

Appendix J: Environmental and Social Management Plan

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J1 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

A generic impact is an impact that potentially occurs at multiple locations across the project AOI where the VEC and or impact characteristics are similar across those multiple locations. A location-specific impact is a potential impact that may occur at a specific location or, where the sensitivity of a VEC at a particular location warrants generic mitigation as well as additional, location-specific mitigation.

Proposed mitigation has been designed to ameliorate generic type impacts and location-specific type impacts to a level that is considered to be not significant.

Section J1.1 presents the ESMP that has been prepared to address generic impacts and identifies respective mitigation together with proposed monitoring parameters, performance indicators, targets and acceptance criteria as applicable and, monitoring frequency.

Section J1.2 presents the location-specific ESMP. For each unique location-and-impact-mitigation combination a separate line item is presented, together with proposed monitoring parameters, performance indicators, targets and acceptance criteria as applicable and, monitoring frequency.

Monitoring parameters and performance indicators have been identified that are consistent with the SMART principle where applicable, namely: specific, measurable, achievable, realistic and time-bound.

The specific costs of mitigations will be provided under separate cover.

J1.1 Generic ESMP Matrix

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Soil compaction	Habitats of conservation importance	Impaired re-establishment of vegetation after construction	Soil Management Plan. Reinstatement Plan. Community Health, Safety and Security Plan.	<p>Load-bearing/ ground protection materials, such as bog mats and geotextile membranes under temporary haul roads, will be used to support heavy loads in areas of soft ground, including wetland areas.</p> <p>Local communities will be discouraged from using the right-of-way as an access road during construction through signage, awareness raising and the use of communication materials.</p> <p>If topsoil is stored for more than six months, the stacks will be monitored for:</p> <ul style="list-style-type: none"> • the presence of weeds, which will be controlled in accordance with the weed and pest control programme • compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Soil compaction. Adherence to the soil management plan in terms of topsoil storage and control of erosion and compaction. Compliance with reinstatement plan in terms of drainage, contouring and revegetation.	Zero noncompliance with the soil management plan and the reinstatement Plan.	Weekly during construction and reinstatement.	Project and project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers, DWRM, WMD, NFA, UWA
Soil erosion	Habitats of conservation importance	Loss of topsoil through erosion by wind or water causing impaired reinstatement	Soil management plan. Reinstatement plan.	Procedures will be developed, incorporating plans for erosion and sediment control and reinstatement. These will be produced before work begins at areas of fragile, sensitive or thin topsoil, side slopes or narrow ridges and at watercourse crossings. Sediment interception measures will be installed, inspected and maintained to prevent sediment runoff from the right-of-way or construction sites affecting watercourses, wetlands, waterbodies or environmentally sensitive areas. Procedures will include additional precautions to be taken and increased monitoring (minimum twice per week), with the aim of preserving the topsoil for subsequent replacement.	Rills or gullies on topsoil stacks and or reinstated areas	No visible signs of erosion	Bi-Weekly until vegetation is established in reinstated areas	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, DWRM, MEMD, PAU, District Environment Officers
Soil erosion	Habitats of conservation importance	Reduced primary productivity in watercourses, smothering of	Soil Management Plan.	Procedures will be developed, incorporating plans for erosion and sediment control and reinstatement. These will be produced before work begins at areas of fragile, sensitive or thin topsoil, side slopes or narrow ridges and at watercourse crossings. Sediment interception measures will	Installation of erosion and sediment controls. Separate storage of	Zero incidence of sedimentation above background levels greater than	Daily - during watercourse construction activities.	Project and Project contractors;

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		invertebrates, lethal or sublethal effects on fish, degradation of spawning habitat	Reinstatement Plan.	<p>be installed, inspected and maintained to prevent sediment runoff from the right-of-way or construction sites affecting watercourses, wetlands, waterbodies or environmentally sensitive areas. Procedures will include additional precautions to be taken and increased monitoring (minimum twice per week), with the aim of preserving the topsoil for subsequent replacement.</p> <p>Surface water that could be affected by runoff from the pipeline route or worksites will be visually inspected on a regular basis and remedial measures implemented if sediment or contamination arising from project activities are visible.</p> <p>During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.</p> <p>As much riparian vegetation as possible will be left in place until immediately before a watercourse crossing needs to be made to maintain stability of the banks. During site preparation, the height of vegetation on the riverbanks will be reduced, but roots will not be disturbed, to dissuade animals from nesting. The vegetation will then be removed when the crossing is made, and the area reinstated as quickly as possible.</p>	bank and bed material during crossings. River crossing method statements developed for wet crossings. Compliance with permit-to-pump.	50 m up- or downstream of crossings during construction. Zero incidence of collapsed banks after reinstatement Zero incidence of sediment loaded surface water runoff entering watercourses (causing sediment load above background levels) from the RoW. Zero noncompliance with permit-to-pump.	Daily during rain seasons. Weekly after reinstatement until vegetation is re-established. Daily when pumping trench and or spread water.	Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, DWRM, MEMD, PAU, District Environment Officers, MAAIF, NFA UWA, WMD
Loss of soil structure, fertility and seed bank	Habitats of conservation importance	Poor recolonization due to anaerobic conditions in stored soil, reduced fertility and loss of entrained seeds	Soil management plan.	<p>If topsoil is stored for more than six months, the stacks will be monitored for:</p> <ul style="list-style-type: none"> the presence of weeds, which will be controlled in accordance with the weed and pest control programme compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site. 	Compliance with soil management plan. Topsoil storage longer than 6 months; corrective measures implemented.	Zero noncompliance with the soil management plan.	Weekly during period between stripping and reinstatement.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, DWRM, MEMD, PAU, District Environment Officers
Impeded flow of river or channel	Habitats of conservation importance	Loss of aquatic and water-margin habitats	Natural Resource Management Plan.	Where water is abstracted from a surface waterbody, the flow, water level or water volume in the waterbody will be assessed before and during abstraction. Abstraction rates and the frequency of assessment of the water flow, level or volume will be monitored based on permit conditions. During abstraction from surface waters, inlet hoses will be fitted with suitably sized fish screens.	Bank stability is maintained before and after crossings. Bank and bed material is stored separately away from water flow. Crossing method	Zero noncompliance with crossing method statement, soil management plan and reinstatement plan. Approved method	Weekly for bank stability and material storage. Once for method statement prior to crossing.	Project and Project contractors; Relevant Government bodies who may conduct

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					statement developed for all wet crossings.	statement prior to crossing.		independent monitoring or review the data include: NEMA, UWA, DWRM, District Environment Officers, PAU, MAAIF, WMD
Loss of habitat	Habitats of conservation importance	Permanent loss of habitat from AGIs and operational RoW.	Biodiversity management plan.	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestore measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. 	Area of habitat loss. Documentation (reports, checklists, etc) demonstrating that supplementary preclearance surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans	Minimum of 7 days before soil stripping commences for preclearance surveys.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, NFA, WMD
Loss of habitat	Habitats of conservation importance	Temporary loss of habitat from construction activities (RoW, other temporary	Biodiversity management plan.	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will	Vegetation composition before removal	Comprehensive data records from supplementary preconstruction surveys	Minimum of 7 days before soil stripping commences for preclearance	Project and Project contractors; Relevant

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		worksites main camps and pipe yards MCPYs)		<p>identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Re-establishment of vegetation following reinstatement Documentation (reports, checklists, etc) demonstrating that supplementary preclearance surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary	Compliance with site-specific management plans Performance indicators may include cover-abundance of species (using Dominance or similar scale)	surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU; WMD, NFA
Loss of habitat	Habitats of conservation importance	Modified habitat structure following habitat reinstatement after construction	Biodiversity management plan.	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p>	Vegetation composition before removal Re-establishment of vegetation following reinstatement Documentation (reports, checklists, etc) demonstrating that supplementary preclearance surveys have been completed and site-specific biodiversity management plans	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans Performance indicators may include cover-abundance of species (using Domin or similar scale)	Minimum of 7 days before soil stripping commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD UWA, DWRM,

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				<ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> supplemental preconstruction flora and fauna surveys supplemental preconstruction biodiversity surveys of pre identified species of conservation concern a biodiversity assessment of watercourses and wetlands an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	have been drafted and implemented where necessary		sites are fully restored.	District Environment Officers, PAU, NFA, WMD
Loss of habitat	Habitats of conservation importance	Loss of wetland and riparian habitat through open cut crossing during construction of the RoW	Biodiversity management plan.	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestitution measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> supplemental preconstruction flora and fauna surveys supplemental preconstruction biodiversity surveys of pre identified species of conservation concern 	Vegetation composition before removal Re-establishment of vegetation following reinstatement Documentation (reports, checklists, etc) demonstrating that supplementary preclearance surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans Performance indicators may include cover-abundance of species (using Dominance or similar scale)	Minimum of 7 days before soil stripping commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, WMD, NFA

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<ul style="list-style-type: none"> a biodiversity assessment of watercourses and wetlands an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>				
Introduction of competitive species or plants/animal diseases	Habitats of conservation importance	Poor re-colonisation by local flora through competition by non-natives following reinstatement	Biodiversity management plan.	Biosecurity measures will be developed and implemented that will include a strategy for weed and pest control and measures to prevent the introduction or spread of alien invasive species on the RoW, work sites and camp facilities. The biosecurity measures will also outline specifics to protect the aquatic environment from alien invasive species.	<p>Evidence of alien invasive species, for example:</p> <ul style="list-style-type: none"> Changes in the extent and density of previously existing alien/invasive species populations; Occurrence of alien/invasive species attributed to the project; Occurrences of newly introduced alien/invasive species <p>Documentation supporting that the biosecurity measures are implemented.</p>	Zero noncompliance with the Biodiversity Management Plan.	Weekly.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU; NFA
Disturbance or harm to wildlife	Habitats of conservation importance	Interaction between construction workers and habitats of conservation importance,	Biodiversity Management Plan. Project-induced in-migration plan. Community	<p>Hunting, fishing, unauthorised gathering of products (including plants and firewood) and deliberate disturbance or harassment of fauna will be prohibited for project personnel. The Project will restrict the purchase of wildlife related products and crafts by project workers.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage</p>	Training records that specifically target hunting and gathering; Number of incidents and grievances (received /	Total coverage of all personnel living in camps	Monthly	Project and Project contractors; Relevant Government bodies who may

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		especially relating to food and fuel	health, safety and security plan Occupational health, safety and security plan	transgressions within the project disciplinary procedures and structures. Provision of food to workers will be planned to cater for workforce requirements and therefore minimise food waste as far as possible.	addressed) related to poaching, harm to wildlife.			conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, MAAIF.
Disturbance or harm to wildlife	Habitats of conservation importance	PIIM to areas around camps causing increased pressure on natural resources (farming, deforestation for fuel)	Project-induced in-migration (PIIM) plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Settlements developing around or near camps and AGIs.	Zero unplanned settlements.	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, NFA, MGLSD
Treatment and disposal of known/unknown contamination	Flora and fauna species of conservation importance (terrestrial and aquatic)	Injury or mortality of flora and fauna due to mobilisation of soil contaminants	Pollution prevention plan.	The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater. A refuelling procedure will be developed and implemented which will include but not be limited to: <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. Areas of surface contamination identified prior to construction within the	Waste disposal and handling methods on project sites; Site verification and records demonstrating that hazardous materials are handled, managed and stored according to the pollution prevention plan and waste management plan.	Zero noncompliance with pollution prevention plan and waste management plan.	Site verification daily when contaminated soils are discovered. Quarterly to review documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, WMD

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>project footprint will be remediated before or during project construction. Where clean-up of pre-existing contaminated land is required, a remediation proposal will be implemented including but not limited to:</p> <ul style="list-style-type: none"> • remediation techniques • the clean-up standard to be achieved • monitoring and analysis of remediated land to be undertaken • all regulatory and project documentation requirements • appropriate environmental and occupational health and safety protection measures to be adopted. All clean-up and remediation activities will be adequately documented. <p>Contaminated material storage areas will be provided with containment measures (e.g., bunds, ditches, impermeable base membranes and covers) to prevent runoff and airborne losses.</p>				
Disposal of solid and liquid waste	Flora and fauna species of conservation importance (terrestrial and aquatic)	Mortality of flora and fauna through contamination of food and water supply	Pollution prevention plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>Areas of surface contamination identified prior to construction within the project footprint will be remediated before or during project construction. Where clean-up of pre-existing contaminated land is required, a remediation proposal will be implemented including but not limited to:</p> <ul style="list-style-type: none"> • remediation techniques • the clean-up standard to be achieved • monitoring and analysis of remediated land to be undertaken • all regulatory and project documentation requirements • appropriate environmental and occupational health and safety protection measures to be adopted. All clean-up and remediation activities will be adequately documented. <p>Contaminated material storage areas will be provided with containment measures (e.g., bunds, ditches, impermeable base membranes and covers) to prevent runoff and airborne losses.</p>	<p>Littering of solid waste. Spillage of liquid waste.</p> <p>Site verification and records demonstrating that hazardous materials are handled, managed and stored according to the pollution prevention plan and waste management plan.</p>	Zero noncompliance with pollution prevention plan and waste management plan.	Daily during wet river crossings. Twice weekly for all other work areas.	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, MAAIF,</p>
Disposal of solid and liquid waste	Flora and fauna species of	Increase in vermin around waste dumps and	Occupational health, safety and security plan	Provision of food to workers will be planned to cater for workforce requirements and therefore minimise food waste as far as possible.	Waste disposal and handling methods on project sites;	Zero noncompliance with the pollution	Weekly	Project and Project contractors;

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	conservation importance (terrestrial and aquatic)	consequent increase in prey availability for carnivorous birds and mammals	(OHSSP). Pollution prevention plan. Waste management plan.	As part of the OHSSP, a pest control plan will be developed for implementation on construction camps.	Documentation demonstrating that project activities are in compliance with the waste management plan and pollution prevention plan Site verification	prevention plan and waste management plan.		Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, MAAIF
Disposal of solid and liquid waste	Flora and fauna species of conservation importance (terrestrial and aquatic)	Stress or mortality to flora and fauna from spills of waste	Pollution prevention plan. Waste management plan.	<p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. <p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p>	Waste disposal and handling methods on project sites; Effectiveness of oil spill equipment; Documentation demonstrating that project activities are in compliance with the waste management plan and pollution prevention plan Site verification	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, OPM (Disaster Preparedness)
Disposal of surplus water from working	Flora and fauna species of conservation	Reduced primary productivity in watercourses, smothering of	Pollution prevention plan (PPP). Waste	As a requirement of the PPP, locations for discharging excavated pipeline trench water will be identified as part of a 'Permit to Pump Procedure' which will be implemented during the construction phase. Appropriate sediment control measures in line with recognised industry best practices	Quality of discharge water; Documentation demonstrating that	Zero noncompliance with the pollution prevention plan	Weekly	Project; Relevant

