within the main Certificate of Approval for the Flyover Project are adhered to. ✓ Ensure that there is full stakeholder engagement and response on this study. ✓ Ensure that separate studies are done for auxiliary components of the road project.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	would have looked at all the issues in detail concerning the subject matter in question. ➢ On the issue concerning the proposed holding ground for the Contractors material or stockpile area, she had wanted to know whether they were other suggested areas for approval because they needed a minimum of three areas in order to approve the stock pile areas. ➢ She indicated that the authority needed to alternatives in the design for such areas to be approved. ➢ She also wanted to know whether works were going to be carried out in the night. ➢ She stated that they didn't want a list of stakeholders presented to them in the document without responses.	
24.	[redacted] **Directorate of Environmental Monitoring and Compliance** **National Environment Management Authority [NEMA]** ➢ He stated that they did not expect a clamped assessment of the culture. He stated that they needed a detailed assessment of the culture and emphasis should be put on the affected monuments and shrine and incorporated in the design on the road. ➢ He stated that they do not approve night works and stockpile areas in the main ESIA. This is done separately. ➢ There should be drainage pattern studies for the low-lying areas. ➢ There should be considerations for minor traffic designs for the traffic flow so that the alternatives are minimised.	✓ Work with the Department of Museums and Monuments to ensure to collect as much information as possible surrounding the monuments and shrines. ✓ Ensure that the conditions within the main Certificate of Approval for the Flyover Project are adhered to. ✓ Ensure that there is full stakeholder engagement and response on this study. ✓ Ensure that separate studies are done for auxiliary components of the road project.
25.	[redacted] **Kampala Capital City Authority [KCCA]**	✓ Needed more time to conceptualise the project;

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He inquired on whether the flyover project was connected to the proposed road project from Nasser road to Nsambya Traffic Lights. ➢ He stated that he needed more time to internalise the project in order to make his input	
26.	[redacted] **Kampala Capital City Authority – Directorate of Physical Planning** ➢ He wanted to know whether the original design of the Clock Tower monument had been maintained following the earlier road design. ➢ He stated that during the first phase of the flyover, design the Japanese Consultancy design team had not been briefed and given the importance and history of the Clock Tower monument and that's why the designs were not done to incorporate it. ➢ He also stated that the history of the entire place would be distorted because some other projects would come and they would shift the Clock Tower to any other point as they did for the Lugard monument at Old Kampala and in Fort portal Municipality. ➢ He stated that shifting such a landmark was disastrous and stated that projects should respect the existing landmarks. This is in line with the Monuments Act. ➢ He stated that the suggested colours by the Global Pan African Movement on the Clock Tower monument was just creating conflicting history. It would seem that Pan Africanism is only an opposition to the colonial symbol, which is not a reflection of national importance. ➢ He also noted that such an act would not only distort this delicate history but it would also affect diplomatic relations such as the United Kingdom history versus the Pan African ideology.	✓ Maintain the original Concept; ✓ The Clock Tower monument is a landmark. ✓ The Design should have incorporated the Clock tower and other monuments without having to relocate them.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He noted that if the design would have not been taken then it would be possible to design the Clock Tower monument with its current base without having to shift. ➢ He also wanted to know whether the Clock Tower monument would be transferred as a whole or destroyed. He inquired on whether the Pan African Movement had a Land Title for the Freedom Square. ➢ He stated that in architecture and physical planning stated that in the Urban Development sector, the cities and towns have an identity, which can be described as a city gate landmark. ➢ He suggested that there would be a byelaw, which help in preserving the heritage. ➢ The identity of the city was to give its semblance of the city establishment. ➢ For the Centenary Monument, it could be cordoned off and the users of the centenary park enjoy its prominence after it has been restored.	
27.	[redacted] [redacted] **Ministry of Tourism, Wildlife and Antiquities [MTWA] –** **Department of Museum and Monuments [DMM]** ➢ He stated that the procedure to be followed should involve the Department of Museums and Monuments. ➢ He inquired from the ESIA Team on whether the design team had a plan of constructing the flyover over the Clock Tower Monument. ➢ He further inquired from the ESIA Team on whether there were any stipulated procedures on how the trees in the Pan African Park would be relocated.	✓ Maintain the original Concept; ✓ The Department of Museums and Monuments should be fully involved in the relocation of these monuments
28.	[redacted] [redacted] **Ministry of Tourism, Wildlife and Antiquities [MTWA] –**	✓ Maintain the original Concept;

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	Department of Museum and Monuments [DMM] ➢ He stated that the Contractor should submit the methodology for relocation of the Monuments for approval. ➢ He further stated that there should be a cartographic map of the existing structure and the new Geographical Information for the new area of relocation of the monuments. ➢ The Team of experts involved for this process should be certified personnel for the technical work. ➢ Tests of Materials should be done aby approved and accredited Government Laboratories. ➢ There should be hammer tests after completion of works ➢ He inquired from asked the ESIA Team on whether the Museum team would visit the Clock Tower and do some documentations for about three days. ➢ He further suggested that the museum team should be involved from the time of demolition of the Clock Tower to completion of its construction.	✓ The Department of Museums and Monuments should be fully involved in the relocation of these monuments
29.	[redacted] **Ministry of Tourism, Wildlife and Antiquities [MTWA] –** **Department of Museum and Monuments [DMM]** ➢ He stated that the Contractor should submit the methodology for relocation of the Monuments for approval. ➢ He further suggested that the museum team should be involved from the time of demolition of the Clock Tower to completion of its construction.	✓ Maintain the original Concept;
30.	[redacted] **Ministry of Tourism, Wildlife and Antiquities [MTWA] –** **Department of Museum and Monuments [DMM]**	✓ Maintain the original Concept; ✓ The design should be sketched to enable the determination of the engineering aspects;

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ She stated that the Buganda Cultural Ministry should be consulted on the issue of the Byuma Katwe Shrine. ➢ She also noted that stones can be preserved by Clans. ➢ She also stated that since people were so secretive when it comes to practising cultural rituals, the ESIA team should involve the Ministry of Gender, Labour and Social Development also facilitate the ritual ceremony of transferring the rock from the Right of Way. This might involve the appeasing of the media before movement. ➢ She further stated that the Clock Tower monument should maintain its integrity of character and history and should not have its colours changed as suggested by the Global Pan African Movement. ➢ She stated and requested the Consultants team to provide an artistic design of the Centenary Park Monument for discussion and review and requested that the artists responsible for the Centenary Monument should be brought on board.	
31.	[redacted] **Ministry of Tourism, Wildlife and Antiquities [MTWA] –** **Department of Museum and Monuments [DMM]** ➢ He suggested that the CHOGM trees could be left in place and the the Contractor and the Museum Teams see on how to rebuild the Clock Tower monument without tampering with the trees. ➢ He stated that consideration of the heritage monument should be put in place including the interpretation panel at the tower.	✓ Maintain the original Concept; ✓ The design should be sketched to enable the determination of the engineering aspects;
32.	[redacted] **Ministry of Tourism, Wildlife and Antiquities [MTWA] –** **Department of Museum and Monuments [DMM]**	✓ Maintain the original Concept; ✓ The design should be sketched to enable the determination of the engineering aspects;

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He stated that the Department of Museums and Monuments should be fully involved when transferring the monuments to avoid loss of artefacts ➢ The procedure to be followed should have been approved by the department to cater for the artefacts such as the clock, the stair case and the original the doors and seals. ➢ He further stated the that documents, designs, periods, architecture and time should availed and be included in this process of relocation. ➢ He wanted to know whether there was a procedure for relocating the affected trees in the Pan African garden since it is regarded as a memorial park. ➢ He stated that further consultations with the Buganda Kingdom should be carried out to ascertain facts of the Byuma Katwe Shrine. ➢ He objected to the colours on the monument and that the integrity of the Clock Tower monument had to be maintained. ➢ He also proposed that the media be present when the relocation and transfer of the Clock Tower Monument is done. ➢ He further suggested that the Contractor and the Museum and Monuments Team should visit the site before works begin to ascertain the facts on ground.	
33.	British Council	✓ To be consulted on the relocation of the Clock Tower,
34.	[redacted] **/Director of Regional and International Economic Affairs** **Ministry of Foreign Affairs [MOFA]** ➢ He was happy with the new developments because it would help in decongesting the city centre.	✓ Ministry of Foreign Affairs will handle the protocol issues with the British High Commission and other Embassy's regarding the Clock Tower Monument and CHOGM Trees Planted in the