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
areas and hydrotest water	importance (terrestrial and aquatic)	invertebrates, lethal or sublethal effects on fish, degradation of spawning habitat	management plan.	will be implemented at each location. Surface water run-off from construction areas and AGIs will be discharged in accordance with project environmental standards. All licences and consents for hydrostatic test water discharge will be obtained following preparation of a hydrostatic test effluent disposal risk assessment. This will undergo internal technical evaluation before submitting the permit application to the appropriate water resources regulatory authority.	project activities are in compliance with the waste management plan and pollution prevention plan Site verification	waste management plan, and wastewater discharge permit requirements.		Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, District Environment Officers, PAU, MAAIF, WMD
Impeded flow of river or channel	Flora and fauna species of conservation importance (terrestrial and aquatic)	Restriction of fish (ranging from general fish species (nonmigratory) to potamodromous fish) movement and reduced reproductive success, impaired movement and reduced habitat suitability of other aquatic organisms	Biodiversity management plan. Natural resource management plan.	During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed. If temporary damming of a watercourse is required, a preconstruction engineering, social and environmental evaluation will be undertaken to plan the work and so the duration of the flow interruption is limited and to determine the need for pump around to maintain flows.	Natural drainage patterns, particularly streams and rivers; Documentation identifying that a Watercourse Crossing Plan has been approved (for crossings when water-courses are flowing) Compliance with Watercourse Crossing Plan	Zero noncompliance with Watercourse Crossing Plan	Daily during watercourse crossing and reinstatement construction activities	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, DWRM, WMD, District Environment Officers, MAAIF
Abstraction of water from river or channel	Flora and fauna species of conservation importance (terrestrial and aquatic)	Decreased water level due to water abstraction for project use leading to loss of aquatic and water-margin habitats causing reduced spawning activity	Biodiversity management plan. Natural resource management plan.	Where water is abstracted from a surface waterbody, the flow, water level or water volume in the waterbody will be assessed before and during abstraction. Abstraction rates and the frequency of assessment of the water flow, level or volume will be monitored based on permit conditions. During abstraction from surface waters, inlet hoses will be fitted with suitably sized fish screens.	Volumes of water abstracted; Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, DWRM, WMD, District Environment Officers, MAAIF

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Abstraction of water from river or channel	Flora and fauna species of conservation importance (terrestrial and aquatic)	Mortality to aquatic organisms from the river through direct abstraction	Natural resource management plan.	<p>If dams and pumps are used to maintain water flow during the construction of watercourse crossings or abstraction of water from watercourses is required, fish screens will be used on the end of the pump inlet hose. Any fish caught within dammed areas either side of the crossing will be transferred up or downstream as appropriate by suitably experienced personnel.</p> <p>Where water is abstracted from a surface waterbody, the flow, water level or water volume in the waterbody will be assessed before and during abstraction. Abstraction rates and the frequency of assessment of the water flow, level or volume will be monitored based on permit conditions. During abstraction from surface waters, inlet hoses will be fitted with suitably sized fish screens.</p>	Use of meshes, screens or fish guards during water abstraction	Zero incidence of abstraction without suitably sized fish guards.	Weekly during water abstraction activities.	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, WMD, District Environment Officers, MAAIF</p>
Management of black and grey water	Flora and fauna species of conservation importance (terrestrial and aquatic)	Injury or mortality of flora and fauna due to surface water contamination	Natural Resource Management Plan, Waste management plan.	<p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An environmental and social evaluation of potential treated wastewater discharge locations will be undertaken as the basis for the development of measures to mitigate impacts from discharges on surface water ecology, downstream water users or terrestrial ecology. The evaluations will take into account the compliance with project environmental standards and will support applications for discharge permits. All licences and consents will be obtained before planned liquid discharges.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p>	Disposal locations of treated effluent; Effectiveness of wastewater treatment plant/process; Quality of discharge effluent before disposal on land; Documentation to support treated wastewater (to be disposed of) meets the relevant waste water discharge standards.	Zero noncompliance with statutory limits.	Monthly or As per permit conditions	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, WMD, District Environment Officers,</p>
Abstraction of groundwater	Flora and fauna species of conservation importance (terrestrial and aquatic)	Decreased water level due to water abstraction for project use leading to loss of habitat for stygofauna	Natural Resource Management Plan	Where water is abstracted from a surface waterbody, the flow, water level or water volume in the waterbody will be assessed before and during abstraction. Abstraction rates and the frequency of assessment of the water flow, level or volume will be monitored based on permit conditions. During abstraction from surface waters, inlet hoses will be fitted with suitably sized fish screens.	Water abstraction is as per the permit conditions and Natural Resource Management Plan.	Zero noncompliance with the Natural Resource Management Plan and abstraction permit requirements.	Monthly - site verification of Natural Resource Management Plan; Water abstraction monitoring as per permit requirement	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data</p>

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
								include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers,
Loss of habitat for species of conservation importance	Flora and fauna species of conservation importance (terrestrial and aquatic)	Permanent loss of breeding and foraging habitat for fauna through site clearance before construction	Biodiversity management plan.	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Conducting of pre-clearance surveys; Extent of site clearance for construction ROW; Change in extent and state of the habitats; Documentation (reports, checklists, etc) demonstrating that supplementary preclearance surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary;	Comprehensive data records from supplementary preconstruction surveys; Compliance with site-specific management plans	Minimum of 7 days before soil stripping commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers, MAAIF

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Loss of habitat for species of conservation importance	Flora and fauna species of conservation importance (terrestrial and aquatic)	Temporary loss of breeding and foraging habitat for fauna through site clearance before construction	Biodiversity management plan.	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestorement measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Extent of site clearance for construction ROW; Documentation (reports, checklists, etc) demonstrating that supplementary preclearance surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans	Minimum of 7 days before soil stripping commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers, MAAIF
Loss of habitat for species of conservation importance	Flora and fauna species of conservation importance (terrestrial and aquatic)	Temporary habitat fragmentation causing disrupted species movement during construction of RoW	Biodiversity management plan.	The total duration of construction disturbance (i.e. the time between initial site clearing and final reinstatement/biorestorement) will be minimised.	Adherence to work schedule, particularly in sensitive locations; Documentation demonstrating that the duration of disturbance is minimised.	Disturbance limited to a single growing season.	Quarterly.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
								include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers, MAAIF,
Introduction of competitive species or plants/animal diseases	Flora and fauna species of conservation importance (terrestrial and aquatic)	Modified habitats due to non-native species establishment leading to increased competition and loss of habitat for breeding and foraging	Biodiversity management plan.	Biosecurity measures will be developed and implemented that will include a strategy for weed and pest control and measures to prevent the introduction or spread of alien invasive species on the RoW, work sites and camp facilities. The biosecurity measures will also outline specifics to protect the aquatic environment from alien invasive species.	Visual inspection for incidence of alien invasive species including; Changes in the extent and density of previously existing alien/invasive species populations; Occurrence of alien/invasive species attributed to the Project; Occurrences of newly introduced alien/invasive species. Documentation supporting that the biosecurity measures are implemented.	Zero noncompliance with the Biodiversity Management Plan.	Weekly.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers,
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Increased predation from predator species due to removal of habitat used to shelter and forage	Biodiversity management plan.	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction. As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as: • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing.	Adherence to work schedule, particularly in sensitive locations; Conducting of pre-clearance surveys; Extent of site clearance for construction ROW; Documentation (reports, checklists, etc) demonstrating that supplementary pre-clearance surveys have been completed; and site-specific biodiversity management plans have been drafted	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans	Minimum of 7 days before soil stripping commences for pre-clearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers, MAAIF

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>Where a section of the right-of-way is through habitats with high biodiversity value (as identified in the baseline appendices of the environmental and social impact assessment), the area will be reviewed to determine if the working width can be reduced to limit impacts as much as possible.</p> <p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. 	and implemented where necessary			
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Mortality of fauna species of conservation importance due to movement of vehicles and presence of construction plants and structures	Biodiversity management plan.	<p>A strict project maximum speed limit will be enforced for project vehicles.</p> <p>Only trained, certified and physically fit drivers will drive vehicles. Night-time driving will be by exception only.</p> <p>The CHSSP will describe requirements to be implemented for vehicles passing through areas where animal disease control measures are in place.</p> <p>Project approved vehicles will be provided to transport camp residents to worksites.</p> <p>Other than when required for crossings excavations, construction equipment and traffic will normally not enter watercourses. Vehicles and equipment will cross watercourses via appropriately sized temporary culverts and bridging arrangements.</p> <p>Bathing or washing clothes, vehicles and equipment by project employees will be prohibited in watercourses.</p>	Journey management with regard to defined routes. Speed infringements and effective corrective action. Vehicles and machinery entering water courses.	Zero noncompliance with journey management; field verification. Decreasing trend of speed infringements. Zero incidence of vehicles and machinery in water-courses other than during crossings.	Monthly for journey management records; daily during intense transport activities (pipe), weekly for people movement. Monthly for speed infringements. Weekly spot checks of watercourses along defined travel routes.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers, MAAIF
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Increased gathering of flora and hunting of fauna species of conservation importance from PIIM to construction camps, from improved access along new or upgraded project	Project Induced In-Migration Management Plan	<p>Hunting, fishing, unauthorised gathering of products (including plants and firewood) and deliberate disturbance or harassment of fauna will be prohibited for project personnel. The Project will restrict the purchase of wildlife related products and crafts by project workers.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p> <p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited</p>	Local recruitment process; Project supply chain; Training records that specifically target hunting and gathering. Settlements developing around or near camps and AGIs. Effective messaging	Total coverage of all personnel living in camps. Zero unplanned settlements	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD,

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		access roads and access provided by RoW during construction and reinstatement.		<p>to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary through targeted meetings scheduled at times and locations that may increase women's participation <p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. <p>Local communities will be discouraged from using the right-of-way as an access road during construction through signage, awareness raising and the use of communication materials.</p>	to PACs (stakeholder engagement records).			UWA, DWRM, WMD District Environment Officers, MAAIF, NFA,
Open excavations	Flora and fauna species of conservation importance (terrestrial and aquatic)	Injury or fatality of fauna from falling into excavations if they cannot escape or where they are at increased risk of predation	Biodiversity management plan.	<p>Appropriate measures will be implemented to prevent fauna or people from entering welded pipe sections or open excavations; there will be fauna ladders placed at suitable intervals in all open excavations. Animals will be removed safely and released into suitable habitat away from the working area.</p> <p>The maximum length of open trench at any one time (per spread) will be defined based on: • the habitats present and potential ecological sensitivities (e.g., terrestrial commuting routes for large mammals) • community safety. Gaps will also be left in soil stacks and pipe strings at strategic locations to allow passage of animals where it is considered safe to do so.</p>	Location and length of open excavations. Location and number of faunal ladders. Incidents of fauna trapped in excavations; Documentation (reports, checklists, etc) demonstrating that appropriate risk assessment has been implemented.	Zero injury or death of animals in excavations.	Daily	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers,
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Disturbance from activities causing noise, vibration, human and vehicle activity affecting breeding and behaviour of animals	Pollution prevention plan. Biodiversity management plan Community health, safety and security plan Occupational health, safety and security plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Potential noise and vibration impacts will be assessed where piling is to be undertaken close to sensitive receptors. Where possible, alternative techniques or materials will be used to reduce potential impacts, e.g. restrictions on times and duration in any given day that piling activities are undertaken.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books 	Noise levels at sensitive receptors; field verification. Maintenance records of vehicles and equipment. Documentation demonstrating that the duration of disturbance is minimised. Journey	Zero exceedance of project environmental standards. Disturbance limited to a single growing season. Zero noncompliance with journey management. Decreasing trend	Weekly for noise level monitoring at sensitive receptors. Monthly for maintenance records. Quarterly for documentation. Monthly for journey management	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
			Project Induced In-Migration Management Plan Road traffic management plan	<ul style="list-style-type: none"> be allocated a unique identifier to be used in a maintenance log be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions not be allowed to idle – engines will be switched off when not in use. <p>The total duration of construction disturbance (i.e. the time between initial site clearing and final reinstatement/biorestoration) will be minimised.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures</p>	management with regard to defined routes. Speed infringements and effective corrective action.	of speed infringements.	records; daily during intense transport activities (pipe), weekly for people movement. Monthly for speed infringements.	include: NEMA, MEMD, UWA, DWRM, WMD District Environment Officers, MAAIF
Use of raw materials and natural resources	Soil	Depletion of natural resources, for example, aggregate	Waste management plan. Natural resource management plan.	<p>All excavated materials will be screened and reused where possible to reduce the need for newly quarried aggregates.</p> <p>Any new aggregate extraction sites and batching plants sites, including 3rd party sites, will undergo environmental and social evaluation prior to use; and, where possible, new sites will be located as close as possible to the existing road network to reduce the requirement for new access roads.</p>	Reuse of aggregate. Environmental and social evaluation for new aggregate extraction sites.	Zero aggregate not reused. Approved environmental and social evaluation of all new aggregate extraction sites.	Monthly for reuse of aggregate. 30 days prior to the opening of new aggregate extraction sites for evaluations.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers
Soil compaction	Soil	Anaerobic conditions developing that restrict plant nutrient uptake efficiency and root development. Loss of drainage capacity and poor plant establishment causing increased surface water ponding, runoff, soil erosion and	Soil management plan. Community health, safety and security plan.	<p>Load-bearing/ ground protection materials, such as bog mats and geotextile membranes under temporary haul roads, will be used to support heavy loads in areas of soft ground, including wetland areas.</p> <p>Local communities will be discouraged from using the right-of-way as an access road during construction through signage, awareness raising and the use of communication materials.</p> <p>Topsoil and subsoil stockpiles will be stored in accordance with the Soil Management Plan, be free draining and include gaps left in strategic locations to allow potential floodwater through.</p> <p>If topsoil is stored for more than six months, the stacks will be monitored for:</p> <ul style="list-style-type: none"> the presence of weeds, which will be controlled in accordance with the weed and pest control programme 	Compressed soil; driving, parking and or storage of machinery, equipment or materials on reinstated RoW.	Zero noncompliance with the Soil Management Plan	Weekly after reinstatement until vegetation is re-established	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, WMD, District