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He inquired on whether the Pan African Movement had a Land Title for the Freedom Square. ➢ He strongly objected to adding the Global Pan African Freedom the colours to the Clock Tower monument and that the integrity of the Clock Tower monument had to be maintained. ➢ He also inquired on whether the whole monument was going to be relocated or if it was going to be reconstructed. ➢ He wanted to know whether the Byuma Bya Katwe Shrine was in existence. ➢ He also stated that officials from the Ministry of Tourism, Wildlife, and Antiquities would have additional information on the Clock Tower monument and that they should check in the archives for this information. ➢ He also stated that the locality would remain the same since the Clock Tower monument was being moved within the same vicinity. ➢ He wanted to know whether the Team had gone into the history and details of the monuments and advised that they should consult the Uganda Foundation Society for History. ➢ He suggested that before the Ministry of Foreign Affairs could contact the British High Commission, contacted the British, they had to check the archives for information covering the Clock Tower Monument. He suggested that the officials from Ministry of Tourism, Wildlife, and Antiquities should look into the records and archives. This would help the Ministry get braced with sufficient information before contacting the British High Commission. ➢ He also stated that the details on the ownership title of the land around the Clock Tower area would have to be ascertained. ➢ He affirmed that British would be happy if they were informed about the matter and that they would handle the matter diplomatically as long as the Clock Tower Monument retained its name and was relocated within the same vicinity. to a nearby	Pan African Freedom Square by the different dignitaries.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	location. He also suggested that information concerning the history and its importance be placed on the Clock Tower Monument to make it a place of prominence. ➢ He also stated that most of the concern would be internal because some people were of the view that we had deliberately erased the country's history over time. ➢ He stated that the British would also comply with the relocation because of the sensitivity of the matter. He further stated that they had not returned many things like the Omukama Kabalega's throne which was still in the Oxford Museum being requested for by Bunyoro Kitara Kingdom. ➢ He also emphasised that the British were sensitive and have considerable knowledge of the existing monuments and artefacts which are part of their history in Uganda. He noted that the British were taking care of the graves of fallen heroes of World war 1 and 2 in Uganda under their separate budget. ➢ He stated that the engagement with the British High Commission would take place after getting the relocation plan and sufficient information on the subject matter. ➢ He also stated that not everybody believed in Pan Africanism and that the Clock Tower was a national monument so it had to remain in its proper form. ➢ He stated that Global Pan African Movement was only a user of the land and that the Change of Land Use committee within the Ministry of Lands, Housing and Urban Development should be consulted to ascertain the real ownership of the land. ➢ He emphasised that the ESIA team should consult the Change of Land Use committee before finalising with the Global Pan African Movement so that the progress of work is made easy. ➢ He noted that apart from the base, the monument did not occupy so much space and could be placed at the Pan African Freedom Square without affecting the character of the park. It would further enhance the entire beauty of the area. ➢ He wanted to know whether the 22 trees that were going to be relocated belonged to all the CHOGM delegates. He further	

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	informed the team that the maps of the area could be in the archives of the Ministry of Local Government because it was in charge of the Beautification Committee during the 2007 CHOGM Heads of Government meeting and that the Park was under their docket at that time. ➢ He stated that most of the missing information was strategic information and that the information covering on the Clock Tower monument could still be available. ➢ He also emphasized that the justification for relocating the Clock Tower monument should be handed over to the Ministry of Foreign Affairs. ➢ He stated that the monuments at centenary park must have been under the National Council on monuments and so they could be consulted regarding that issue.	
35.	[redacted] **Under Secretary** **Ministry of Foreign Affairs [MOFA]** ➢ He welcomed the ESIA Consultancy team to the Ministry of Foreign Affairs. ➢ He stated that he had involved the Ministry of Tourism, Wildlife and Antiquities, Department of Museums and Monuments which had more technical experience on the matter concerning the Clock Tower and other monuments. ➢ He also stated that the Ugandans were looking forward to a beautiful Uganda, and were also looking forward to decongestion in the city centre and its associated exits. ➢ He stated that the Ministry of Foreign Affairs was informed about the matter before contacting the British High Commission ➢ He stated that they needed to such the archives before getting to the British since it's a statement between the country and the British Royal Family. ➢ He also said that the matter of the Clock Tower should be handled with caution.	✓ Ministry of Foreign Affairs will handle the protocol issues with the British High Commission and other Embassy's regarding the Clock Tower Monument and CHOGM Trees Planted in the Pan African Freedom Square by the different dignitaries.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He stated that the Ministry of Foreign Affairs was to act as a link to the British Government for the purposes of the additional ESIA studies being carried out on the Clock Tower monument. ➢ He wanted to know whether there were alternative sites fully explored and did it interfere with the challenge that we are trying to sort out? ➢ He stated that he lacked the structural design of the Clock Tower. ➢ He wanted to know whether all the CHOGM trees were going to be affected and by what number and whether they were marked for the particular trees. ➢ He also emphasized that consultations should go on and that we needed to move forward cautiously. ➢ He objected to the colours on the monument and that the integrity of the Clock Tower monument had to be maintained	
36.	[redacted] **Ministry of Foreign Affairs [MOFA]** ➢ He stated that there was need to visit the sites to ascertain what was on ground as discussed in order to give an informed view and opinion on the matter covering the Clock Tower and other monuments.	✓ Ministry of Foreign Affairs will handle the protocol issues with the British High Commission and other Embassy's regarding the Clock Tower Monument and CHOGM Trees Planted in the Pan African Freedom Square by the different dignitaries
37.	[redacted] **Development** **Ministry of Lands, Housing and Urban Development [MLHUD] – Directorate of Physical Planning and Urban Development** ➢ He inquired on whether the Pan African Movement had a Land Title for the Freedom Square.	✓ Ministry of Land s Housing and Urban Development would harmonise the land issue where the Clock Tower would be relocated. ✓ The Clocktower monument the original concept should be maintained. ✓ The Clock Tower should have its integrity and history

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He wanted to know whether the Shrine was in existence or that it was just a fake shrine that emerged as a result of the Flyover Road Project. He stated that they as a Ministry have stumbled on may fake shrines during the land acquisition process all over the country. ➢ He wanted to a lay his fears and that he was happy that the road project had fulfilled the Environment and Social Impact Assessment for the entire road project ➢ He stated that the Pan African Freedom Square should have been a park and a green area not meant for buildings. He further stated that he would check on the land use and the registered land user for the park. ➢ He objected to the colours on the monument and that the integrity of the Clock Tower monument had to be maintained ➢ Other suggested colours other than its original colour on the monument was out of order. ➢ He strongly agrees with the conditions set by the Department of Museums and Monuments. [DMM] ➢ He also agreed with the relocation and evacuation plan as suggested by Department of Museums and Monuments. He stated that there are many monuments which have been moved around the world. ➢ He also stated that the locality would remain the same since the Clock Tower monument was being moved within the same vicinity. ➢ He wanted to know whether the Team had gone into the history and details of the monuments. ➢ He further stated that the monument of the clocktower should maintain its integrity of character and the change of colours should be rejected by everyone. ➢ The proposed meeting should generate consensus on the matter. ➢ He stated that the Pan African Movement might have Political Muscle but they should be in line with other users. ➢ It is also possible to carry the artefacts of the Clock Tower to the museum and then create a replica of the same in the proposed relocation area.	maintained as well as making a place of prominence which can be accessed by the general public.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ While designing the Clock Tower, it is also possible to achieve modernity while maintain the ancient monument. ➢ He wanted to know how much space Kampala Capital City Authority was wielding on the title of the freedom square. ➢ He stated that it it would be possible to design the Clock Tower while maintaining the CHOGM Trees. He wanted to know the species of the trees ➢ The Director instructed the Assistant Commissioner for Department of Urban Development to check on the land use of the Freedom Square. ➢ He stated that they have faced many challenge's during compensation and that authenticity of the Byuma Katwe Shrine should be checked. ➢ He suggested that the Centenary Monument at the Park could be cordoned off. ➢ He further stated that the Centenary Monument could be left as it is without necessarily raising it. the park could be redesigned and made of prominence to let the Centenary monument stand out since he has seen it happen in other countries.	
38.	[redacted] **Planning** Ministry of Lands, Housing and Urban Development [MLHUD] – Directorate of Physical Planning and Urban Development ➢ He did not know what it meant by attachment to a monument until they tampered with the cow that showed a get way into Mbarara town. ➢ He wanted to know the attachment of the Clock Tower monument to the people. ➢ He also wanted to know whether the team had found its intrinsicBy value to the Clock Tower monument.	✓ The design of the clock tower monument should address and maintain the original concept. ✓ It should remain imposing as it was before.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He also stated that the Clock Tower monument could be preserved and gave an example of the Anglican shrine at Namugongo, which was preserved, and that a new one had been constructed separately besides it. ➢ He further stated that the tomb of Lazarus in Israel was preserved and that a modern was built besides it. ➢ He also stated that the Clock Tower monument should remain imposing even though it was relocated so that no one would notice that it has been moved.	
39.	[redacted] **Development** Ministry of Lands, Housing and Urban Development [MLHUD] – Directorate of Physical Planning and Urban Development ➢ She stated that in the Urban Development sector, the cities have an identity which can be described as a city gate land mark. ➢ During the Biblical times, cities had such land marks like Babylon which are still existent today. ➢ The identity of the city was to give its semblance of the city establishment ➢ Katwe is a neighbouring city and the Clock Tower was in one way seen as a gateway to the Kampala City. ➢ She further suggested that for the Clock Tower monument, the design would look at a balance between the old and the new. ➢ The identity of the Clock Tower monument would promote local tourism. ➢ The Ministry would ascertain the land use and ownership. ➢ She also stated that the design could be circumvented.	✓ Visibility of the monuments should be maintained ✓ Maintain the original Concept and history of the monuments should be preserved. The should achieve the balance between the old and the new since they identify the history of cities.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ In the matter of the Byuma Katwe Shrine, she stated that it was possible to maintain the shrine. It would matter if the culture was most predominant in the area. ➢ She gave an example of some of the shrines in India where a road was built and the shrine was preserved in the centre of the road without tampering with it. ➢ She stated that the Clock Tower was of great significance since it preserved history ➢ For the Centenary Monument it could be cordoned off and the users of the centenary park enjoy its prominence after it has been restored.	
40.	[redacted] **Ministry of Lands, Housing and Urban Development [MLHUD] –** Directorate of Physical Planning and Urban Development ➢ She stated that the Clock Tower monument was a land mark in the city for directions. ➢ She stated that it was imperative to preserve the Clocktower monument. ➢ She inquired on whether the people around the vicinity of the area would be affected and whether they have been consulted and compensated. ➢ The team should continue to engage the public on the matter. ➢ She stressed that it was good as a country to preserve history. ➢ In the matter of the Byuma Katwe shrine, she suggested the Buganda Cultural Ministry be consulted to pronounce its self on the matter. ➢ She stressed that the shrine was a sensitive matter and the Buganda leadership [Ssaza Chiefs] of the area should be consulted to ascertain the ownership and its importance in relation to the Buganda culture.	✓ The Clock Tower should be left as a landmark for the country. ✓ Consult the Buganda Kingdom Cultural Ministry on the Byuma Katwe cultural shrine.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
41.	[redacted]	✓ To be consulted on the relocation of the Clock Tower, and the Byuma Katwe Shrine
42.	[redacted] Director of the Directorate of Labour, Employment and Occupational Safety and Health - Ministry of Gender, Labour and Social Development [MGLSD]	✓ To be consulted on the enabling environment for equitable access to safe, healthy and decent employment.
43.	Director of Gender and Community Development- Ministry of Gender, Labour and Social Development [MGLSD]	✓ To be consulted on Community Mobilization and Empowerment which aims at mobilising communities to participate in the development process
44.	[redacted] Director Social Protection- Ministry of Gender, Labour and Social Development [MGLSD]	✓ To be consulted on Social protection which seeks to protect the vulnerable groups from deprivation and livelihood risks.
45.	[redacted] **Minister of Lands, Agriculture, Environment and Community Service** **Buganda Kingdom Government** ➢ She welcomed the ESIA Team to Buganda Kingdom Headquarters in Bulange. ➢ She stated that the mode of communication was Luganda. ➢ She requested that the Clock Tower monument maintains its integrity and be referred to as 'Esawa Ya Kwini' ➢ She stated that the CHOGM trees which should have been cut in the Pan African park should be replaced by indigenous trees in the relocation plan. ➢ She further stated that the documents had been passed to the Cultural and Tourism Ministry for scrutiny and comments.	✓ Visibility of the monuments should be maintained ✓ Maintain the original Concept and history of the monuments should be preserved.

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ She also stated that she would consult the Buganda Cultural AND tourism Ministry on matters of the Byuma Katwe Shrine. ➢ She thanked the Team for consulting Buganda Kingdom.	
46.	[redacted] **Ministry of Lands, Agriculture, Environment and Community Service** **Buganda Kingdom Government** ➢ He stated that he was happy with the new developments. ➢ He also wanted to know whether the pollution aspects had been put into consideration especially covering the Nakivubo channel. ➢ He wanted to know the ecosystem of the Nakivubo Channel. ➢ He wanted to know about the drainage patterns and how they would affect the surrounding settlements. ➢ that he was not so conversant with the Centenary Park Monument. ➢ He also stated that he did not know much about the Byuma Katwe Shrine in existence. ➢ He inquired on whether the real trees of CHOGM were being relocated and replanted elsewhere.	✓ Maintain the original Concept and history of the monuments should be preserved.
47.	[redacted] **The Chairperson, Natural Resources Committee of the Parliament of the Republic of Uganda** ➢ He stated that he was happy with the new developments. ➢ He also stated that he was not so conversant with the Centenary Park Monument. ➢ He also stated that he did not know much about the Byuma Katwe Shrine in existence but advised that consultations be done with Buganda Kingdom.	✓

	Meeting Stakeholders	
S/No	Comments at meeting	Summary
	➢ He inquired on whether the real trees of CHOGM were being relocated and replanted elsewhere.	
48.	Utilities Providers.	✓ To be invited for the Stakeholders workshop on the 18th of February 2020
49	Meeting **Counsellor KCCA Katwe II Parish,** [redacted] The area is composed of several stones one of which lies in the right of way of the final design road. The Councillor informed the team that there was an important spirit (musambwa) that owns the shrine. This Musambwa has supernatural powers to the extent of holding a train till sacrifices have been done. He went on to point out the following: - ➢ The stones were shrouded in a bush before the CHOGM conference. This enabled the congregation to perform their rituals undisturbed; ➢ The celebrations are conducted at the centre (some kind of alter) although the procession starts from the first stone (to the east about 30 metres from the centre); ➢ Different people come to the shrine with varying needs as directed by the spirit; ➢ Since the action of CHOGM to expose the stones, locals have started to call them CHOGM stones although originally they were known as ByumaKatwe,. The origin of the name Katwe is from the First stone to the east from where the procession starts; ➢ He narrated the experience of Muhindo who failed to follow cultural norms before constructing, that him, excavator driver and his workers died within two days after commencing excavation (this could not be collaborated though!); ➢ After performing rituals, it was found to be OK later; ➢ In the ancient past the shrine owner was Mr. Byoma. ➢ Following the clearing of the bush the traffic of pilgrims has drastically reduced;	✓ The shrine is revered, and those who did not take it seriously suffered consequences ✓ Its both a healing centre and a place of pilgrimages where processions occasionally take place in line with different needs; ✓ Since CHOGM, the traffic has reduced because the bush around was removed;
50	[redacted] The chairman was not keen to discuss this matter, but acknowledged that the care taker was JajjaJajja Getrida Nabona. He wondered whether that stone could stop development?	✓ The stone protruding into the road should be removed and not allowed to stop development;

	Nevertheless, he agreed to introduce the team to the main care taker.	
51	[redacted] The team discussed both the shrine and the Clock Tower relocation with the Vicar. He noted as follows: - ➢ The church is associated to the Clock tower because of its sign and location Vis a vie the church; ➢ It has been used as a directional point for those seeking to come to Kitarra church; ➢ They welcome the development and have no problem with the relocation; ➢ But can the designers consider providing an access to the church from the new road; ➢ This church is also monumental because it is one of a kind in Kampala City allowing people to worship in their languages and thereby preserving their culture; ➢ Regardng Katwe station, them as Christians have believing in God cannot support that activity; ➢ *The* stone should be cleared; ➢ When the church came the activity at the shrine reduced and the bush was removed at CHOGM time; ➢ It is now mostly a dane for drug pushers and harbours all manner of criminals; ➢ Sanitation is an issue at the stone such that a few of the descent ones sometimes come to the church premises, while others litter the area;	✓ The clock tower is important to the as the reference point for those locating the church and its relocation in the same area will not affect that status; ✓ ✓ The shrine can be removed since it is now a den for thieves and wrong elements which is not Christian like; ✓ There is a serious issue of sanitation because of the many people there who have no sanitation facilities. **Summary Response to the Vicar from the team member** ➢ Regarding access, the Vicar was informed that while the request will be recorded, it is a complicated mater since there is also the railway line to consider; ➢ That in fact the current access that crosses the railway line is not quite legal; ➢ That it can be good for them to approach the railway people who can consider the possibilities as they conclude the standard gauge railway design;
52	[redacted] ➢ As far as she was concerned, shifting the clock tower is Ok as it allowed development; ➢ She had never heard of the Katwe shrine although she has seen the stones; ➢ The place harbours many thieves especially before the thicket which was there was removed;	✓ This person was devoted Christian and did not appear comfortable to discuss the shrine issues however she thinks that the shrine should be removed