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		decreased productivity.		<ul style="list-style-type: none"> • compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site. 				Environment Officers
Soil erosion	Soil	Loss of topsoil causing reduced fertility and impaired reinstatement	Soil management plan. Community health, safety and security plan.	<p>Load-bearing/ ground protection materials, such as bog mats and geotextile membranes under temporary haul roads, will be used to support heavy loads in areas of soft ground, including wetland areas.</p> <p>Local communities will be discouraged from using the right-of-way as an access road during construction through signage, awareness raising and the use of communication materials.</p> <p>Topsoil and subsoil stockpiles will be stored in accordance with the Soil Management Plan, be free draining and include gaps left in strategic locations to allow potential floodwater through.</p> <p>If topsoil is stored for more than six months, the stacks will be monitored for:</p> <ul style="list-style-type: none"> • the presence of weeds, which will be controlled in accordance with the weed and pest control programme • compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site. 	Rills or gullies on topsoil stacks and or reinstated areas	No visible signs of erosion	Weekly until vegetation is established in reinstated areas	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers
Loss of soil structure, fertility and seed bank	Soil	Development of anaerobic conditions in stored soil. Mixing of different soil or soil with foreign materials leading to loss of drainage and fertility.	Soil management plan.	<p>Topsoil and subsoil stockpiles will be stored in accordance with the Soil Management Plan, be free draining and include gaps left in strategic locations to allow potential floodwater through.</p> <p>If topsoil is stored for more than six months, the stacks will be monitored for:</p> <ul style="list-style-type: none"> • the presence of weeds, which will be controlled in accordance with the weed and pest control programme • compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site. 	Compliance with soil management plan. Topsoil storage longer than 6 months; corrective measures implemented. Separate topsoil and subsoil stacks	Zero noncompliance with the Soil Management Plan	Weekly during period between stripping and reinstatement.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers
Disturbance, treatment and disposal of known/unknown contamination	Soil	Mobilisation of soil contaminants	Pollution prevention plan. Reinstatement plan.	The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to	Waste disposal and handling methods on project sites; Site verification and records demonstrating that hazardous materials	Zero noncompliance with pollution prevention plan and waste management plan.	Daily during wet river crossings. Twice weekly for all other work areas.	Project and Project contractors; Relevant Government bodies who may

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>Areas of surface contamination identified prior to construction within the project footprint will be remediated before or during project construction. Where cleanup of pre-existing contaminated land is required, a remediation proposal will be implemented including but not limited to:</p> <ul style="list-style-type: none"> • remediation techniques • the cleanup standard to be achieved • monitoring and analysis of remediated land to be undertaken • all regulatory and project documentation requirements • appropriate environmental and occupational health and safety protection measures to be adopted. All cleanup and remediation activities will be adequately documented. <p>Contaminated material storage areas will be provided with containment measures (e.g., bunds, ditches, impermeable base membranes and covers) to prevent runoff and airborne losses.</p>	are handled, managed and stored according to the pollution prevention plan and waste management plan.			conduct independent monitoring or review the data include: NEMA, MEMD, PAU, WMD, DWRM, District Environment Officers
Management of waste and accidental release of oil or chemicals	Soil	Soil contamination	Pollution prevention plan. Waste management plan.	<p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills. <p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands,</p>	Waste disposal and handling methods on project sites; storage of oil, chemicals and hazardous materials; Site verification and records demonstrating that hazardous materials are handled, managed and stored according to the pollution prevention plan and waste management plan.	Zero noncompliance with pollution prevention plan and waste management plan.	Daily during wet river crossings. Twice weekly for all other work areas.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers, OPM (Disaster Preparedness)

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIPP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. 				
Management of surplus subsoil and aggregate	Soil	Loss of soil structure, drainage, fertility and seed bank	Waste management plan.	<p>Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.</p> <p>Options will be considered for the use of surplus rock from blasting including:</p> <ul style="list-style-type: none"> • crushing and onsite re-use • offsite re-use • offsite disposal • onsite placement. <p>if this is in keeping with the local landscape character.</p>	Presence of excess soil / rock remaining on site immediately after reinstatement is completed	Zero noncompliance with the waste management plan.	Immediately after reinstatement Weekly until all excess soil is removed, reused and or disposed of	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers
Erosion	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters	Soil management plan. Reinstatement plan.	<p>During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.</p> <p>As much riparian vegetation as possible will be left in place until immediately before a watercourse crossing needs to be made to maintain stability of the banks. During site preparation, the height of vegetation on the riverbanks will be reduced, but roots will not be disturbed, to dissuade animals from nesting. The vegetation will then be removed when the crossing is made and the area reinstated as quickly as possible.</p> <p>Where watercourse bank reinforcement is required, the impact on riparian habitats and riparian fauna will be assessed to determine if the reinstatement or reinforcement is sufficient to maintain connectivity along the riparian elements of the watercourse. Mitigation will be installed to maintain habitat connectivity.</p>	Visual evidence of erosion of river banks and bank stability (cracks, sag, shearing) within 50m up and down stream of construction activities. Visual evidence of significant sedimentation (water colour, turbidity) greater than 50 m of construction activity.	Zero incidence of sedimentation greater than 50 m up- or downstream of crossings during construction Zero incidence of collapsed banks after reinstatement	Weekly after reinstatement until vegetation is re-established	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be limited to:</p> <ul style="list-style-type: none"> • consideration of information from preconstruction surveys • locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies • details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground • measures for working in areas of fragile and sensitive soils • restrictions to the storage of materials on steep slopes • provision for erosion and sediment control at watercourses. <p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment 				Environment Officers, DWRM, WMD, NFA, UWA
Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. 	Waste disposal and handling methods on project sites; storage of oil, chemicals and hazardous materials; Documentation demonstrating that project activities are in compliance with	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>impermeable drip trays)</p> <ul style="list-style-type: none"> • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 	the waste management plan and pollution prevention plan Site verification			review the data include: NEMA, MEMD, PAU, District Environment Officers, DWRM, WMD
Impeded flow of river or channel	Surface water	Deterioration of water quality	Biodiversity management plan. Soil management plan. Pollution prevention plan.	<p>During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.</p> <p>Open-cut river crossings will be undertaken during the dry season where possible; where not possible site-specific method statements will be developed addressing ecological sensitivities.</p> <p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control • sediment control 	Separate storage of bank and bed material during crossings. River crossing method statements developed for wet crossings. Bank and bed material is stored separately away	Zero incidence of sedimentation above background levels greater than 50 m up- or downstream of crossings during construction. Zero incidence of sediment loaded surface water run-	Daily during watercourse crossing and reinstatement activities. Weekly spot checks of watercourses along defined travel routes.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<ul style="list-style-type: none"> maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming notifying fisherfolk as appropriate reinstatement spill response equipment. <p>Other than when required for crossings excavations, construction equipment and traffic will normally not enter watercourses. Vehicles and equipment will cross watercourses via appropriately sized temporary culverts and bridging arrangements. Bathing or washing clothes, vehicles and equipment by project employees will be prohibited in watercourses.</p>	from water flow. Vehicles and machinery entering water courses.	off entering water-courses (causing sediment load above background levels) from the RoW. Zero noncompliance with crossing method statement, soil management plan and reinstatement plan. Zero incidence of vehicles and machinery in water-courses other than during crossings.		review the data include: NEMA, MEMD, PAU, District Environment Officers, DWRM, WMD
Altered drainage pattern	Surface water	Trench can act as conduit for groundwater, draining higher areas and flooding lower areas	Reinstatement plan.	Trench breakers will be installed in the pipeline trench where downhill flow within the backfilled trench may lead to erosion.	Site verification that trench breaks are installed; document verification that trench break numbers and locations are fit for purpose.	Trench breaks installed as per plan.	Minimum of 7 days prior to backfill.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers, DWRM, WMD
Management of waste and accidental release of oil or chemicals	Groundwater	Potential for groundwater contamination	Waste management plan ; Pollution prevention plan; Natural resource management plan; Emergency preparedness and response plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> details of mobile and static refuelling areas and equipment (e.g. 	Storage of hazardous materials; Waste disposal and handling methods on project sites; Effectiveness of spill prevention measures; Documentation demonstrating that project activities are	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>impermeable drip trays)</p> <ul style="list-style-type: none"> • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 	in compliance with the waste management plan and pollution prevention plan Site verification			include: NEMA, MEMD, PAU, District Environment Officers, DWRM, WMD
Visual intrusion of project components into landscape	Landscape	Change of landscape character and views caused by project components	Biodiversity Management Plan. Reinstatement Plan. Soil	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction 	Height of stockpiles to avoid significant change in views and landscape; Restriction of vegetation	No significant change in landscape	Weekly during reinstatement	Project; Government bodies who may conduct

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			Management Plan.	<ul style="list-style-type: none"> • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.</p> <p>Where benching is required then the areas will be re-contoured to original profiles. Side casting in areas of steep terrain will be prohibited. The effects of accidental spoil slippage on steep slopes will mitigated, e.g., by using fences or a geotextile membrane.</p> <p>Recontouring should be sympathetic and in keeping with preconstruction profiles, where this is not precluded by risk to integrity of the pipeline or erosion considerations.</p> <p>Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.</p> <p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will:</p> <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform pre-entry agreements including: <ul style="list-style-type: none"> o agreement for temporary measures to be installed (e.g., during disruption to drainage or irrigation, temporary fencing) o reinstatement requirements. Pre-entry agreements will be made with landowners, including reinstatement requirements, prior to access onto a site. 	clearance to only within the construction ROW; Before and after photographs with regard to contouring, drainage, waste and debris; reinstatement of borrow pits .			independent monitoring or review the data include: NEMA, MEMD, UWA, WMD, District Environment Officers, NFA, PAU
Disposal of surplus subsoil and aggregate	Landscape	Permanent change of views as a result of	Soil Management Plan. Waste	Options will be considered for the use of surplus rock from blasting including: <ul style="list-style-type: none"> • crushing and onsite re-use 	Height of stockpiles to avoid significant change in views and	Zero noncompliance with the	Immediately after reinstatement	Project and Project contractors;

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		disposal of surplus subsoil and aggregate	Management Plan. Reinstatement Plan. Biodiversity management plan.	<ul style="list-style-type: none"> • offsite re-use • offsite disposal • onsite placement. if this is in keeping with the local landscape character. Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.	landscape; Restriction of vegetation clearance to only within the construction ROW; reinstatement of borrow pits; Presence of excess soil remaining on site immediately after reinstatement is completed	Reinstatement Plan.	Weekly until all excess soil is removed, reused and or disposed of	Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU
Release of gases, exhausts and vapours to atmosphere	Air Quality	Reduced air quality from combustion of fuel in construction equipment and vehicles	Pollution Prevention Plan	To minimise emissions to air, vehicles, machines and equipment will: <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.	Servicing and maintenance of project vehicles, machines and equipment; Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero noncompliance with scheduled servicing and maintenance of combustion equipment	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD
Release of gases, exhausts and vapours to atmosphere	Air Quality	Hydrocarbon vapour emissions from refuelling operations causing reduced air quality	Pollution Prevention Plan	A refuelling procedure will be developed and implemented which will include but not be limited to: <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. 	Refuelling procedures; Effectiveness of spill prevention measures; Training records targeting refuelling.	All personnel responsible undertaking refuelling activities are trained to reduce spills and vapour emissions.	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Dust	Air Quality	Nuisance from dust emissions from construction site activities	Pollution Prevention Plan Traffic and Road Safety Management Plan	Where construction generated dust may affect sensitive receptors, the following mitigation measures will be considered: <ul style="list-style-type: none"> dust suppression at work-sites and transport routes adherence to RoW speed limits supplemented by awareness training sheeting of fine materials being transported or stored on-site 	Implementation of dust suppression measures Site verification Number of related complaints	Zero noncompliance with dust suppression measures described in the Pollution Prevention Plan Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement	Weekly - site verification Monthly - complaints, documentation	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU
Noise	Acoustic Environment	Disturbance or nuisance from noise from construction on the RoW	Pollution Prevention Plan	Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site. Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration. Preference will be given to selecting low noise and vibration emitting equipment for all construction works. To minimise emissions to air, vehicles, machines and equipment will: <ul style="list-style-type: none"> be appropriate for the task required have a valid maintenance and inspection certificate or log books be allocated a unique identifier to be used in a maintenance log be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions not be allowed to idle – engines will be switched off when not in use. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Noise	Acoustic environment	Disturbance or nuisance from noise during commissioning of the pipeline	Pollution prevention plan	Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site. Where possible new access roads will be constructed a minimum of 100 m away from sensitive receptors (hospitals, educational facilities or dwellings). To minimise emissions to air, vehicles, machines and equipment will: <ul style="list-style-type: none"> be appropriate for the task required have a valid maintenance and inspection certificate or log books be allocated a unique identifier to be used in a maintenance log 	Noise levels at sensitive receptors; Number of related complaints.	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly.	Project and Project contractors; Relevant Government bodies who may conduct independent

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				<ul style="list-style-type: none"> • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 				monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Noise	Acoustic Environment	Disturbance or nuisance from noise from traffic movement	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Vibration	Acoustic Environment	Disturbance, nuisance or cosmetic / structural damage from vibration	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	Documentation demonstrating noise and vibration assessments have been completed, mitigation is implemented, and noise levels meet project emission standards Number of related complaints	Zero noncompliance with project noise standards Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement	Daily during construction where construction occurs near sensitive receptors Monthly for documentation and complaints	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Employment	Economy	The generation of national employment opportunities leading to an increase in household income and an improvement in living standards.	Local Content Plan	<p>A Procurement and Supply Chain Management Plan (PSCMP) will be developed to maximise the purchase of goods and services from within Uganda/Tanzania. This will be contingent on whether local suppliers can offer sufficient quality and reliability and can meet project requirements. PSCMP will include, as appropriate, enterprise development, capacity development and ring-fencing contracts.</p> <p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment. 	Local recruitment target	Meeting local recruitment target	Quarterly	<p>Project and project contractors;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD</p>
Provision of goods and services	Economy	Project procurement providing opportunities for national businesses.	Local Content Plan	<p>A Procurement and Supply Chain Management Plan (PSCMP) will be developed to maximise the purchase of goods and services from within Uganda/Tanzania. This will be contingent on whether local suppliers can offer sufficient quality and reliability and can meet project requirements. PSCMP will include, as appropriate, enterprise development, capacity development and ring-fencing contracts.</p>	Development of a Procurement and Supply Chain Management Plan (PSCMP) to maximise the purchase of goods and services from within Uganda/Tanzania	Zero noncompliance with the Procurement and Supply Management Plan	Monthly	<p>Project and project contractors;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD</p>
Contribution to economy	Economy	Contribution to national economy from investment.	-	-	Contribution to the national economy		Annual	<p>Project;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU</p>
Contribution to economy	Economy	Changes to the fiscal balance.	-	-	Contribution to the national economy		Annual-	<p>Project;</p> <p>Relevant</p>

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
								Government agencies who may conduct independent monitoring or review include: MEMD, PAU
Employment	Local economy (nonland-based livelihoods)	The generation of project local employment opportunities	Procurement and supply chain management plan. Labour management plan. Stakeholder engagement plan.	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment. <p>As part of the tendering process, (sub) contractors will be required to include training components in their proposal aimed at increasing local employment as well as improving skills of local staff.</p>	Local recruitment target	Meeting local recruitment target	Quarterly	<p>Project and project contractors;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD</p>
Employment	Local economy (nonland-based livelihoods)	The provision of training and skill development opportunities within employment	Procurement and supply chain management plan. Labour management plan.	<p>As part of the tendering process, (sub) contractors will be required to include training components in their proposal aimed at increasing local employment as well as improving skills of local staff. A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary through targeted meetings scheduled at times and locations that may increase women's participation <p>As part of the OHSSP, a risk-based worksite and construction camp training programme will be developed and administered to the workforce, vendor representatives and site visitors; the training programme (including daily toolbox meetings) will be updated in accordance with changes made in scope, incident statistics and/or regulatory requirements. Daily toolbox meetings will be held where health and safety issues will be discussed.</p>	Number and content of training sessions Number of training participants	Continuous improvement on percentage of training participants versus total number of workers One training sessions documented per week and work site	Quarterly	<p>Project and project contractors;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD</p>

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Provision of Goods and Services	Local economy (nonland-based livelihoods)	Project procurement providing opportunities for local businesses	Procurement and supply chain management plan. Labour management plan.	A Procurement and Supply Chain Management Plan (PSCMP) will be developed to maximise the purchase of goods and services from within Uganda/Tanzania. This will be contingent on whether local suppliers can offer sufficient quality and reliability and can meet project requirements. PSCMP will include, as appropriate, enterprise development, capacity development and ring-fencing contracts.	Development of a Procurement and Supply Chain Management Plan (PSCMP) to maximise the purchase of goods and services from within Uganda/Tanzania	Zero noncompliance with the Procurement and Supply Management Plan	Monthly	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD
Provision of Goods and Services	Local economy (nonland-based livelihoods)	Improvements in road conditions for business owners and public transport	Infrastructure and Utilities Management Plan	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.	Road traffic accidents and congestion	No annual increase in number of project related road traffic accidents No increases in project related road congestion	Quarterly	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD
Employment	Local economy (nonland-based livelihoods)	Loss of employment after project construction phase	Procurement and supply chain management plan. Labour management plan. Stakeholder engagement plan.	Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment. The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities.	Documentation demonstrating worker awareness training on limited duration of employment and need to maintain existing livelihoods.	Full coverage of workforce at start of employment.	Monthly.	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD
Employment	Local economy (nonland-based livelihoods)	Dissatisfaction arising from unmet expectations over the scale and duration of project local employment opportunities	Project-induced in-migration management plan. Labour management plan. Stakeholder engagement plan.	An approved recruitment procedure will be implemented that: <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs 	Documentation demonstrating worker awareness training on limited duration of employment and need to maintain existing livelihoods	Full coverage of workforce at start of employment. Continuous improvement on percentage of unresolved related complaints after Project has	Monthly	Project and project contractors; Relevant Government agencies who may conduct

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment.</p> <p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary, through targeted meetings scheduled at times and locations that may increase women's participation <p>The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities.</p>	Number of related complaints	proposed solution/s during engagement		independent monitoring or review include: MEMD, PAU, MGLSD
Employment	Local economy (nonland-based livelihoods)	Competition over employment opportunities	Project-induced in-migration management plan. Labour management plan. Stakeholder engagement plan.	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment. <p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary, through targeted meetings scheduled at times and locations that may increase women's participation 	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints.	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement.	Quarterly	Project and Project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD
Employment	Local economy (nonland-	Diversion of workers gaining employment from	Procurement and supply chain management	A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:	Effectiveness on stakeholder messaging (by	Continuous improvement on percentage of	Quarterly for complaints. For	Project and Project contractors;

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
	based livelihoods)	the project away from existing local businesses or public-sector jobs	plan. Labour management plan. Stakeholder engagement plan.	<ul style="list-style-type: none"> The local recruitment strategy. Criteria for employment. The number and types of employment opportunities. The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary, through targeted meetings scheduled at times and locations that may increase women's participation <p>Before construction, a benchmarking exercise gathering data associated with average incomes in the private and public sector for each region/district will be undertaken. This information will be used to identify salary levels for the construction workforce so that disparities between project-related salaries and local businesses/public sector salaries are avoided.</p> <p>The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities.</p>	feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints. Labour management plan is informed by pre-project salary benchmarking.	unresolved complaints after Project has proposed solution/s during engagement. Pre-project salary benchmarking is completed.	benchmarking, 90 days prior to construction commencing.	Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD
Employment	Local economy (nonland-based livelihoods)	School drops outs seeking employment in the project supply chain	Procurement and supply chain management plan. Monitoring and reporting plan. Labour management plan. Stakeholder engagement plan.	<p>An awareness campaign targeting schools at sensitive locations within the project AOI will be developed, addressing:</p> <ul style="list-style-type: none"> Importance of staying in school. Risks particularly to girls of relationships with transient workers, transactional and commercial sex. Road safety awareness. Awareness about their rights. Project grievance mechanism and their right to use it. 	Evidence of a standard clause in all contracts that no employees shall be hired, directly or indirectly, under the age of 18 years of age	No underage persons to be employed as part of the project workforce Inspections and audits to identify whether children under the age of 18 are being hired by the Project	Monthly	Project and Project Contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD
Provision of Goods and Services	Local economy (nonland-based livelihoods)	Inflation and effects on supply owing to project procurement	Procurement and supply chain management plan.	<p>A Procurement and Supply Chain Management Plan (PSCMP) will be developed to maximise the purchase of goods and services from within Uganda/Tanzania. This will be contingent on whether local suppliers can offer sufficient quality and reliability and can meet project requirements. PSCMP will include, as appropriate, enterprise development, capacity development and ring-fencing contracts.</p> <p>Before construction, a benchmarking exercise to gather data associated with average prices for goods will be undertaken in each region/district. This information will be used to identify appropriate prices so that large price disparities between project-procured goods and local goods are avoided.</p>	Documentation that demonstrates a benchmarking exercise is completed and that information informs the Procurement and Supply Management Plan.	Zero noncompliance with the Procurement and Supply Management Plan	90 days prior to construction commencing.	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU
Provision of Goods and Services	Local economy (nonland-	Restriction of access to small businesses, street vendors and local	Resettlement action plan. Monitoring and reporting plan.	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A	Effectiveness on stakeholder messaging (by feedback templates	Continuous improvement on percentage of unresolved	Quarterly	Project; Relevant

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
	based livelihoods)	markets during construction	Stakeholder engagement plan.	Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.	or interviews) regarding - compensation process - grievance procedure Number of related complaints	complaints after Project has proposed solution/s during engagement		Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MHLUD, MTWA, MGLSD
Temporary Road Closure	Local economy (nonland-based livelihoods)	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding: notification; grievance procedure; compensation process. Number of related complaints	Continuous improvement on percentage of unresolved complaints on employment after Project has proposed solution/s during engagement	Quarterly	Project; in consultation with respective utility service provider. Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, District Local Governments
Use of Road Network	Land-based livelihoods	Improved ability to sell agricultural produce to nearby markets for farmers and traders	Infrastructure and Utilities Management Plan	For major road crossings, crossing techniques that minimize the obstruction of traffic flow will be selected.	Completed roadworks	Roadworks completed as per engineered design	At the completion of roadworks	Project in consultation with respective utility service provider; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, Local Governments
Impeded Movement of Animals	Land-based livelihoods	Due to access restrictions, livestock cause damage to crops	Community health, safety and security plan. Stakeholder engagement plan. Monitoring and reporting plan.	Local people will be consulted on the optimum location of crossing points and pastoralists informed of the access restrictions in advance, advising them to avoid cultivated areas. Crossing points will be provided across open trenches and welded pipes and gaps will be left in soil stacks and pipe strings at strategic locations. Incidents in conflicts between crop farmers and herders in the vicinity of the project footprint will be monitored and support will be provided to local authorities to obtain a resolution in cases of conflict wherever possible.	Site verification - gaps in soil stacks and pipe strings and crossing points as per the Community Health Safety and Security Plan Number of related complaints	Zero noncompliance with the Community Health, Safety and Security Plan Continuous improvement on percentage of	Weekly - site verification Monthly - complaints	Project; Government bodies who may conduct independent monitoring or

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				Regular meetings will be held with PAC representatives, during construction in their area, to update them on construction progress and to receive comments or queries. A community liaison log will be maintained detailing the content of all meetings.		unresolved complaints on damage to crops after Project has proposed solution/s during engagement		review the data include: PAU, MEMD, NEMA, Local Government
Accidents Due to Open Excavations	Land-based livelihoods	Livestock falling into excavations	Community health, safety and security plan. Stakeholder engagement plan. Monitoring and reporting plan.	The maximum length of open trench at any one time (per spread) will be defined based on: <ul style="list-style-type: none"> • the habitats present and potential ecological sensitivities (e.g., terrestrial commuting routes for large mammals) • community safety. Gaps will also be left in soil stacks and pipe strings at strategic locations to allow passage of animals where it is considered safe to do so. Community awareness programmes will be developed and implemented in project-affected communities to explain: <ul style="list-style-type: none"> • road safety risks and how to increase the safety of pedestrians particularly children • how to ensure their safety during construction • the measures that have been, or will be, implemented to protect their health and safety (e.g., provision of safe access). 	Location and length of open excavations Documentation (reports, checklists, etc) demonstrating that appropriate risk assessment has been implemented Number of related complaints	Continuous improvement of percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project and Project contractors; Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, Local Government
Loss/Severance of Land and Disruption to Land-Based Livelihoods	Land-based livelihoods	Permanent loss of land used for crop farming	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Number of related complaints	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Quarterly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, Local Government, MGLSD, MTWA
Loss/Severance of Land and Disruption to Land-Based Livelihoods	Land-based livelihoods	Temporary loss of grazing land	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Quarterly	Project; Relevant Government bodies who may conduct independent monitoring or review the data

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					Number of related complaints			include: PAU, MEMD, NEMA, MLHUD, Local Government, MGLSD, MTWA
Loss/Severance of Land and Disruption to Land-Based Livelihoods	Land-based livelihoods	Increased traffic leading to spread of animal diseases	Transport and road safety management plan. Community health, safety and security plan. Biodiversity management plan.	The community health, safety and security plan will include measures to reduce the spread of animal diseases due to increased movement of livestock.	Evidence (records, inspections etc) that control measures have been implemented for vehicles passing through areas where animal disease exist; site verification of effectiveness of measures. Number of related complaints	Zero noncompliance with control measures. Continuous improvement on percentage of unresolved complaints on project vehicle related spread of animal disease after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MAAIF, Local Government
Loss/Severance of Land and Disruption to Land-Based Livelihoods	Land-based livelihoods	Permanent loss of access to artisanal mining sites	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Number of related complaints	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Quarterly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, Local Government, MGLSD, MTWA
Loss/Severance of Land and Disruption to Land-Based Livelihoods	Land-based livelihoods	Permanent loss of natural resources	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance. A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Number of related complaints	solution/s during engagement		include: PAU, MEMD, NEMA, Local Government, NFA,
Loss/Severance of Land and Disruption to Land-Based Livelihoods	Land-based livelihoods	Reduction in honey production due to loss of habitat	<p>Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.</p>	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	<p>Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding</p> <ul style="list-style-type: none"> - compensation process - grievance procedure <p>Compensation records Number of related complaints</p>	<p>Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement</p>	Monthly	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, Local Government, MAAIF,</p>
Disruption to Surface Water Catchments	Land-based livelihoods	Temporary disruption to surface water	<p>Infrastructure and utilities management plan. Resettlement action plan.</p>	<p>Potentially affected landowners, land users, communities and other affected stakeholders (e.g. tourism operators) will be consulted if there is likely to be any disruption to the existing infrastructure and utility services. Feedback from communities will inform planning of the works, especially when determining the options for temporary alternatives.</p> <p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p>	Number of related complaints	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	<p>Project in consultation with respective utility service provider;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: PAU,</p>

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
								MEMD, NEMA, Local Government, DWRM, WMD
Restriction of Access to Fisheries	River and lake-based livelihoods	Temporary loss of access to fishing grounds (rivers, lakes, dams and ponds) due to temporary road closures and access restrictions across the RoW	Resettlement action plan. Stakeholder engagement plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, Local Government, DWRM, WMD, MAAIF
Resettlement	River and lake-based livelihoods	Permanent loss of access to ponds used for aquaculture due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Monitoring and reporting plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, Local Government, DWRM, WMD, MAAIF

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Resettlement	Land and property	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD, Local Government, MTWA, MGLSD
Resettlement	Land and property	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The Project will continue monitoring of and liaising with authorities on land speculation. Where required additional interventions will be developed to enhance existing interventions.</p> <p>PACs will be sensitised to recent land speculation and instances of associated violence and informed of actions that can be taken.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD, Local Government, MTWA, MGLSD

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Resettlement	Land and property	Land and property speculation by land owners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The Project will continue monitoring of and liaising with authorities on land speculation. Where required additional interventions will be developed to enhance existing interventions.</p> <p>PACs will be sensitised to recent land speculation and instances of associated violence and informed of actions that can be taken.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD, Local Government, MGLSD, MTWA
Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding disputes and conflict. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD, Local Government, MGLSD, MTWA

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD, Local Government. MGLSD, MTWA
Resettlement	Land and property	Permanent loss of local enterprises due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD, Local Government, MGLSD

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Resettlement	Land and property	Loss of community infrastructure (schools, clinics, community halls) due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD, Local Government, MTWA, MGLSD
Resettlement	Land and property	Loss of access to informal support networks and social services after physical displacement due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding provision in the resettlement action plan to nurture informal support networks and project support for continued social support. Number of related complaints	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD, Local Government, MGLSD

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Vibration	Land and property	The generation of vibrations during construction works	Infrastructure and utilities management plan.	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken or appropriate compensation paid if damage is proven.</p> <p>Potential noise and vibration impacts will be assessed where piling is to be undertaken close to sensitive receptors. Where possible, alternative techniques or materials will be used to reduce potential impacts, e.g. restrictions on times and duration in any given day that piling activities are undertaken.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p>	Preconstruction record of condition. Documentation demonstrating noise and vibration assessments have been completed. Number of related complaints	Comprehensive preconstruction record of condition. Noise and vibration evaluations completed at sensitive receptors. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement	Once 30 days before construction commences for preconstruction record of condition and noise and vibration evaluations. Monthly for complaints.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Environment Officers, OSH Department - MGLSD