	➢ Although the Church was started in 1992 and used to meet at Nakasero, the construction of the church was started in 2008 and the church completed and was entered in 2009; ➢ The Bush around the stones were cleared at CHOGN time in 2008; ➢ The stones can be removed;	
53	[redacted] ➢ This is the most senior person the team met that has authority over the stones. It was explained to her that one of the stones lies in the right of way of the KFO and we wanted her views regarding its removal in addition to other pertinent matters about the shrine. The stated as follows: - ➢ As a person she did not know when the shrine started; ➢ For her she has been caretaking kabaka's shrines something she called (***Kukuma Ebyotto Bya Sabassajja Kabaka of Buganda***); ➢ She has done this at the Masaka Palace, Bamunaika Palace and at The Mengo Palace (although in Mengo she worked only two months); ➢ The stone / shrine is useful as it helps us all and these stones represent the bones which everyone has in his / her body; ➢ As one who does Kukuma Ekyoto Kya Kabaka she is supposed to do it daily but here she does it occasionally; ➢ On the day the Queen came, she Kukuma Kyoto and even the Queen's Motor cade slowed as it approached the area recognising the Musambwa. ➢ She says that waliwo bananyini (that there are the owners whom she could not name as they are spirits); he said the baganda don't say everything thus ***"Ffe abaganda obutuba twogera tulekamu"***; ➢ People come to worship and Jajjanaboja doesn't accept money. She says she is rich. ➢ For her she Looks after the alter (Kukuma Kyoto) and originally the shrine had two sides with the left belonging to Byoma while the right side belonges to Kiwanuka; ➢ During those times miracles like lightning strikes and Enyondo (hammer). These days the street lights took the miracles away: ➢ The road contractors can remove and relocate the stone within the area. She would have no objection; ➢ On being probed about the possible cultural functions she said none is needed and even if given a million she can not accept it that would be tantamount to selling the **<u>BYOMA BYA KATWE</u>**. ➢ She also raised the issue of sanitation and lawlessness the ***"Emisegge gyonoonawo"***	✓ The shrine is owned by higher powers but for them they caretake and are commandeered by the spirit to take any actions; ✓ The shrine especially the stone is useful to the community according to their need; ✓ Miracles can sometimes happen at this stone; ✓ The stone in the right of way can be relocated and there would be no requirement for payment since payment would be against the Spirit **of BYOMA BYA KATWE**. ✓ The issue of sanitation and lawlessness is a concern The Team also observed as follows: - ➢ Close observation showed that the stone has some blasting holes as if some person had wanted to blast it in the past. No one could give an answer as to why the blasting never took place! ➢ Her explanation was that they failed to blast them. ➢ To test the Jajja about her claims of not accepting money,

	Regarding the Clock Tower she noted as follows: - ➢ As a Muganda she has nothing to say about the clock tower. She saw it being built in the fifties, and she doesn't involve in Politics since her dad was arrested during the pre-independence struggles; ➢ Her parents were Israel Mbuga and Filista Namudu Nakayima. ➢ Her grandfather was Jajja Eriya Kibakola and she can interpret dreams!	➢ The Team Leader offered her ten thousand shillings for lunch. She run away quickly that that would have been a tabu if she were toaccept. She looks above eighty but she has strength to run ➢ She declined to disclose her age. ➢ She was happy with the team as seen from the images below
54	[redacted] ➢ This was met earlier and she told the team that she only comes to clean when the spirit orders her. She called it Empewo. ➢ She entertains those who come and find her by way of helping; ➢ The spirit guides her on who to help; ➢ For her she can accept donations and a donation was made; ➢ She would not wish to talk much but would take us to the real boss – [redacted]	✓ Would not wish to talk much but the spirit guides her when to come and when to stay away; ✓ She welcomes all who come to the shrine and it is open to all
	[redacted] In Charge of Communications, **Bank of Uganda**	✓ In a telephone discussion, he indicated that the Bank would not block development and the idea of relocation would be acceptable. He however asked for a letter to the Governor so that the response could be in written form and more official.

ANNEX CT 6 : LIST OF CONTACTED PEOPLE / PERSONS

RWENZO GREEN ASSOCIATES

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 13th Jan 2020

LEAD AGENCY/KEY STAKEHOLDER

[redacted]

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE:.....

LEAD AGENCY/KEY STAKEHOLDER

[redacted]

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE:....22 - 01 - 2020.....

LEAD AGENCY/KEY STAKEHOLDER

[redacted]

RWENZO GREEN ASSOCIATES

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 22/01/2020 **LEAD AGENCY/KEY STAKEHOLDER**

[redacted]

RWENZO GREEN ASSOCIATES

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 29th - 01 - 2020 **LEAD AGENCY/KEY STAKEHOLDER**

[redacted]

RWENZO GREEN ASSOCIATES

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE:..... **LEAD AGENCY/KEY STAKEHOLDER**

[redacted]

RWENZO GREEN ASSOCIATES

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 29/1/2020 **LEAD AGENCY/KEY STAKEHOLDER**

[redacted]

RWENZO GREEN ASSOCIATES

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 04/02/2020 **LEAD AGENCY/KEY STAKEHOLDER**

[redacted]

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 30/01/2020 DISTRICT : - **KCCA**

[redacted]

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 30/01/2020 DISTRICT : - KCCA

[redacted]

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 4th Feb 2020 LEAD AGENCY/KEY STAKEHOLDER

[redacted]

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 4th Feb 2020 **LEAD AGENCY/KEY STAKEHOLDER**

[redacted]

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 04 · 03 · 2020

LEAD AGENCY/KEY STAKEHOLDER

[redacted]

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE:.....

LEAD AGENCY/KEY STAKEHOLDER

[redacted]

RWENZO - GREEN ASSOCIATES: - "Preserving the Environment and Sustaining Development through Environment, Social and Climate Impacts Assessments"

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

List of Contacted Persons

DATE: 10/2/2020 - Buganda Kingdom Meeting

LEAD AGENCY/KEY STAKEHOLDER

RWENZO - GREEN ASSOCIATES: - "Preserving the Environment and Sustaining Development through Environment, Social and Climate Impacts Assessments"

SPECIFIC ENVIRONMENTAL IMPACT STUDY FOR THE CLOCK TOWER RELOCATION DURING THE CONSTRUCTON OF THE KAMPALA FLYOVER (KFO) – ADDENNDUM TO FINAL EIS

DATE: 11/2/2020

List of Contacted Persons

[redacted]

ANNEX CT 7: LIST OF WORKSHOP ATTENDANTS

KAMPALA FLYOVER CONSTRUCTION AND ROAD UPGRADING PROJECT – LOT 1/2

RECORD OF ATTENDANCE

PURPOSE: REVIEW OF ESIA FOR CLOCK TOWER RELOCATION

VENUE: MESTIL HOTEL - MABIRA CONFERENCE ROOM **DATE:** 18/02/2020

[redacted]

[redacted]

[redacted]

KAMPALA FLYOVER CONSTRUCTION AND ROAD UPGRADING PROJECT – LOT 1/2

RECORD OF ATTENDANCE

PURPOSE: REVIEW OF ESIA FOR CLOCK TOWER RELOCATION

VENUE: MESTIL HOTEL - MABIRA CONFERENCE ROOM **DATE:** 18/02/2020

[redacted]

ANNEX CT 8: LETTER FROM DMM GIVING CONDITIONS FOR RELOCATION

Telephone/fax 256-41-232707
Email: mumod@mtti.go.ug
: rmwanja@mtti.go.ug

THE REPUBLIC OF UGANDA

MINISTRY OF TOURISM, WILDLIFE AND HERITAGE
Department of Museums and Monuments,
Plot No. 5 Kira Road,
P.O. Box 5718,
Kampala-Uganda.

MMD/ADIM/06

15th October 2015

The Executive Director
Uganda National Roads Authority.
Kampala

Dear Sir/Madam,

RE: CLOCK TOWER MONUMENT RELOCATION

The Department of Museums and Monuments has now accepted the relocation of the Clock Tower Monument following the new improved designs by UNRA and JICA. The designs have elaborated on :-

- Improved visibility, greater accessibility by the general public and tourists. The new location will be only 100 meter way from the Queens way, so the clock tower will still be in line with the history of queen's way Landscape. The two different histories of Pan Africanism and colonialism will not be juxtaposed as earlier designed.

However the following actions need to be followed.

1 Identify and earmark the site for the relocation from the Pan African square.

2 An archeological study to be conducted at the new place of relocation before the process takes place.

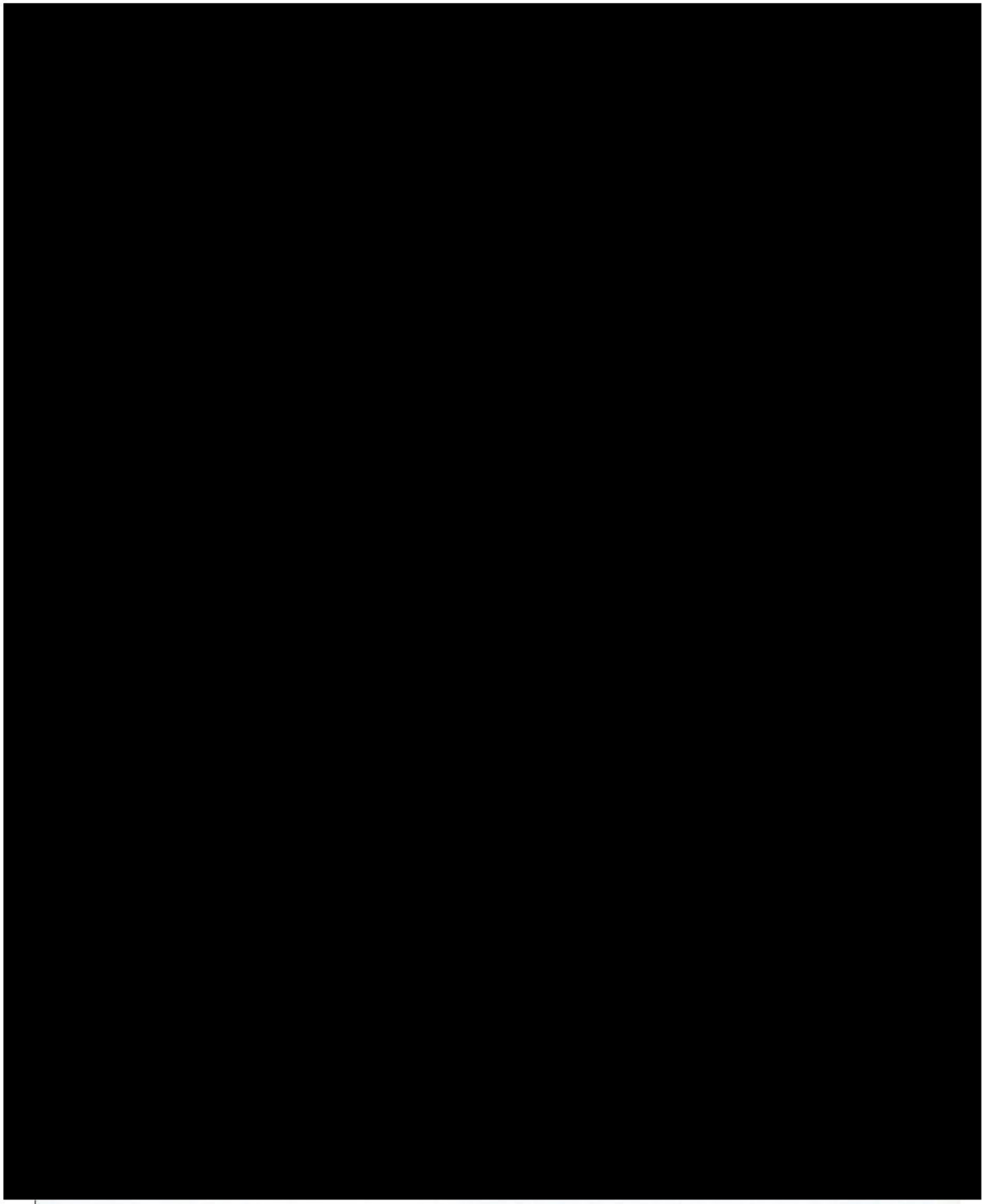
3 An architect be procured before the relocation process to prepare details of the design of the new replica concrete support structure and associated support structures and surrounding landscapes be submitted to the department.

4 Documentation at all phases, before and during relocation have to be considered. Amongst the team to conduct the documentation exercise should compose at least one (Conservator) from the Department of Museums and Monuments.

5 Before the commencement of the relocation process, the minister responsible for Tourism and Antiquities will make a public notice of the clock tower relocation.

Cc: Executive Director, KCCA
Cc: Executive Director, NIPPON KOEI

1 ANNEX CT 9 LETTER FROM GLOBAL PAN AFRICAN MOVEMENT GIVING CONDITIONS



ANNEX CT 10: TREE CUTTING PERMIT FROM KCCA

KCCA
KAMPALA CAPITAL CITY AUTHORITY

DIRECTORATE OF PHYSICAL PLANNING

Our Ref: DPP/KCCA/705/01
Your Ref: SKJV/L/KFO/KCCA/003

2nd September, 2019

SHIMIZU – KONOIKE JOINT VENTURE
OFFICE PLOT 4, 6-8 QUEENS WAY
(CLOCK TOWER), KAMPALA.
P.O. BOX 7036, KAMPALA, UGANDA
Tel: 0200993 993 / 020099699

[redacted]

RE: PERMISSION TO CUT TREES FOR LOT 1 OF KAMPALA FLYOVER PROJECT CONSTRUCTION

Reference is made to the above subject

A number of site visits were conducted with the KCCA technical team and the contractor (Shimizu-Konoike joint venture) between 19th - 23rd August. A detailed tree assessment was undertaken and below are some of the observations;

- A total of **524 trees** were assessed within the working area for the proposed construction of Kampala Flyover project. This includes the all affected road reserves, public green spaces and private properties (Table 1).
- A total of **474 trees** are located within the demarcated project right of way (Table 1).
- A total of **23 trees** are located in close proximity to the demarcated project right of way and may be affected by the works (Table 1).

P. O. Box 7010 Kampala- Uganda
Plot 1-3 Apollo Kaggwa Road
Tel: 0414 231 446 / 0204 660 000
Web: www.kcca.go.ug, Email: info@kcca.go.ug
f: facebook.com/kccaug, t: @KCCAUG

- A total of **27 trees** are located safely outside the project right of way and therefore should not be cut (Table 1)
- The assessment identified a total of **53 tree species** which included both indigenous and exotics species ranging from the very young to the mature trees.
- The majority of the trees were observed to be in good health.
- It was noted that the project contractor had marked out some trees for removal prior to the assessments (Figure1)

Based on the above observations, we recommend the following:

- A total of **474 trees** shall be **CUT** to pave way for the Kampala flyover works as per recommendation in (Tables 3-13) attached to this permit.
- The contractor should take note that of the **50 trees** located close to and outside the project right of way, **23 trees** may be affected by the works as shall be guided by KCCA. The remaining **27 trees SHALL NOT** be damaged or cut (Table 1).
- The contractor shall desist from cutting trees that have not been earmarked for removal without authorization especially within Pan African freedom square and Uganda Police fire brigade premises
- The contractor shall ensure transportation of all cut tree logs and offcuts to locations that will be specified by KCCA.
- Every tree cut (young or mature) **SHALL** be replaced with two saplings of a specific species and size. The confirmed replacements currently stand at **948** saplings. However this number may increase where trees likely to be affected

are eventually cut and these shall be replaced with the same rate of two saplings per tree (Table 1).

- All replacement saplings shall be of a size not less than 1m depending on the species as recommended by the Authority (Table 2). The contractor is advised to purchase these saplings early enough within the project timeline to enable them acclimatize to the environment.
- All proposed saplings shall be planted in adequately sized tree holes (1m x1m x 1m) and locations for the same shall be determined by the Authority.
- All saplings shall be planted with tree protection cages to improve their survival rate.
- All saplings must be nourished with organic manure at the point of planting.
- All newly planted trees shall be maintained for the entire length of the defects liability period.
- Any saplings or trees that may be damaged or lost during the defects liability period **MUST** be replaced with a similar species and maintained.
- All waste generated (cut material) from the exercise should be promptly cleared and not burned on the site.
- The contractor shall ensure safety of pedestrians and surrounding property during the execution of the exercise.
- The works shall be executed in the presence of a KCCA representative from Landscape Department for guidance.

KCCA requires that you adhere to the recommendations as stipulated in this permit. Please take note that KCCA shall not take responsibility for any activities that are done in disregard of the above mentioned requirements. Failure to comply with any of the above considerations shall render this permit invalid.

[redacted]

2 ANNEX CT 11: RELOCATION PLAN OF THE CLOCK TOWER.

1. OVERVIEW.

The Government of Uganda is implementing the Kampala Flyover Construction and Road Upgrading project. The objective is to improve traffic flow within the Greater Kampala Metropolitan Area by decongesting the central business district of Kampala city. The project is funded partly by the Government of Uganda with support from the government of Japan through Japanese International Corporation Agency (JICA).

In the construction plan, the main components of the flyover, pedestrian bridge and junction upgrading all fall around the current Clock Tower. In order to allow for smooth traffic flow across the areas of the current Clock Tower junction, it's proposed that the Clock Tower be relocated to an alternate site at Pan African Park within the current vicinity of the Tower.

2. BACKGROUND OF CLOCK TOWERS.

Clock towers are a specific type of building which houses a turret clock and has one or more clock faces on the upper exterior walls. Many clock towers are freestanding structures but they can also adjoin or be located on top of another building. Clock towers are a common sight in many parts of the world with some being iconic buildings. The mechanism inside the tower is known as a turret clock. It often marks the hour (and sometimes segments of an hour) by sounding large bells or chimes, sometimes playing simple musical phrases or tunes.

Although clock towers are today mostly admired for their aesthetics, they once served an important purpose. Before the middle of the twentieth century, most people did not have watches, and prior to

the 18th century even home clocks were rare. The first clocks did not have faces, but were solely striking clocks, which sounded bells to call the surrounding community to work or to prayer. They were therefore placed in towers so the bells would be audible for a long distance. Clock towers were placed near the centers of towns and were often the tallest structures there. As clock towers became more common, the designers realized that a dial on the outside of the tower would allow the townspeople to read the time whenever they wanted. The use of clock towers dates back to the antiquity and some towers have become famous landmarks.

3. CLOCK TOWERS AS MONUMENTS.

A monument is a memorial place or structure. It usually exists to remember past events or persons who have done something important in society. Monuments are not just of national importance but they also adorn the country or a city and are tourist attractions. Monuments are part of our heritage as most of them are historical, archeological and traditional. Some of them get destroyed because of bad weather conditions or urban development.