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Employment	Workers' health, safety and welfare	An improvement in the health and safety of workers from disease awareness and reduction programmes	Occupational health, safety and security plan.	<p>As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs.</p> <p>A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address:</p> <ul style="list-style-type: none"> •awareness and understanding among drivers about the risks of HIV and STDs •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services •the distribution of information, leaflets and condoms. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.</p> <p>As part of the OHSSP, a risk-based worksite and construction camp training programme will be developed and administered to the workforce, vendor representatives and site visitors; the training programme (including daily toolbox meetings) will be updated in accordance with changes made in scope, incident statistics and/or regulatory requirements. Daily toolbox meetings will be held where health and safety issues will be discussed.</p>	Number of instances of communicable diseases in workforce per worksite Trends in communicable diseases in PACs	No increase in communicable diseases of workforce by category and worksite against baseline	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health
Employment	Workers' health, safety and welfare	Risk of wildlife interaction/animal bites and contracting zoonotic diseases	Occupational health, safety and security plan.	As part of the OHSSP Risk Assessment process, the risk to worker health posed by wildlife at each camp and yard will be assessed and appropriate management measures will be developed and implemented.	Evidence that a risk assessment has been undertaken regarding worker health posed by wildlife at each camp and yard Evidence of appropriate management measures implemented	Number of recorded incidents of workforce interactions with wildlife at MCPYs	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, UWA, Ministry of Health

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Employment	Workers' health, safety and welfare	Other occupational health and safety incidents causing diseases, injuries and mortality	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan. Transport and road safety management plan.	<p>As part of the project OHSSP, construction camps will be designed and built to meet national requirements and regulations. Measures will be detailed to avoid and reduce impacts associated with the development and occupation of construction camps, including but not limited to:</p> <ul style="list-style-type: none"> • suitable and sufficient welfare facilities will be provided appropriate for both genders • clean and sanitary toilet facilities and showers will be provided appropriate for both genders. • adequate segregation between different areas (e.g. accommodation and hazardous areas) • measures to reduce or remove community disturbance or nuisance from the camps, e.g. preventing litter, dust generation, odours and noise. • include a helicopter landing area and secure fencing around the boundary. <p>Provide workers with personal protection from prevalent diseases where feasible (e.g., condoms and ITN).</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p> <p>As part of the OHSSP, a pest control plan will be developed for implementation on construction camps.</p> <p>As part of the OHSSP, a risk-based worksite and construction camp training programme will be developed and administered to the workforce, vendor representatives and site visitors; the training programme (including daily toolbox meetings) will be updated in accordance with changes made in scope, incident statistics and/or regulatory requirements. Daily toolbox meetings will be held where health and safety issues will be discussed.</p> <p>PPE appropriate for the task will be provided to all workers.</p> <p>As part of the OHSSP, basic workplace wellness programs that are culturally and religiously acceptable will be developed and implemented.</p>	Health and safety incidents.	Trend of reduction of health and safety incidents.	Monthly	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health</p>
Use of Road Network	Social infrastructure and services	Road widening and improvement	Infrastructure and utilities management plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p>	Completed roadworks	Roadworks completed as per engineered design	At the completion of roadworks	<p>Project;</p> <p>Relevant Government bodies that may conduct independent monitoring or review the data include: PAU,</p>

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
								NEMA, MGLSD, UNRA, MLHUD (Physical Planning Department), District Local Governments.
Damage to Third Party Infrastructure (Pipelines, Cables and Community Infrastructure)	Social infrastructure and services	Temporary disruption of power supply due to planned outage or accidental damage to cables or other pipelines during pipeline construction	Infrastructure and utilities management plan.	<p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding: notifications; grievance procedure; compensation process. Number of related complaints	Continuous improvement on percentage of unresolved complaints on employment after Project has proposed solution/s during engagement. Relevant stakeholder engagement records.	Quarterly	<p>Project in consultation with respective utility service providers;</p> <p>Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, MLHUD (Physical Planning Department), UETCL, District Local Governments</p>
Use of Road Network	Social infrastructure and services	Deterioration of road conditions	Infrastructure and utilities management plan.	<p>A post-construction exit survey will be conducted covering all areas surveyed during preconstruction (and any additional land requirements during construction) to assess the condition of dwellings, roads used including bridges, drainage structures, signage, traffic management and other road infrastructure. Any actions, such as repairs, arising from the exit survey will be closed out on a timely basis to allow a prompt return to the relevant authority, village or landowner.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>The Project will conduct regular inspection of access roads to check for</p>	Condition of roads against preconstruction survey	Agreement with lead agency regarding scope and extent of repairs	Every 6 months	<p>Project and Project contractors;</p> <p>Relevant Government bodies that may conduct independent monitoring or review the data</p>

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				damage caused by project vehicles to repair damage in a timely and efficient manner. Strict load management will be enforced on all project vehicles.				include: PAU, MEMD, MLHUD, UNRA, District Local Governments
Use of Road Network	Social infrastructure and services	Traffic congestion leading to delays	Stakeholder engagement plan. Transport and road safety management plan.	<p>Community liaison officers will encourage PAC Leadership to provide advance warning of local events so that construction activities can be avoided at these times.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>Authorities will be notified when oversize heavy loads need to be transported and such loads will be escorted by the project.</p>	Documentation supporting journey management	Zero noncompliance with the Stakeholder Engagement Plan and the Transport and the Road Safety Management Plan	Weekly whilst heavy loads are being transported Monthly thereafter.	Project; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, District Local Government, UNRA, local police
Use of Road Network	Social infrastructure and services	Disruption of traffic flows	Infrastructure and utilities management plan. Transport and road safety management plan.	<p>The Project will conduct regular inspection of access roads to check for damage caused by project vehicles to repair damage in a timely and efficient manner. Strict load management will be enforced on all project vehicles.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>Community liaison officers will encourage PAC Leadership to provide advance warning of local events so that construction activities can be avoided at these times.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>Authorities will be notified when oversize heavy loads need to be transported and such loads will be escorted by the project.</p> <p>A post-construction exit survey will be conducted covering all areas surveyed during preconstruction (and any additional land requirements during construction) to assess the condition of dwellings, roads used including bridges, drainage structures, signage, traffic management and other road infrastructure. Any actions, such as repairs, arising from the exit survey will be closed out on a timely basis to allow a prompt return to the relevant authority, village or landowner.</p>	Documentation supporting journey management Road inspection records. Stakeholder engagement records. Exit survey.	Zero noncompliance with journey management. All access roads regularly inspected. Journey management responsive to community events. Exit survey completed.	Weekly whilst heavy loads are being transported. Monthly thereafter.	Project and Project contractors; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, District Local Government, UNRA, local police

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Resettlement	Community health	Resettled households' exposure to areas of higher vector densities, increasing the burden of vector-related diseases	Resettlement action plan.	<p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	Number of related complaints	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MGLSD, Ministry of Health, MLHUD, District Local Governments
Resettlement	Community health	Resettled households' decreased food security	Resettlement action plan.	<p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	Number of related complaints	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MGLSD, MLHUD, District Local Governments
Community health	Community health	Project activities leading to an increase in vector-related diseases	Community health, safety and security plan. Occupational health, safety and security plan. Stakeholder engagement plan.	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	Project; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MGLSD, Ministry of Health,

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
								MLHUD, District Local Governments
Noise	Community health	Excessive noise exposure due to project activities	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site. Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration. Preference will be given to selecting low noise and vibration emitting equipment for all construction works. Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within: <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Documentation (records, reports etc) demonstrating that noise monitoring at sensitive receptors is completed.	Zero exceedance of project environmental standards.	Monthly	Project and Project contractors; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MGLSD, District Local Government
Disposal of Solid and Liquid Waste	Community health	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	Adherence to waste management plan	Documentation (reports, records, etc) supporting that audits of waste facilities being used by the project are completed	Zero noncompliance with Waste Management Plan	Monthly	Project; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, Local Government
Use of Road Network	Community health	An increase in the burden of disease along the project's transport corridors caused by drivers spreading communicable diseases	Community health, safety and security plan. Occupational health, safety and security plan. Infrastructure and utilities management plan. Stakeholder engagement plan.	A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of non-compliance, workers will be disciplined in accordance with project disciplinary procedures and structures. A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address: <ul style="list-style-type: none"> •awareness and understanding among drivers about the risks of HIV and STDs •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services 	Documentation demonstrating that community-based interventions covering malaria control and HIV/TB have been implemented Site verification (e.g. spot check) that HIV/STD awareness and prevention programme delivered as planned	HIV/STD awareness and prevention programme delivered as per plan (dates, locations, distribution of information and condoms etc.)	Documentation - 30 days before construction in a new location Site verification every 3 months (quarterly)	Project and Project contractors; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MGLSD, Ministry of Health,

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Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<ul style="list-style-type: none"> the distribution of information, leaflets and condoms. An awareness campaign targeting schools at sensitive locations within the project AOI will be developed, addressing: <ul style="list-style-type: none"> Importance of staying in school. Risks particularly to girls of relationships with transient workers, transactional and commercial sex. Road safety awareness. Awareness about their rights. Project grievance mechanism and their right to use it. 				MLHUD, District Local Governments
Community Safety	Community safety, security and welfare	Community health and safety incidents associated with construction activities other than traffic accidents	Community health, safety and security plan. Occupational health, safety and security plan. Stakeholder engagement plan.	Construction barriers will have visible warning signs understandable by local communities. Signage will be in accordance with internationally accepted symbols and/or be well known to local communities. Regular meetings will be held with PAC representatives, during construction in their area, to update them on construction progress and to receive comments or queries. A community liaison log will be maintained detailing the content of all meetings. Appropriate measures will be implemented to prevent fauna or people from entering welded pipe sections or open excavations; there will be fauna ladders placed at suitable intervals in all open excavations. Animals will be removed safely and released into suitable habitat away from the working area. As part of the OHSSP, a first aid needs assessment will be undertaken for each camp to determine first aider and first aid kit requirements (e.g., qualifications, content of kits, locations).	Site verification that warning signs in appropriate languages and bright colours are installed. Stakeholder engagement records indicating PACs are regularly engaged regarding community relevant project information. First aid available at all camps.	Zero noncompliance with signage. Zero noncompliance with stakeholder engagement plan. First aid available 24/7.	Weekly for site verification. Monthly for stakeholder engagement records.	Project and Project contractors; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MGLSD, Ministry of Health, MLHUD, District Local Governments
Community Dynamics	Community safety, security and welfare	The capturing of project benefits by men leads to a decrease in quality of life and access to resources for women and children in PACs	Community health, safety and security plan. Stakeholder engagement plan. Labour management plan. Resettlement action plan.	Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment. An Information Education and Communication (IEC) programme will be developed for workers addressing social conduct and including topics such as: gender-based violence and, drug and alcohol misuse. The IEC programme will explore opportunities to support community initiatives addressing vulnerable groups including gender balance. Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.	Compensation agreements.	Both spouses sign agreement.	Monthly.	Project; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MGLSD, MLHUD. District Local Governments
Community Dynamics	Community safety, security and welfare	Conflict between PACs and project security personnel	Community health, safety and security plan. Stakeholder	Security personnel engaged by the project will receive training on Voluntary Principles (this will include where army and or security forces are engaged by the project); performance will be monitored. The Voluntary Principles on Security and Human Rights will be	Training records. Effectiveness on stakeholder messaging (by feedback templates or interviews)	Full coverage of security personnel. Zero community-security incidents.	Monthly	Project; Relevant Government bodies that may

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
			engagement plan.	implemented; compliance will be monitored. Public awareness programmes for stakeholders will include a specific section about the security presence around camps and security protocols which apply.	regarding project security.			conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MGLSD, MLHUD, Local Police, District Local Governments

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Disturbance or loss of cultural heritage	Tangible and Intangible Cultural Heritage	Increased knowledge of tangible and intangible cultural heritage. Employment of people to survey and investigate cultural heritage affected by the project.	Cultural Heritage Management Plan	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site • Excavation of a site • a watching brief during vegetation removal or topsoil stripping • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p> <p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel. <p>A written scheme of investigation (WSI) will be prepared where an intervention is needed and appended to the cultural heritage management plan (CHMP). Until investigation and recording in accordance with the WSI, or avoidance or management activity is signed off by government authorities, construction may not proceed in that area.</p>	Documentation (records, reports etc) demonstrating that a written scheme of investigation has been conducted Documentation (records, reports etc) demonstrating compliance to the Cultural Heritage Management Plan (CHMP)	Zero noncompliance with written scheme of investigation (WSI)	Monthly	Project and Project contractors; Relevant Government bodies including NEMA, Ministry of Tourism, Wildlife and Antiquities (MTWA) - Department of Museums and Monuments
Disturbance or loss of cultural heritage	Tangible and Intangible Cultural Heritage	Damage, disturbance or disruption of access of unknown Category 1 and 2 tangible cultural heritage features, such as evidence of previous	Cultural Heritage Management Plan	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site • Excavation of a site • a watching brief during vegetation removal or topsoil stripping 	Documentation (records, reports etc) demonstrating that a written scheme of investigation has been conducted Documentation (records, reports etc) demonstrating	Zero noncompliance with written scheme of investigation (WSI). Zero noncompliance with chance finds procedure.	Monthly	Project and Project contractors; Relevant Government bodies including NEMA, Ministry of Tourism, Wildlife

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		settlement and graves.		<ul style="list-style-type: none"> • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p> <p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p> <p>A written scheme of investigation (WSI) will be prepared where an intervention is needed and appended to the cultural heritage management plan (CHMP). Until investigation and recording in accordance with the WSI, or avoidance or management activity is signed off by government authorities, construction may not proceed in that area.</p> <p>The senior cultural heritage monitor (SCHM) will prepare the chance finds procedure (CFP); Chance finds will be excavated by suitably qualified and approved archaeologists, in accordance with the CFP and authorised by the relevant government authority.</p>	compliance to the Cultural Heritage Management Plan (CHMP)			and Antiquities (MTWA) Department of Museums and Monuments
Disturbance or loss of cultural heritage	Tangible and Intangible Cultural Heritage	Damage, disturbance or disruption of access of unknown Category 3 intangible cultural heritage, such as meeting places, sacred natural sites, rivers or ceremonial ways, traditional dance, rituals, traditional	Cultural Heritage Management Plan	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site • Excavation of a site • a watching brief during vegetation removal or topsoil stripping • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any</p>	Documentation (records, reports etc) demonstrating that a written scheme of investigation has been conducted Documentation (records, reports etc) demonstrating compliance to the Cultural Heritage Management Plan (CHMP)	Zero noncompliance with written scheme of investigation (WSI). Zero noncompliance with chance finds procedure.	Monthly	Project and Project contractors; Relevant Government bodies including NEMA, Ministry of Tourism, Wildlife and Antiquities (MTWA) Department of Museums and

Table J1.1-1 Generic ESMP Matrix – Construction Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		healing and syncretism		<p>appropriate licences obtained.</p> <p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel. <p>A written scheme of investigation (WSI) will be prepared where an intervention is needed and appended to the cultural heritage management plan (CHMP). Until investigation and recording in accordance with the WSI, or avoidance or management activity is signed off by government authorities, construction may not proceed in that area.</p> <p>The senior cultural heritage monitor (SCHM) will prepare the chance finds procedure (CFP); Chance finds will be excavated by suitably qualified and approved archaeologists, in accordance with the CFP and authorised by the relevant government authority.</p>				Monuments

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Introduction of competitive species or plants/animal diseases	Habitats of conservation importance	Poor re-colonisation by local flora through competition by non-natives following reinstatement	Biodiversity management plan.	Biosecurity measures will be developed and implemented that will include a strategy for weed and pest control and measures to prevent the introduction or spread of alien invasive species on the RoW, work sites and camp facilities. The biosecurity measures will also outline specifics to protect the aquatic environment from alien invasive species.	Documentation supporting that the biosecurity measures are implemented. Visual inspection for incidence of alien invasive species.	Zero noncompliance with the Biodiversity Management Plan.	Weekly.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, UWA, WMD, District Environment Officers, PAU, NFA
Disturbance or harm to wildlife	Habitats of conservation importance	PIIM to areas around camps causing increased pressure on natural resources (farming, deforestation for fuel)	Project-induced in-migration plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Settlements developing around or near camps and AGIs.	Zero unplanned settlements.	Monthly.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, UWA, DWRM, District Environment Officers, PAU, NFA, WMD
Management of black and grey water	Flora and fauna species of conservation importance (terrestrial and aquatic)	Injury or mortality of flora and fauna due to surface water contamination	Natural Resource Management Plan Waste management plan.	The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.	Disposal locations of treated effluent. Documentation to support treated wastewater (to be disposed of) meets	Zero noncompliance with statutory limits.	Monthly or As per permit conditions.	Project; Relevant Government bodies who may

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.	the relevant water quality standards.			conduct independent monitoring or review the data include: NEMA, DWRM, District Environment Officers, PAU
Introduction of competitive species or plants/animal diseases	Flora and fauna species of conservation importance (terrestrial and aquatic)	Modified habitats due to non-native species establishment leading to increased competition and loss of habitat for breeding and foraging	Biodiversity management plan.	Biosecurity measures will be developed and implemented that will include a strategy for weed and pest control and measures to prevent the introduction or spread of alien invasive species on the RoW, work sites and camp facilities. The biosecurity measures will also outline specifics to protect the aquatic environment from alien invasive species.	Documentation supporting that the biosecurity measures are implemented. Visual inspection for incidence of alien invasive species.	Zero noncompliance with the Biodiversity Management Plan.	Weekly.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, UWA, DWRM, District Environment Officers, PAU, NFA, WMD
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Maintenance activities causing in directly mortality or loss of breeding and forage habitat to species	Biodiversity management plan.	Operation phase vegetation management activities will account for species of conservation importance and their habitat requirements for foraging, nesting and/or breeding.	Maintenance records identifying compliance with the biodiversity management plan with regard to seasonal constraints and impact reduction on habitats and species of conservation importance.	Zero noncompliance.	Every 3 months (quarterly)	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, UWA, DWRM, District

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
								Environment Officers, PAU, WMD, NFA
Soil erosion	Soil	Loss of topsoil causing reduced fertility and impaired reinstatement	Reinstatement plan. Biodiversity management plan.	Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.	Restored vegetation in terms of floral diversity, density and cover.	Floral species diversity, density and cover meets reinstatement objectives.	Weekly until vegetation is established in reinstated areas; twice yearly thereafter	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, DWRM, PAU, District Environment Officers
Management of waste and accidental release of oil or chemicals	Soil	Soil contamination	Pollution prevention plan. Waste management plan.	<p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills. <p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p>	Documentation demonstrating that project activities are in compliance with the waste management plan and Pollution Prevention Plan Site verification.	Zero noncompliance with the Pollution Prevention Plan and Waste Management Plan.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, DWRM, PAU, District Local Government, OPM (Disaster Preparedness), Local Police

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. 				
Erosion	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters	Soil management plan. Reinstatement plan.	<p>During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.</p> <p>As much riparian vegetation as possible will be left in place until immediately before a watercourse crossing needs to be made to maintain stability of the banks. During site preparation, the height of vegetation on the riverbanks will be reduced, but roots will not be disturbed, to dissuade animals from nesting. The vegetation will then be removed when the crossing is made and the area reinstated as quickly as possible.</p> <p>Where watercourse bank reinforcement is required, the impact on riparian habitats and riparian fauna will be assessed to determine if the reinstatement or reinforcement is sufficient to maintain connectivity along the riparian elements of the watercourse. Mitigation will be installed to maintain habitat connectivity.</p> <p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. <p>Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.</p> <p>Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be limited to:</p> <ul style="list-style-type: none"> • consideration of information from preconstruction surveys • locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies • details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground • measures for working in areas of fragile and sensitive soils 	Visual evidence of erosion of river banks and bank stability (cracks, sag, shearing) within 50m up and down stream of construction activities. Visual evidence of significant sedimentation (water colour, turbidity) greater than 50 m of construction activity.	Zero incidence of sedimentation greater than 50 m up- or downstream of crossings during construction Zero incidence of collapsed banks after reinstatement	Weekly after reinstatement until vegetation is re-established	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, District Environment Officers, DWRM, WMD

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<ul style="list-style-type: none"> •restrictions to the storage of materials on steep slopes •provision for erosion and sediment control at watercourses. <p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment. 				
Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water	<p>Pollution prevention plan. Waste management plan. Emergency preparedness and response plan.</p>	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment 	Site verification	Zero noncompliance with Pollution Prevention Plan	Monthly	<p>Project;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, District Environment Officers, DWRM, WMD</p>

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<ul style="list-style-type: none"> • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills. 				
Altered drainage pattern	Surface water	Trench can act as conduit for groundwater, draining higher areas and flooding lower areas	Reinstatement plan.	Trench breakers will be installed in the pipeline trench where downhill flow within the backfilled trench may lead to erosion.	Site verification that trench breaks are installed; document verification that trench break numbers and locations are fit for purpose.	Trench breaks installed as per plan.	Minimum of 7 days prior to backfill.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, District Environment Officers, DWRM, WMD
Management of waste and accidental release of oil or chemicals	Groundwater	Potential for groundwater contamination	Waste management plan Pollution prevention plan. Natural resource management plan Emergency preparedness and response plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in</p>	Documentation demonstrating that project activities are in compliance with the waste management plan and pollution prevention plan Site verification	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, District Environment

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system." <p>"In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				Officers, DWRM
Visual intrusion of pipeline into landscape	Landscape	Change of landscape character and views caused by project components	Biodiversity Management Plan. Reinstatement Plan. Soil Management Plan.	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. <p>Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction.</p> <p>Environmental and social evaluations will be undertaken to identify suitable offsite disposal sites for waste soil and rock, and appropriate management measures to be implemented. All temporary borrow pits and soil and rock disposal sites will be reinstated, unless instructed otherwise by the regulatory authorities, in accordance with pre-entry agreements with landowner and location-specific reinstatement plans will be prepared and implemented.</p> <p>Where benching is required then the areas will be re-contoured to original</p>	Before and after photographs with regard to contouring, drainage, waste and debris.	No significant change	Weekly during reinstatement	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, UWA, WMD, District Environment Officers, NFA, PAU

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>profiles. Side casting in areas of steep terrain will be prohibited. The effects of accidental spoil slippage on steep slopes will be mitigated, e.g., by using fences or a geotextile membrane.</p> <p>Recontouring should be sympathetic and in keeping with preconstruction profiles, where this is not precluded by risk to integrity of the pipeline or erosion considerations.</p> <p>Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.</p> <p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will:</p> <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform pre-entry agreements including: o agreement for temporary measures to be installed (e.g., during disruption to drainage or irrigation, temporary fencing) o reinstatement requirements. Pre-entry agreements will be made with landowners, including reinstatement requirements, prior to access onto a site. 				

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Release of gases, exhausts and vapours to atmosphere	Air Quality	Exhaust emissions from vehicles causing reduced air quality during operation	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Vehicle maintenance records	Zero noncompliance with scheduled servicing and maintenance of combustion equipment	Annually	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Environment Officers, PAU, MGLSD (OSH Department)
Dust	Air Quality	Nuisance from mobilisation of dust by project vehicles	Pollution Prevention Plan Traffic and Road Safety Management Plan	<p>Where construction generated dust may affect sensitive receptors, the following mitigation measures will be considered:</p> <ul style="list-style-type: none"> • dust suppression at work-sites and transport routes • adherence to RoW speed limits supplemented by awareness training • sheeting of fine materials being transported or stored on-site 	Implementation of dust suppression measures Site verification Number of related complaints.	Zero noncompliance with dust suppression measures described in the Pollution Prevention Plan Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement.	Site verification twice weekly during dry periods Monthly - complaints, documentation.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Environment Officers, PAU
Noise	Acoustic Environment	Disturbance or nuisance from noise from traffic movement	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site. Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration. Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p>	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project; Relevant Government bodies who may conduct independent

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	site is up to date on manufacturer's recommended maintenance and servicing.	has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.		monitoring or review the data include: NEMA, District Environment Officers, OSH Department - MGLSD
Provision of goods and services	Economy	Project procurement providing opportunities for national businesses.	Local Content Plan	A Procurement and Supply Chain Management Plan (PSCMP) will be developed to maximise the purchase of goods and services from within Uganda/Tanzania. This will be contingent on whether local suppliers can offer sufficient quality and reliability and can meet project requirements. PSCMP will include, as appropriate, enterprise development, capacity development and ring-fencing contracts.	Development of a Procurement and Supply Chain Management Plan (PSCMP) to maximise the purchase of goods and services from within Uganda/Tanzania	Zero noncompliance with the Procurement and Supply Management Plan	Monthly	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD
Contribution to economy	Economy	Contribution to national economy from investment.	-	-	Contribution to the national economy		Annual	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU,
Contribution to economy	Economy	Changes to the fiscal balance.	-	-	Contribution to the national economy		Annual	Project; Relevant Government agencies who may conduct

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
								independent monitoring or review include: MEMD, PAU
Provision of Goods and Services	Local economy (nonland-based livelihoods)	Improvements in road conditions for business owners and public transport	Infrastructure and utilities management plan.	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.	Road traffic accidents and congestion	No annual increase in number of project related road traffic accidents No increases in project related road congestion	Quarterly	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, OHS Department MGLSD, District Local Governments
Employment	Local economy (nonland-based livelihoods)	School drops outs seeking employment in the project supply chain	Procurement and supply chain management plan. Monitoring and reporting plan. Labour management plan. Stakeholder engagement plan.	An awareness campaign targeting schools at sensitive locations within the project AOI will be developed, addressing: • Importance of staying in school. • Risks particularly to girls of relationships with transient workers, transactional and commercial sex. • Road safety awareness. • Awareness about their rights. • Project grievance mechanism and their right to use it.	Evidence of a standard clause in all contracts that no employees shall be hired, directly or indirectly, under the age of 18 years of age	No underage persons to be employed as part of the project workforce Inspections and audits to identify whether children under the age of 18 are being hired by the Project	Monthly	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD
Employment	Workers' health, safety and welfare	An improvement in the health and safety of workers from disease awareness and	Occupational health, safety and security plan.	As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs. A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address: •awareness and understanding among drivers about the risks of HIV and STDs	Number of instances of communicable diseases in workforce per worksite Trends in	No increase in communicable diseases of workforce by category and	Monthly	Project and project contractors; Relevant Government

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		reduction programmes		<ul style="list-style-type: none"> •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services •the distribution of information, leaflets and condoms. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.</p> <p>As part of the OHSSP, a risk-based worksite and construction camp training programme will be developed and administered to the workforce, vendor representatives and site visitors; the training programme (including daily toolbox meetings) will be updated in accordance with changes made in scope, incident statistics and/or regulatory requirements. Daily toolbox meetings will be held where health and safety issues will be discussed.</p>	communicable diseases in PACs	worksite against baseline.		agencies who may conduct independent monitoring or review include: MEMD, PAU, OHS Department MGLSD, Ministry of Health
Employment	Workers' health, safety and welfare	Other occupational health and safety incidents causing diseases, injuries and mortality	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan. Transport and road safety management plan.	<p>As part of the project OHSSP, construction camps will be designed and built to meet national requirements and regulations. Measures will be detailed to avoid and reduce impacts associated with the development and occupation of construction camps, including but not limited to:</p> <ul style="list-style-type: none"> • suitable and sufficient welfare facilities will be provided appropriate for both genders • clean and sanitary toilet facilities and showers will be provided appropriate for both genders. • adequate segregation between different areas (e.g. accommodation and hazardous areas) • measures to reduce or remove community disturbance or nuisance from the camps, e.g. preventing litter, dust generation, odours and noise. • include a helicopter landing area and secure fencing around the boundary. <p>Provide workers with personal protection from prevalent diseases where feasible (e.g., condoms and ITN).</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p> <p>As part of the OHSSP, a pest control plan will be developed for implementation on construction camps.</p> <p>As part of the OHSSP, a risk-based worksite and construction camp training programme will be developed and administered to the workforce, vendor representatives and site visitors; the training programme (including daily toolbox meetings) will be updated in accordance with changes made in scope, incident statistics and/or regulatory requirements. Daily toolbox meetings will be held where health and safety issues will be discussed.</p> <p>PPE appropriate for the task will be provided to all workers.</p>	Health and safety incidents.	Trend of reduction of health and safety incidents.	Monthly	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, OHS Department MGLSD