4. THE QUEEN'S CLOCK TOWER IN KAMPALA.

The clock tower on Entebbe road was constructed in 1954 to commemorate the coming of queen Elizabeth 11 to officiate the opening of the Owen falls dam renamed Nalubaale in Jinja District. It's therefore one of Uganda's renown historical monuments and its relocation is of paramount national importance.

5. FRAMEWORK.

Relocation and dismantling of an existing resource should be employed only as a last resort, if protection cannot be achieved by any other means.

Interventions in the relocation process will occur from documentation, identification and selection of artifacts, preservation to redevelopment and will be characterized by several activities ranging from maintenance to addition clearly stating the goals against which decisions will be based considering the cultural significance, integrity and contextual value.

6. ACTIVITY.

6.1 Identification of new site.

Investigations of historical, socio-cultural, ethnographic and archeological will be made at the new site to make proper analysis of suitability and preparation for relocation.

6.2. Preservation and restoration.

Sites of highest cultural significance are considered primarily as artifacts demanding protection as fragile and complex historical monuments. Retention of the existing form, integrity of the site and material if possible.

The design should/will be made in a way that protect the historical and original look of the tower while maintaining some of the aspects like the clock, steel ladders, original door, electrical fittings and the upper most part.

6.3 . Rehabilitation and reconstruction.

The activities of removal or addition are characteristic of measures in support of enhancement of the heritage resource. A property should be used for its originally intended purpose. If this is not feasible, every reasonable effort shall be made to provide a compatible use which requires minimum alteration. Consideration of new use should begin with respect of existing and original traditional patterns. Therefore modification of the tower to current contemporary functional use and recreation of vanished resources will be explored. This will include the functional use of the clock with a ringing bell and if the original clock is not available create one.

6.4. Redevelopment.

Introduction of contemporary structures and additions sympathetic to the setting. This will involve proper documentation with interpretation panel availing information to enhance the heritage and history of the area. Any element of built environment is inseparable from the history to which it bears witness, and from the setting in which it occurs. Additions will echo contemporary ideas but respect and enhance the spirit of the original.

Structured Removal/ dismantling; this will follow the guided framework which will be generated based on the identified artifacts which will be incorporated into the new clock tower and those which will be kept by the Departments of Museum and Monuments if need be

6.5. Protection.

Protection involves a continuing programme of maintenance starting with the development of the conservation plan. The process of protection and enhancement will recognize all interests and have recourse of all fields of expertise which can contribute to the safeguarding of the site.

7. PRACTICE.

7.1. Documentation.

The better a resource is understood and interpreted, the better it will be protected and enhanced. To properly understand and interpret a site, there must be comprehensive investigation of all the qualities which invest a structure with significance. The documentation will capture historical, cultural, social, artistic and aesthetic values. It will also incorporate the aspects of form and design, material and substance, use and functions, traditional techniques and workmanship, location and setting and spirit and feeling. The department will be at the forefront of this including documentation of work on site.

7.2. Conjecture.

Activities involving the recovery or recreation of earlier forms will be limited to those forms which can be achieved without conjecture.

7.3. Distinguishability.

New work should/will be identifiable on close inspection or to the trained eye but will not impair the aesthetic integrity of the whole.

7.4 Materials and techniques.

Materials and techniques should/will respect traditional practice originally used on the clock tower unless modern substitutes for which a firm scientific basis exists, which have been supported by a body of experience and provide significant advantage.

7.5. Patina.

This forms part of the historic integrity of a resource and its destruction should/will be allowed only when essential to the protection of the resource.

7.6. Integrity.

Structural and technological integrity will be respected and will require attention to performance as well as appearance.

8.0 CONCLUSION

Adherence to the guidelines and principles outlined above will ensure that the clock tower continues to stand as an iconic pedestal and gateway to Uganda's capital city, Kampala, for generations to come.

3 ANNEX CT 12: MINUTE OF THE FINAL WORKSHOP AT MESTIL HOTEL NSAMBYA, KAMPALA.

KAMPALA FLYOVER CONSTRUCTION AND ROAD UPGRADING PROJECT LOT 1

WORKSHOP: THE CLOCK TOWER RELOCATION AND OTHER PHYSICAL CULTURAL RESOURCES

DATE: 18TH FEBRUARY 2020

VENUE: MÉSTIL HOTEL NSAMBYA

RAPPORTEUR'S REPORT

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ABBREVIATIONS AND ACRONYMS

CoA	Certificate of Approval
DMM	Department of Monuments and Museums
EJEC	Eighth Japan Engineering Company
GKMA	Greater Kampala Metropolitan Area
GPAM	Global Pan African Movement
JICA	Japan International Cooperation Agency
JV	Joint Venture
KCCA	Kampala Capital City Authority
KFCRUP	Kampala Flyover Construction and Road Upgrading Project
MOU	Memorandum of Understanding
PCR	Physical Cultural Resources
UNRA	Uganda National Roads Authority

EXECUTIVE SUMMARY

In 2014, a Feasibility Study (F/S) was conducted in 2013 – 2014 to find solutions to the traffic congestion in the Greater Kampala Metropolitan Area (GKMA). The F/S concluded that the construction of two flyovers at Kitgum House and Clock Tower Junction, widening of Mukwano Road and improvements of interfacing roads and junctions would be effective and feasible to achieve the traffic congestion mitigation objective.

An ESIA (Environmental and Social Impact Assessment) was conducted in 2014 for the Kampala Flyover Construction and Road Upgrading Project (KFCRUP) and the report was approved by National Environmental Management Authority (NEMA) on 28th August 2014, and the Certificate of Approval (CoA) was also issued by NEMA. The CoA expired on 27th August 2019 and an update was conducted to renew the CoA.

Due to changes in the detail designs, it is best practice to adjust the ESIA by conducting a design change environmental impact assessment. Furthermore, there is change in the Environment Law from the NEA Cap 253 to the NEA 2019 and that NEMA approvals require provision of more information whenever there are changes either in design or methods, so do the International Best Practices. With all these changes, the Employer, UNRA found it best that key stakeholder engagement meetings be conducted and a workshop be put in place where The Employer, The Consultant, The Contractor and concerned Stake Holders come together to discuss these issues so that they come up with a harmonized way forward.

The workshop was therefore held on 18th February 2020 and different presentations were made. The first presentation was by UNRA EBS/[redacted], who gave a brief overview of the entire project, updates on the land acquisition status and progress of the project. The next presentation was about the Background to the Clock Tower relocation by the KFCRUP Consultant's Head of Design, [redacted]. He highlighted the increase in the number of pedestrians, cars and motorcycles in the last 20 years since the Clock Tower was constructed, and explained the issues associated with the current location of the Clock Tower and the benefits that will come fourth after its relocation from an engineering point of view. The ESIA team leader [redacted], then presented the key changes with respect to the relocation of the Clock Tower and the impacted Physical Cultural Resources (PCRs) such as the Centenary Monument and the stone rocks in the right of way at Byuma bya Katwe shrine and the issues and areas of agreement as far as their relocation is concerned. Finally, the Contractor's representative [redacted] presented the Clock Tower relocation methodology.

The audience was invited to comment on the presentations made and some of the major concerns voiced were: accessibility of the Clock Tower after relocation; preservation of the Clock Tower as it is being relocated; which colours will be adopted by the relocated Clock Tower and preservation of other

cultural resources in Pan African Freedom Park during relocation. Official clarification on these matters was given for instance: land acquisition by UNRA for the area where the Clock Tower will be constructed; incorporating some artifacts of the old Clock Tower onto the Clock Tower to be constructed, and that archaeological test pits were dug and no cultural resources were found in the relocation area.

[redacted] outlined concluding remarks about the workshop and UNRA's HBS/Contracts Manager, [redacted], gave the workshop closing remarks.

1. BACKGROUND AND METHODOLOGY OF THE WORKSHOP

1.1 Background of the workshop

An ESIA study was conducted in 2014 and the report was approved by National Environmental Management Authority (NEMA) on 28th August 2014 then the Certificate of Approval (CoA) of Environmental Impact Assessment was also issued by NEMA. The CoA expired on 27th August 2019 and an update was conducted to renew the CoA.

Due to changes in the detail designs, it is best practice to adjust the ESIA by conducting a design change environmental impact assessment. Furthermore, there is change in the Environment Law from the NEA Cap 253 to the NEA 2019 and that NEMA approvals require provision of more information whenever there are changes either in design or methods, so do the International Best Practices.

With all these changes, the Employer, UNRA found it best that key stakeholder engagement meetings be conducted and a workshop be put in place where The Employer, The Consultant, The Contractor and concerned Stake Holders come together to discuss these issues so that they come up with an integrated way forward.

1.1.1 Why the workshop was conducted

a) The workshop was to bring Key Stakeholders together so that they can make an input in the proposed Design Change Mitigation Measures while at the same time contribute to the consensus building for the Clock Tower relocation;

b) To seek consensus on some of the critical Physical Cultural Resources (PCRs) such as the Clock Tower, the Byuma bya Katwe Shrine and Centenary Monument.