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				As part of the OHSSP, basic workplace wellness programs that are culturally and religiously acceptable will be developed and implemented.				
Use of Road Network	Community health	An increase in the burden of disease along the project's transport corridors caused by drivers spreading communicable diseases	Community health, safety and security plan. Occupational health, safety and security plan. Infrastructure and utilities management plan. Stakeholder engagement plan.	<p>A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of non-compliance, workers will be disciplined in accordance with project disciplinary procedures and structures.</p> <p>A HIV/STD awareness and prevention programme will be put in place at the rest stops used by project drivers to address:</p> <ul style="list-style-type: none"> •awareness and understanding among drivers about the risks of HIV and STDs •the associated health implications •the preventative measures that can be taken •community awareness meetings •counselling and testing services •the distribution of information, leaflets and condoms. <p>An awareness campaign targeting schools at sensitive locations within the project AOI will be developed, addressing:</p> <ul style="list-style-type: none"> • Importance of staying in school. • Risks particularly to girls of relationships with transient workers, transactional and commercial sex. • Road safety awareness. • Awareness about their rights. • Project grievance mechanism and their right to use it. 	Documentation demonstrating that community-based interventions covering malaria control and HIV/TB have been implemented Site verification (e.g. spot check) that HIV/STD awareness and prevention programme delivered as planned	HIV/STD awareness and prevention programme delivered as per plan (dates, locations, distribution of information and condoms etc)	Documentation - 30 days before construction in a new location Site verification every 3 months (quarterly)	Project and Project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, Ministry of Health
Disturbance or loss of cultural heritage	Tangible and Intangible Cultural Heritage	Damage or disturbance of Category 1 and 2 tangible cultural heritage	Cultural Heritage Management Plan	A CHMP will include details of all cultural heritage features identified before and during construction. The CHMP will inform cultural heritage management measures that may be required during project operation.	Verification that the CHMP includes details of all cultural heritage features identified before and during construction.	Zero noncompliance	Once; prior to 1st Oil	Project; Relevant Government bodies including NEMA, Ministry of Tourism, Wildlife and Antiquities (MTWA) Department of Museums and Monuments
Disturbance or loss of cultural heritage	Tangible and Intangible Cultural Heritage	Damage or disturbance of Category 3	Cultural Heritage Management Plan	A CHMP will include details of all cultural heritage features identified before and during construction. The CHMP will inform cultural heritage management measures that may be required during project operation.	Verification that the CHMP includes details of all cultural heritage features	Zero noncompliance.	Once; prior to 1st Oil	Project; Relevant

Table J1.1-2 Generic ESMP Matrix – Operational Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Parameter to be Monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		intangible cultural heritage			identified before and during construction.			Government bodies including NEMA, Ministry of Tourism, Wildlife and Antiquities (MTWA) Department of Museums and Monuments

J1.2 Location-Specific ESMP Matrix

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0-11 Guineo–Congolian semi-evergreen forest	Guineo–Congolian semi-evergreen forest	Loss of habitat	Loss of, Guineo–Congolian semi-evergreen forest	Biodiversity Management Plan. Reinstatement Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, NFA, District Environment Officers, PAU
Hoima 6-32 Wetland forests (riverine forest and swamp forests) located throughout the extent of the pipeline route	Wetland forests (riverine forest and swamp forests) located throughout the extent of the pipeline route	Loss of habitat	Loss of wetland forest (swamp and riverine forest)	Biodiversity Management Plan Reinstatement Plan	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as: <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. 	drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.		plan; there-after monthly until sites are fully restored.	review the data include: NEMA, MEMD, UWA, NFA, District Environment Officers, PAU, WMD, DWRM
Kyankwanzi 78-82 Taala FR	Taala FR	Loss of habitat	Permanent loss of natural and modified habitats (bushland, wetland and wetland forest) from Taala FR	Biodiversity Management Plan Reinstatement Plan	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction. As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as: <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. 	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, NFA, District Environment Officers, PAU
Kyankwanzi 78-82 Taala FR	Taala FR	Loss of habitat	Temporary loss of habitat from Taala FR	Biodiversity Management Plan. Reinstatement Plan	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.		plan; there-after monthly until sites are fully restored.	review the data include: NEMA, MEMD, UWA, NFA, District Environment Officers, PAU
Hoima 6 Various	Various	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat and disturbance to Bohor reedbuck	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestore measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> supplemental preconstruction flora and fauna surveys supplemental preconstruction biodiversity surveys of pre identified species of conservation concern a biodiversity assessment of watercourses and wetlands an assessment of fish spawning habitat at open-cut river 	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur</p> <ul style="list-style-type: none"> • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>				
Gomba 165 Various	Various	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat and disturbance to Bohor reedbuck	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestore measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur 	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>				
Sembabule 187 Various	Various	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat and disturbance to Bohor reedbed	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> supplemental preconstruction flora and fauna surveys supplemental preconstruction biodiversity surveys of pre identified species of conservation concern a biodiversity assessment of watercourses and wetlands an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.				
Lwengo 218-231 Various	Various	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat and disturbance to Bohor reedbed	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestore measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> supplemental preconstruction flora and fauna surveys supplemental preconstruction biodiversity surveys of pre identified species of conservation concern a biodiversity assessment of watercourses and wetlands an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.				
Rakai 289 Various	Various	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat and disturbance to Bohor reedbed	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0-20 Wambabya–Bugoma corridor	Wambabya–Bugoma corridor	Loss of Habitat to Species of Conservation Importance	Loss of chimpanzee habitat	Biodiversity Management Plan. Reinstatement Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, NFA, District Environment Officers, PAU

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0-20 Wambabya– Bugoma corridor	Wambabya– Bugoma corridor	Disturbance or Harm to Wildlife	Disturbance to chimpanzee	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, NFA, District Environment Officers, PAU

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Hoima 4.5-8 Wambabya	Wambabya	Disturbance or Harm to Wildlife	Noise and visual disturbance to species of conservation importance using the adjacent reserve	Biodiversity Management Plan. Reinstatement Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>The total duration of construction disturbance (i.e. the time between initial site clearing and final reinstatement/biorestoration) will be minimised.</p> <p>Vegetation clearing in suitable nesting habitat for vultures will be undertaken in advance of the dry season (when nesting occurs). A preclearance check for occupied vulture nests will be undertaken in suitable nesting habitat within 500m of the RoW. If any occupied nests are found, avoid construction until the chick has fully fledged or install noise and visual screening to minimise disturbance.</p>	<p>Documentation scheduling vegetation clearance to be completed outwith nesting season. Survey plan to include nests within 500m of RoW; site verification. Noise levels at sensitive receptors; field verification. Documentation demonstrating that the duration of disturbance is minimised. Journey management with regard to defined routes. Speed infringements and effective corrective action. Noise levels at sensitive receptors; field verification. Maintenance records of vehicles and equipment. Documentation demonstrating that the duration of disturbance is minimised.</p>	<p>No vegetation clearance during nesting season. Construction avoided within 500m of an occupied nest. Zero exceedance of project environmental standards. Disturbance limited to a single growing season. Zero exceedance of project environmental standards. Disturbance limited to a single growing season. Zero noncompliance with journey management. Decreasing trend of speed infringements.</p>	<p>90 days prior to construction commencing for documentation. Weekly for site verification for occupied nests during nesting season. Weekly for noise level monitoring at sensitive receptors. Quarterly for documentation. Monthly for journey management records; daily during intense transport activities (pipe), weekly for people movement. Monthly for speed infringements.</p>	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, NFA, District Environment Officers, PAU</p>
Hoima 4.5-8 Wambabya	Wambabya	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat, and noise and visual disturbance during construction for grey parrot.	Biodiversity Management Plan. Reinstatement Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestoration measures including seed collection, translocation and species</p>	<p>Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed;</p>	<p>Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans.</p>	<p>Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites</p>	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may</p>

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					<p>propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Reinstatement completed according to reinstatement plan.	are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	conduct independent monitoring or review the data include: NEMA, MEMD, UWA, NFA, District Environment Officers, PAU
Kakumiro 36-37 Kafu Crossing	Kafu Crossing	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat and disturbance (noise and visual) during construction on papyrus specialists, endemics and other species of conservation importance	Biodiversity Management Plan. Reinstatement Plan	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or

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Kyankwanzi 79-80 Wetland on northern edge of Taala FR	Wetland on northern edge of Taala FR	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat supporting species of conservation interest and noise and visual disturbance during construction	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, NFA,

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					<p>measures such as:</p> <ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> supplemental preconstruction flora and fauna surveys supplemental preconstruction biodiversity surveys of pre identified species of conservation concern a biodiversity assessment of watercourses and wetlands an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.			District Environment Officers, PAU, WMD, DWRM
Mubende 99.5 Secondary Acacia sp. woodland, bushland and wooded grassland	Secondary Acacia sp. woodland, bushland and wooded grassland	Loss of Habitat to Species of Conservation Importance	Loss of habitat supporting the gold star evergreen scrambling shrub <i>Blepharispernum pubescens</i>	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestorement measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works 	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>will be undertaken in advance of clearing.</p> <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	plant species that support forage, refuge and nesting.			
Rakai 276.5 Secondary Acacia sp. woodland, bushland and wooded grassland	Secondary Acacia sp. woodland, bushland and wooded grassland	Loss of Habitat to Species of Conservation Importance	Loss of habitat supporting the gold star evergreen scrambling shrub <i>Blepharispermum pubescens</i>	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestation measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>				
Sembabule 201.5 Secondary Acacia sp. woodland, bushland and wooded grassland	Secondary Acacia sp. woodland, bushland and wooded grassland	Loss of Habitat to Species of Conservation Importance	Loss of habitat supporting the gold star evergreen scrambling shrub <i>Blepharispermum pubescens</i>	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern 	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>				
Lwengo 217.5 Secondary Acacia sp. woodland, bushland and wooded grassland	Secondary Acacia sp. woodland, bushland and wooded grassland	Loss of Habitat to Species of Conservation Importance	Loss of habitat supporting the gold star evergreen scrambling shrub <i>Blepharispermum pubescens</i>	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorecovery measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for 	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>Conservation of Nature or Red Data Book species are known or likely to occur</p> <ul style="list-style-type: none"> • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>				
Mubende 93.1 Swampy grassland with occasional woody species	Swampy grassland with occasional woody species	Loss of Habitat to Species of Conservation Importance	Loss of habitat supporting the endemic <i>Leucas calostachys</i>	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. 	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU, DWRM, WMD

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.				
Mubende 106-112.6 Swamp forest and Papyrus swamp	Swamp forest and Papyrus swamp	Loss of Habitat to Species of Conservation Importance	Loss of habitat supporting the vascular plant, <i>Mondia whitei</i>	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestore measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU, DWRM, WMD, NFA

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.				
Mubende 147-148 River Crossing (Nabakazi River)	River Crossing (Nabakazi River)	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat and disturbance (noise and visual) during construction on papyrus specialists, endemics and other species of conservation importance	Biodiversity Management Plan. Reinstatement Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestore measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> directional felling of trees on land inside the right-of-way avoiding damage to trees outside the right-of-way identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> supplemental preconstruction flora and fauna surveys supplemental preconstruction biodiversity surveys of pre identified species of conservation concern a biodiversity assessment of watercourses and wetlands an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU, DWRM, WMD

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Gomba 164-165 Katonga River	Katonga River	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat supporting species of conservation interest, and noise and visual disturbance during construction	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU, DWRM, WMD
Sembabule 187 Wetland	Wetland	Loss of Habitat to Species of Conservation Importance and	Loss of habitat and direct mortality for	Biodiversity Management Plan	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the	Documentation (reports, checklists, etc) demonstrating	Comprehensive data records from supplementary preconstruction	Minimum of 7 days before vegetation clearance	Project and Project contractors;

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		Disturbance or Harm to Wildlife	golden throated rocket frog		<p>working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU, DWRM, WMD

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Sembabule 203-270 Valleys in southern Uganda	Valleys in southern Uganda	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of breeding and foraging habitat and noise and visual disturbance to grey crowned cranes	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU, WMD

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Kyotera 283 MCPY-4	MCPY-4	Loss of Habitat to Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of breeding and forage habitat and noise and visual disturbance to Bunyoro rabbit from MCPY4	Biodiversity Management Plan	<p>Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop bio restoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.</p> <p>As part of the Biodiversity Management plan a vegetation removal method statement to reduce impacts on biodiversity will be developed. This will include but not be limited to measures such as:</p> <ul style="list-style-type: none"> • directional felling of trees on land inside the right-of-way • avoiding damage to trees outside the right-of-way • identifying areas where strimming, coppicing or other works will be undertaken in advance of clearing. <p>A biodiversity survey strategy will be developed to include timings and methods of surveys to be undertaken, including but not limited to:</p> <ul style="list-style-type: none"> • supplemental preconstruction flora and fauna surveys • supplemental preconstruction biodiversity surveys of pre identified species of conservation concern • a biodiversity assessment of watercourses and wetlands • an assessment of fish spawning habitat at open-cut river crossings where the watercourse crossing is planned to occur during the fish-spawning season and International Union for Conservation of Nature or Red Data Book species are known or likely to occur • preconstruction checks on the right-of-way. <p>Ways to achieve an increasing trend in vegetation regrowth and diversity of desired species, specifically species composition and, plant species that support forage, refuge and nesting for species of conservation importance, in reinstated areas will be sought, with reference to nearby areas undisturbed by project activities. The re-establishment of vegetation will be monitored following reinstatement until long term re-vegetation targets have been reached.</p>	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Rakai 288-289 Disused airstrip and associated borrow pits	Disused airstrip and associated borrow pits	Disturbance or Harm to Wildlife	Noise and visual disturbance to bird and fauna species causing a restriction in species' distributions	Biodiversity Management Plan	Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site. The total duration of construction disturbance (i.e. the time between initial site clearing and final reinstatement/biorestoration) will be minimised.	Noise levels at sensitive receptors; field verification. Documentation demonstrating that the duration of disturbance is minimised. Journey management with regard to defined routes. Speed infringements and effective corrective action.	Zero exceedance of project environmental standards. Disturbance limited to a single growing season.	Weekly for noise level monitoring at sensitive receptors. Quarterly for documentation. Monthly for journey management records; daily during intense transport activities (pipe), weekly for people movement. Monthly for speed infringements.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU
Hoima 4.5-8 Wambabya FR	Wambabya FR	Loss of Habitat and Disturbance or Harm to Wildlife	Loss of ecological function and integrity of protected site through impacts on species and habitats	Biodiversity Management Plan	Preconstruction biodiversity surveys will be undertaken at locations identified in the baseline appendices of the environmental and social impact assessment to record details of habitats and species of conservation importance within the working areas. This information will be used to produce site specific biodiversity management plans that will identify fine-scale route changes (where feasible), mark features for retention and protection, develop biorestoration measures including seed collection, translocation and species propagation and provide details of the specific mitigation measures (such as seasonal construction restrictions) to be implemented to reduce impacts on biodiversity during construction.	Documentation (reports, checklists, etc) demonstrating that supplementary preconstruction surveys have been completed; and site-specific biodiversity management plans have been drafted and implemented where necessary. Reinstatement plan to include increasing trend in vegetation regrowth and plant species that support forage, refuge and nesting.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement completed according to reinstatement plan.	Minimum of 7 days before vegetation clearance commences for preclearance surveys. There-after weekly until sites are reinstated for compliance with biodiversity management plan; there-after monthly until sites are fully restored.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment Officers, PAU, NFA