1.2 Workshop objectives

The overall **aim** of the workshop was to strengthen the design change Environmental Impact Assessment which includes relocation of Clock Tower and Other Monuments.

Specific Objectives were;

a) To present an overview of the progress of Kampala Flyover Construction and Road Upgrading Project in relation to Clock Tower Relocation.
b) To present a historical and technical background to the rationale behind the relocation of the Clock Tower.
c) To review and discuss the Consultants ESIA report of the relocation of Clock Tower and other monuments.

2. Methodology

The methodology adopted during the workshop included presentations from UNRA, the consultant and the contractor, discussion of issues arising from the presentations and concluding on the way forward.

Workshop participants encompassed representatives from Government, different organisations and offices. Among these were the Ministry of Works and Transport; the Ministry of Lands, Housing and Urban Development; Uganda National Roads Authority (UNRA); Kampala Capital City Authority (KCCA); Traffic Police; Global Pan African Movement (GPAM); Department of Monuments and Museum (DMM); History Department of Makerere University; The Consultant; The Contractor; among others.

3. Opening remarks

The Chief Guest, [redacted] representing the UNRA Executive Director, welcomed everyone to the workshop. He said that UNRA has a special commitment to observe the standards of environment and social protection throughout its activities and that there are several themes among which, three were mentioned;

i. UNRA is dedicated to take any assessment of environment and social impacts of roads and other UNRA projects in the compliance of national environmental requirements.
ii. UNRA is to engage stake holders and disclose information knowledge and creating awareness on UNRA projects.
iii. UNRA is committed to recognizing of cultural heritage

[redacted] mentioned that in line with safety issues, it was a necessity for the Clock Tower to be relocated to pave way for construction works.

4. PRESENTATIONS

4.1 Presentation by UNRA [redacted]

4.1.1 Background of the project

In order to mitigate traffic congestion within the Greater Kampala Metropolitan Area (GKMA), many projects and studies have been carried out. Among them, JICA conducted the Preparatory Survey on

the Great Kampala Roads Improvement Project (the F/S) in 2013 and 2014. The F/S concluded that the construction of two flyovers at Kitgum House and Clock Tower Junction, widening of Mukwano Road and improvements of interfacing roads and junctions would be effective and feasible to achieve the traffic congestion mitigation objective. The Project was further divided into three packages namely; Package 1 (Clock Tower Flyover), Package 2 (Nsambya Road - Mukwano Road) and Package 3 (Kitgum House Flyover).

Based on the F/S results, the Government of Uganda (GOU) represented by Uganda National Roads Authority (UNRA) carried out the detailed engineering study and procurement of the Project using the own government fund. During the original Detailed Design study, it became apparent that the harmonization with railway viaduct for the SGR (Standard Gauge Railway) project is necessary, which inevitably required significant modifications to Package 3 design. Consequently, UNRA decided to proceed with procurement of the Contractor for Packages 1&2 that had no impacts from SGR. Further, Packages 1&2 were combined as one contract package namely “Lot1”. In the same manner of naming, the Package 3 was renamed as “Lot2”.

Lot 1 commenced on 4th May 2019 with the Contractor’s (Shimizu-Konoike JV) Contract signed on 17th September 2018 and Consultancy Agreement signed on 5th March 2019.

4.1.2 Project overview

[redacted] pointed out the main parties that are responsible for the smooth running off the project as listed below;

- The Employer: Uganda National Roads Authority (UNRA)
- The Line Ministry: Ministry of Works and Transport
- Project-based affiliated agency: Kampala Capital City Authority (KCCA)
- The Financer: JICA Loan (JPY 19.989 billion)
- The Consultants: Nippon Koei/ Eighth-Japan Engineering Consultants Inc. JV in association with ICS Engineering and Environment Ltd
- Lot 1 Contractors: Shimizu – Konoike Joint Venture

4.1.3 Land acquisition status for Lot 1

Mr. Mijumbi added that 99% of the Lot 1 Right of Way has been handed over to the contractor excluding the Link Road and the remaining RoW is expected to be handed over by the end of April 2020. A layout showing RoW hand over status has been appended.

4.1.4 Progress of works

Mr. Mijumbi presented the progress of works as summarized in the table below:

Table 1: Progress of works

No	Description	Progress
1	**Mobilization**	Base camp & offices set up, materials sources approved
2	**Relocation Works**	– Nominated Subcontractor, ROKO in place. – Designs complete – Ongoing site relocation works
	• Eaton Tower	– MOU Signed, works to start 20 February 2020
	• Water & Sewerage Lines	– MOU Signed, Specialized Subcontractor currently mobilizing
	• Telecom Lines	– Designs complete – Erection of Temporary Poles ongoing
	• UMEME	– Designs complete – Awaiting MOU signatures and UMEME mobilization
	• Bill Boards	– Removals ongoing
	• Clock Tower Relocation	– Investigations and Inventory of existing structures done, – ESIA Updates ongoing prior to relocation
3	**Civil Works** 0.93% vs 2.9% planned	– Batching plant set up; – Ongoing Underpass excavations works; – Clearing and grubbing and Earthworks along Queensway; – Foundation Steel screw Piles for Foundations on site;

4.2 Clock Tower Presentation

[redacted] presented the background of the project, the escalation in the number of pedestrians, cars and motorcycles over the years in the last 20 years since the Clock Tower was constructed in 1999, as of end of 2019. He further explained the issues associated with the current location of the Clock Tower and the benefits that will come fourth after its relocation from an engineering point of view.

4.2.1 Concerns about the current location Clock Tower

a) Limits traffic Capacity: The current location impairs smooth traffic flow through the junction and provision of the required widening or extra lanes to meet the future demand.
b) Visibility problem for traffic: Obscures traffic sight lines and/or reduces on the sight distance which poses safety challenges.

c) Tourists/Pedestrian safety: Impossible to be accessed by tourists, remains largely isolated and observed from a distance with no intimate appreciation.
d) Constructability: The existing tower will interfere with smooth construction works especially arrangement of traffic diversion and movement of construction equipment.

4.2.2 Advantages offered by relocating to the Pan African square

a) It has ample space to among other things provide information panels on the history of the Clock Tower for the public to access and appreciate the monument.
b) It is located very close to the current location of the Clock Tower and will more or else retain similar viewership as before.

4.2.3 Conclusion from Engineering point of view

a) Enable implementation of the BRT and Kampala Flyover construction and Road Upgrading Project
b) Increased capacity of the junction as additional lanes will be provided
c) Smooth movement of traffic and improvement of visibility for motorists
d) Safe and flexible construction planning can be made
e) The new location of the Clock Tower will allow for accessibility which will enhance public awareness and appreciation of the monument
f) The new location will promote tourism since it will be safer for the tourists and general public to visit the site.

4.3 ESIA Presentation

[redacted] noted that because of changes in the detail designs, it is best practice to adjust the ESIA by conducting a design change environmental impact assessment. He also hinted on the change in the Environment Law from the NEA Cap 253 to the NEA 2019 and that NEMA approvals require provision of more information whenever there are changes either in design or methods, so do the International Best Practices. He then stated the reasons as to why the workshop was necessary as outlined below;

c) The workshop was to bring Key Stakeholders together so that they can make an input in the proposed Design Change Mitigation Measures while at the same time contribute to the consensus building for the development;
d) To seek consensus on some of the critical Physical Cultural Resources (PCRs) such as the Clock Tower, the Katwe Shrine and Centenary Monument.

He further mentioned that an ESIA study was conducted in 2014 and the report was approved by NEMA on 28th August 2014 and Certificate of Approval (CoA) of Environmental Impact Assessment was issued also by the National Environmental Management Authority (NEMA). The CoA expired on 27th August 2019 and an update was conducted to renew the CoA.

4.3.1 Key changes with respect to PCRs

a) The Detailed Design expanded the RoW.
b) The Detailed Design relocated the Clock Tower from present location to Pan African Park.
c) One of the stones at the Katwe Shrine was found to be in the RoW.
d) Some of the CHOGM Trees in the park will be impacted.

4.3.2 What the consultant has done so far

a) Conducting detailed consultations; Almost 80 individual Key Stakeholders have been consulted, excluding the workshop.
b) Conducted detailed Archaeological studies over the present location of Clock Tower and the targeted part of the Pan African Freedom Park (PAFP).
c) Prepared a Relocation Plan for the Clock Tower.
d) Conducted air pollution studies around the Clock Tower.
e) Reviewed various related literature and searches regarding lay out map for the planted trees.
f) Writing the reports

4.3.3 The Clock Tower relocation

The Clock Tower is to be relocated in Pan African Freedom Park (PAFP). After talking with a number of Stake Holders for the Clock Tower, Mr. Magezi hinted on a few of their reactions regarding its relocation during his presentation as listed below;

a) Department of Monuments and Museums (DMM)

The DMM wants the original design, photographs and documentation of the Clock Tower and its antiquities. DMM suggests that the people who are going to do the relocation should be certified professionals and the materials to be used for construction of the relocated Clock Tower should be tested in the laboratory.

b) Global Pan African Movement (GPAM)

Mr. Magezi stated that the GPAM agreed to relocate the Tower in their land but with some conditions and discussions about how the colour and slogan will be after relocation are going to continue.

c) Buganda Kingdom

They support the relocation as along as other environmental concerns have been taken care of.

d) Other Stake Holders

They say the Clock Tower is a sensitive monument and suggest enough consultations be done. Furthermore, some agree to its relocation but it should not be completely destroyed as Uganda's heritage will be getting destroyed. Others say it is a National Monument and should stay that way and not belong to the Buganda Kingdom or GPAM or other people.

e) Housing and Urban Development

The land use of the PAFP is in conformity with the relocation of the Clock Tower so there is no need for change of the Land Use Certificate. The clock must maintain its original character since little information is known about it.

f) Ministry of Foreign Affairs

Mr. Magezi reported that the Ministry of Foreign Affairs said that the Clock Tower is a national icon and Ugandans should decide on how it is treated, not necessarily the owners of the keys or the British although consultations can be made. They further mentioned that the clock must not be desecrated like what has happened to many other monuments in Uganda. It also offered to discuss with other stake holders especially the British High Commission.

4.3.4 Relocation of the stone in RoW at Byuma bya Katwe shrine

One of the stones at Byuma bya Katwe shrine is within the right of way (RoW). Mr. Magezi presented the opinions of some stake holders for this shrine as explained below;

a) Buganda Government

The Buganda Government agrees the offending stone be removed and placed inside the shrine with the other stones away from the RoW.

b) The care takers of the shrine

They also said the stone can be relocated and so far, have not indicated that there is going to be a financial cost for the relocation.

c) The Kitara Church

They do not mind removing the shrine altogether, but have to co-exist so discussions are still on going.

d) Department of Monuments and Museums (DMM)

They have listed seventy-two (72) monuments in Kampala but the shrine is not one of them. Mr. Magezi highlighted that a report has been submitted to the DMM and have asked them to study it and advise accordingly.

4.3.5 Relocation of Centenary Monument

[redacted] emphasized that the Centenary Monument, whose insignia is part of the Uganda 20-shillings currency note, falls in Lot 2 and it will be relocated but within the park. He also stated that the DMM thinks its designers should be involved. He mentioned that some people want to raise it because the flyover will dwarf the existing one and some oppose this because history will be changed.

4.3.6 Issues and areas of agreement

[redacted] concluded his presentation with the following remarks;

a) All Stakeholders consulted agree with the relocation of Clock Tower to Pan African Freedom Park
b) Conditions given by DMM as well as the Department of Physical Planning are accepted by most Stakeholders.

c) There is lack of consensus with some of the proposals of the GPAM.
d) There is agreement on relocation of the stone at shrine although the Buganda Kingdom is still consulting.
e) Sanitation facilities at Shrine area need follow up.
f) Traffic flow during construction is to be monitored.
g) The relocation should maintain the original concept with minimum changes.
h) The New Clock Tower should still stand out and be a center piece of the area.
i) The Clock Tower should maintain the original Concept.
j) Preserve any of the PCR that will be identified during the ongoing archeological excavations, though none have been found so far.
k) All trees removed must be replanted.
l) If Centenary Monument is to be temporarily removed, then, during removal, packaging and relocation, KCCA and DMM should be involved.
m) If possible the removal team should include the Artist who designed the Centenary Monument [redacted]
n) Boxing the Centenary Monument (for the Contractor to work around it) should be considered, although it is impossible because space is needed for the construction of the flyover.
o) Keep our eyes on the crown which is to deliver the Flyover at end of the day, otherwise we shall all have failed Uganda.

5. CLOCK TOWER DESIGN PRESENTATION FROM CONTRACTOR

[redacted] said that the major reason for relocation of the Clock Tower is its obstruction of flow of traffic. An as-is built investigation was done and the following were observed;

a) The outer shell is a steel casing fixed to a 250mm concrete wall and mounted on a clay tile floor finish
b) It has three (3) levels, each with stairs going up to the next level.
c) After the 3 levels, there is an area where the clocks are viewed from but no clocks were found in place.

He mentioned that three design teams have been submitted to the Engineer for approval and the criteria for these teams is that they have done cultural resource or monument projects before. Additionally, the new design for the Clock Tower will be a replica for the old one and no alterations will be made on the external dimensions. Only the wall and slab thicknesses will be improved for structural purposes.

6. REACTIONS, CONCLUSION AND CLOSING REMARKS

6.1 Reactions and responses

After presentations, the audience was invited to comment on the presentations made. The table below shows the reactions that arose.

Table 2: Reactions and responses to the presentations

NO.	Reaction	Response
1	[redacted] He was in agreement with the transfer of the Clock Tower, however, he needed assurance from the ESIA team on the issues of national interest, heritage preservation and sustainable relocation. How far will the relocation stand the test of time? Will it survive in the relocation area for the next 1000 years or after 50 years, it will be relocated again? If that's the case, can a better place that can give it sustainable relocation be found for its transfer?	[redacted] mentioned that a conservation management plan will be made incorporating various issues including the information about the preservation of the relocated Clock Tower
2	[redacted] He said that during the presentation, it was made clear that the Tower was visited to investigate what it contains and it was noticed that the clocks are missing. When relocating, is there a chance to upgrade the relocated Clock Tower?	[redacted] suggested that this will be evaluated.
3	[redacted] He acknowledged that relocation is needed for the construction of the flyover. However, from a historical perspective, public executions done by Idi Amin in 1970's took place in the Pan African Freedom Park (PAFP), way before it was called the PAFP. There are tree stamps of eucalyptus trees where people were tied and shot at. In his opinion, as the French conserved the Bastille, the trees should also be	[redacted] explained that the consultant has dug test pits randomly in the area where the relocation of the Clock Tower is to be done and it was found clear of any archaeological or historical features. [redacted] pointed out that the land at PAM land is being acquired and

NO.	Reaction	Response
	preserved with higher importance than the Clock Tower because they remind Ugandans that never again should public executions be done in Uganda. He suggested that as the Tower gets executed, the place where public executions took place should not be tampered with. He also pointed out that the problem is that most of the public parks have ceased to be public. They are called public parks but are not accessible to everyone. In addition, he suggested the Tower should be constructed in such a way that the trees and the tower are accessible to the public.	the Clock Tower will be built on government land.
4	[redacted] He was concerned about the traffic congestion for the feeder roads that connect to major roads like Entebbe road, Salaama road, Kampala-Entebbe Express way, etc. He suggested that some of these feeder roads like Kayemba, Nantongo and Namasole Roads be worked on because they are in bad shape.	[redacted] mentioned that together with KCCA, they have identified these roads and come up with two options; a) Those interfacing with the project road within the right of way, there is a budget for maintaining them. b) KCCA should structure those outside the right of way into different projects and source for funds.
5.	[redacted] He suggested that the entire structure of Clock Tower not be demolished but some parts be preserved in the museum or reused in the construction of the new one. There also must be connectivity between the new and old Tower in terms of location, therefore, he disagreed with transferring it far away.	

NO.	Reaction	Response
6	[redacted] He suggested that the new Clock Tower be painted colours of what Africans stand for like red that represents the blood that unites all people of Africa, black for African people. Also, it should have the GPAM flag since it will be relocated on the Pan African land and words saying " Pan African Movement Square" be built at the bottom of the Tower	[redacted] explained that if it is relocation and not construction of a new Clock Tower, then it is only in order to follow the practical and international principles of relocation.
7	[redacted] He suggested that the Clock Tower be made accessible to everyone after construction and not be owned by GPAM.	
8	[redacted] She commented that relocation can happen for many reasons but it must be reserved in its original state. How much of the existing tower is going to be preserved and how will the authenticity of the tower be maintained? She further disagreed with changing the colours of the Clock Tower. In her opinion, the two should co-exist with each representing its own history and later joining into one from the time of the construction of the new Clock Tower till a later time. It should also be documented in history.	[redacted] hinted on the changes that the Pan African Square has gone through over a period of time. He pointed out that CHOGM trees were planted in the square and if the issue is to do with colonialism, those trees would not have been planted. In his opinion, it is possible for both the Tower and the PAFP to be harmonized.
9	[redacted] He requested that employment should be provided for the community during the construction activities.	

7. Conclusion

[redacted] concluded that there seemed to be a good consensus, i.e. about 99.9% of stakeholders agreed that the Kampala Flyover is a good project and it should go on as supported.

In addition, over 99% agree that the Clock Tower can be shifted from where it is to a location near the existing one and there is almost total agreement in relocating it to the Pan African Square from everyone that was consulted apart from one person, a Rastafarian.

Similarly, discussions are ongoing for the conservation management plan and the issue had already been raised by the consultant because without it, there is no assured future location for the monument.

Lastly, finalisation of land acquisition is underway by UNRA of the area where the Clock Tower is to be relocated. After the land is acquired, it will then be accessible by the public after construction.

8. Closing Remarks

[redacted] was delighted that the workshop had come to an end and said that people are always welcome to give comments. He then introduced the Contractor, Consultant and the UNRA team and closed the workshop.