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
All locations sensitive to soil compaction	All locations sensitive to soil compaction	Soil compaction	Anaerobic conditions developing that restrict plant nutrient uptake efficiency and root development. Loss of drainage capacity and poor plant establishment causing increased surface water ponding, runoff, soil erosion and decreased productivity.	Biodiversity Management Plan Community Health, Safety and Security Plan Transport and Road Safety Management Plan	Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).	Compressed soil; driving, parking and or storage of machinery, equipment or materials on reinstated RoW.	Zero noncompliance with the Soil Management Plan	Weekly after reinstatement until vegetation is re-established	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers
All locations sensitive to soil erosion	All locations sensitive to soil erosion	Soil erosion	Loss of topsoil causing reduced fertility and impaired reinstatement	Soil management plan. Reinstatement plan.	Load-bearing/ ground protection materials, such as bog mats and geotextile membranes under temporary haul roads, will be used to support heavy loads in areas of soft ground, including wetland areas. Local communities will be discouraged from using the right-of-way as an access road during construction through signage, awareness raising and the use of communication materials. Topsoil and subsoil stockpiles will be stored in accordance with the Soil Management Plan, be free draining and include gaps left in strategic locations to allow potential floodwater through. If topsoil is stored for more than six months, the stacks will be monitored for: • the presence of weeds, which will be controlled in accordance with the weed and pest control programme • compaction and erosion – corrective measures will be implemented if either is identified. Reinstatement will be undertaken as early as practicable following completion of construction activities in any ROW section or site.	Rills or gullies on topsoil stacks and or reinstated areas	No visible signs of erosion	Weekly until vegetation is established in reinstated areas	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, PAU, District Environment Officers
Hoima 0 PAR-PS1 road KP2.5	PAR-PS1 road KP2.5	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste	The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation	Documentation demonstrating that project activities are in compliance with the waste	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project and Project contractors; Relevant

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				management plan.	<p>measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIPP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to 	management plan and pollution prevention plan Site verification			Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, WMD, OPM (Disaster Preparedness)

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills.				
Kakumiro 40 MCPY1	MCPY1	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment 	Documentation demonstrating that project activities are in compliance with the waste management plan and pollution prevention plan Site verification	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, WMD, OPM (Disaster Preparedness)

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				
Mubende 126 ERU-MCPY2 road KP1.0	ERU-MCPY2 road KP1.0	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p>	Documentation demonstrating that project activities are in compliance with the waste management plan and pollution prevention plan Site verification	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, WMD, OPM (Disaster Preparedness)

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				
Sembabule 185 ERU-PS2 road KP0.5	ERU-PS2 road KP0.5	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p>	Documentation demonstrating that project activities are in compliance with the waste management plan and pollution prevention plan Site verification	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, WMD, OPM (Disaster Preparedness)

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				
Rakai 283 MCPY4	MCPY4	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures 	Documentation demonstrating that project activities are in compliance with the waste management plan and pollution prevention plan Site verification	Zero noncompliance with the pollution prevention plan and waste management plan	Weekly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD,

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				District Environment Officers, DWRM, WMD, OPM (Disaster Preparedness)
Mubende 126 ERU-MCPY2 road KP1.0	ERU-MCPY2 road KP1.0	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	<p>During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.</p> <p>As much riparian vegetation as possible will be left in place until immediately before a watercourse crossing needs to be</p>	Visual evidence of erosion of river banks and bank stability (cracks, sag, shearing) within 50m up and down stream of	Zero incidence of sedimentation greater than 50 m up- or downstream of crossings during construction Zero incidence of	Weekly after reinstatement until vegetation is re-established	Project and Project contractors; Relevant Government

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>made to maintain stability of the banks. During site preparation, the height of vegetation on the riverbanks will be reduced, but roots will not be disturbed, to dissuade animals from nesting. The vegetation will then be removed when the crossing is made and the area reinstated as quickly as possible.</p> <p>Where watercourse bank reinforcement is required, the impact on riparian habitats and riparian fauna will be assessed to determine if the reinstatement or reinforcement is sufficient to maintain connectivity along the riparian elements of the watercourse. Mitigation will be installed to maintain habitat connectivity.</p> <p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be limited to:</p> <ul style="list-style-type: none"> • consideration of information from preconstruction surveys • locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies • details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground • measures for working in areas of fragile and sensitive soils • restrictions to the storage of materials on steep slopes • provision for erosion and sediment control at watercourses. <p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control 	<p>construction activities. Visual evidence of significant sedimentation (water colour, turbidity) greater than 50 m of construction activity.</p>	<p>collapsed banks after reinstatement</p>		<p>bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, WMD</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment. 				
Sembabule 185 ERU-PS2 road KP0.5	ERU-PS2 road KP0.5	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	<p>During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.</p> <p>As much riparian vegetation as possible will be left in place until immediately before a watercourse crossing needs to be made to maintain stability of the banks. During site preparation, the height of vegetation on the riverbanks will be reduced, but roots will not be disturbed, to dissuade animals from nesting. The vegetation will then be removed when the crossing is made and the area reinstated as quickly as possible.</p> <p>Where watercourse bank reinforcement is required, the impact on riparian habitats and riparian fauna will be assessed to determine if the reinstatement or reinforcement is sufficient to maintain connectivity along the riparian elements of the watercourse. Mitigation will be installed to maintain habitat connectivity.</p> <p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be</p>	Visual evidence of erosion of river banks and bank stability (cracks, sag, shearing) within 50m up and down stream of construction activities. Visual evidence of significant sedimentation (water colour, turbidity) greater than 50 m of construction activity.	Zero incidence of sedimentation greater than 50 m up- or downstream of crossings during construction Zero incidence of collapsed banks after reinstatement	Weekly after reinstatement until vegetation is re-established	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, WMD</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>limited to:</p> <ul style="list-style-type: none"> •consideration of information from preconstruction surveys •locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies •details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground •measures for working in areas of fragile and sensitive soils •restrictions to the storage of materials on steep slopes •provision for erosion and sediment control at watercourses. <p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment. 				
Rakai 283 MCPY4	MCPY4	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	<p>During open-cut watercourse crossing activities, bank and bed material will be segregated, stored away from the active channels, and not be placed where flow or drainage will be obstructed.</p> <p>As much riparian vegetation as possible will be left in place until immediately before a watercourse crossing needs to be made to maintain stability of the banks. During site preparation, the height of vegetation on the riverbanks will be reduced, but roots will not be disturbed, to dissuade animals from nesting. The vegetation will then be removed when the crossing is made and the area reinstated as quickly as possible.</p> <p>Where watercourse bank reinforcement is required, the impact on riparian habitats and riparian fauna will be assessed to determine if the reinstatement or reinforcement is sufficient to maintain connectivity along the riparian elements of the watercourse. Mitigation will be installed to maintain habitat connectivity.</p> <p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during 	Visual evidence of erosion of river banks and bank stability (cracks, sag, shearing) within 50m up and down stream of construction activities. Visual evidence of significant sedimentation (water colour, turbidity) greater than 50 m of construction activity.	Zero incidence of sedimentation greater than 50 m up- or downstream of crossings during construction Zero incidence of collapsed banks after reinstatement	Weekly after reinstatement until vegetation is re-established	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, WMD

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>construction</p> <ul style="list-style-type: none"> • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Site specific erosion risk assessments will be completed by a qualified fluvial geomorphologist or soil scientist as appropriate; the information will be used to prepare a soil management plan and a reinstatement plan prior to construction. Erosion control measures will include but not be limited to:</p> <ul style="list-style-type: none"> • consideration of information from preconstruction surveys • locations where soil compaction may result in increased sediment laden runoff to watercourses and waterbodies • details on construction through soft ground, considering the use of load-bearing materials to support heavy loads in soft ground • measures for working in areas of fragile and sensitive soils • restrictions to the storage of materials on steep slopes • provision for erosion and sediment control at watercourses. <p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment. 				
Hoima 0 PS1	PS1	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment 	Site verification of compliance with waste management plan Number of related complaints Documentation relating to groundwater monitoring Visual inspection for evidence of	Zero noncompliance with waste management plan Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed	Monthly - complaints, groundwater monitoring Weekly- site inspections	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>(e.g. impermeable drip trays)</p> <ul style="list-style-type: none"> regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors spill prevention measures training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment contact details for the rapid response team and spill response organisation notification requirements. All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> A trained rapid response team will be mobilised Spill response personnel and equipment will be provided to contain, cleanup and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, cleanup and remediate Tier 2 and Tier 3 spills. 	contamination or sediment run-off	solution/s during engagement Groundwater monitoring results meet project environmental standards No evidence of contamination or sediment run-off		review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, OPM (Disaster Preparedness)
Sembabule 185 PS2	PS2	Management of waste and accidental	Contamination of groundwater	Waste management plan	The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water	Site verification of compliance with waste	Zero noncompliance with waste	Monthly - complaints, groundwater	Project and Project contractors;

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		release of oil or chemicals			<p>channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following</p>	<p>management plan</p> <p>Number of related complaints</p> <p>Documentation relating to groundwater monitoring</p> <p>Visual inspection for evidence of contamination or sediment run-off</p>	<p>management plan</p> <p>Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed solution/s during engagement</p> <p>Groundwater monitoring results meet project environmental standards</p> <p>No evidence of contamination or sediment run-off</p>	<p>monitoring</p> <p>Weekly- site inspections</p>	<p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, OPM (Disaster Preparedness)</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					actions will take place: <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				
Kakumiro 40 MCPY1	MCPY1	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to: <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. </p> <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover: <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a </p>	Site verification of compliance with waste management plan Number of related complaints Documentation relating to groundwater monitoring Visual inspection for evidence of contamination or sediment run-off	Zero noncompliance with waste management plan Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed solution/s during engagement Groundwater monitoring results meet project environmental standards No evidence of contamination or sediment run-off	Monthly - complaints, groundwater monitoring Weekly- site inspections	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, OPM (Disaster Preparedness)

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment</p> <ul style="list-style-type: none"> • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				
Mubende 126 MCPY2	MCPY2	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways</p>	Site verification of compliance with waste management plan Number of related complaints Documentation relating to groundwater monitoring Visual inspection for evidence of contamination or sediment run-off	Zero noncompliance with waste management plan Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed solution/s during engagement Groundwater monitoring results meet project environmental standards No evidence of contamination or sediment run-off	Monthly - complaints, groundwater monitoring Weekly- site inspections	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, OPM (Disaster Preparedness)

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				
Rakai 283 MCPY4	MCPY4	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will</p>	Site verification of compliance with waste management plan Number of related complaints Documentation relating to groundwater monitoring Visual inspection for evidence of contamination or sediment run-off	Zero noncompliance with waste management plan Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed solution/s during engagement Groundwater monitoring results meet project environmental standards No evidence of contamination or sediment run-off	Monthly - complaints, groundwater monitoring Weekly- site inspections	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM, OPM (Disaster Preparedness)

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p> <p>A spill response procedure based on Tier 1, 2 and 3 spill responsibilities defined in the Emergency Preparedness and Response Plan will be developed together with other responsible parties, and the necessary equipment and resources will be procured to implement it. The procedure will cover:</p> <ul style="list-style-type: none"> • responses for any unintended or unauthorised release of a potentially hazardous material, identification of locations where spill response equipment and resources will be provided, and procedures for its deployment • contact details for the rapid response team and spill response organisation • notification requirements. • All Tier 1, 2 and 3 spills will be reported in accordance with the project incident reporting system. <p>In the event of a spillage of hazardous materials the following actions will take place:</p> <ul style="list-style-type: none"> • A trained rapid response team will be mobilised • Spill response personnel and equipment will be provided to contain, clean-up and remediate (Tier 1 spills). A wider range of resources will be utilised to contain, clean-up and remediate Tier 2 and Tier 3 spills. 				
Hoima 0 PS1	PS1	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) 	Site verification of compliance with pollution prevention plan and waste management plan Number of related complaints Documentation relating to groundwater monitoring Visual inspection for evidence of	Zero noncompliance with pollution prevention plan and waste management plan Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has	Monthly - complaints, groundwater monitoring Weekly- site inspections	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors spill prevention measures training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p>	contamination or sediment run-off	proposed solution/s during engagement Groundwater monitoring results meet project environmental standards No evidence of contamination or sediment run-off		include: NEMA, PAU, MEMD, District Environment Officers, DWRM
Sembabule 185 PS2	PS2	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors spill prevention measures training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be</p>	Site verification of compliance with pollution prevention plan and waste management plan Number of related complaints Documentation relating to groundwater monitoring Visual inspection for evidence of contamination or sediment run-off	Zero noncompliance with pollution prevention plan and waste management plan Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed solution/s during engagement Groundwater monitoring results meet project environmental standards No evidence of contamination or sediment run-off	Monthly - complaints, groundwater monitoring Weekly- site inspections.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p>				
Kakumiro 40 MCPY1	MCPY1	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GILP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p>	<p>Site verification of compliance with pollution prevention plan and waste management plan</p> <p>Number of related complaints</p> <p>Documentation relating to groundwater monitoring</p> <p>Visual inspection for evidence of contamination or sediment run-off</p>	<p>Zero noncompliance with pollution prevention plan and waste management plan</p> <p>Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed solution/s during engagement</p> <p>Groundwater monitoring results meet project environmental standards</p> <p>No evidence of contamination or sediment run-off</p>	<p>Monthly - complaints, groundwater monitoring</p> <p>Weekly- site inspections</p>	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM</p>
Mubende 126 MCPY2	MCPY2	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation</p>	<p>Site verification of compliance with pollution prevention plan and waste management plan</p>	<p>Zero noncompliance with pollution prevention plan and waste management plan</p>	<p>Monthly - complaints, groundwater monitoring</p> <p>Weekly- site inspections</p>	<p>Project and Project contractors;</p> <p>Relevant</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g. sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p>	<p>Number of related complaints</p> <p>Documentation relating to groundwater monitoring</p> <p>Visual inspection for evidence of contamination or sediment run-off</p>	<p>Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed solution/s during engagement</p> <p>Groundwater monitoring results meet project environmental standards</p> <p>No evidence of contamination or sediment run-off</p>		<p>Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM</p>
Rakai 283 MCPY4	MCPY4	Management of black and grey water	Contamination of groundwater	<p>Pollution prevention plan. Waste management plan.</p>	<p>The storage of hazardous materials will be restricted to designated hazardous materials storage areas at least 50 m from any wetlands, surface watercourse or seasonal water channel. Such storage locations will be subject to site-specific environmental and social risk assessment that will inform site selection and the adoption of any additional mitigation measures. Storage areas for hazardous materials will be bunded (no drainage valves/holes), have impermeable floor and will be covered to minimise the ingress of rainwater.</p> <p>A refuelling procedure will be developed and implemented which will include but not be limited to:</p> <ul style="list-style-type: none"> • details of mobile and static refuelling areas and equipment (e.g. impermeable drip trays) • regulatory / GIIP constraints of refuelling operations to sensitive environmental receptors • spill prevention measures • training on refuelling procedures. <p>The grey water stream will be separated from black water (e.g.</p>	<p>Site verification of compliance with pollution prevention plan and waste management plan</p> <p>Number of related complaints</p> <p>Documentation relating to groundwater monitoring</p> <p>Visual inspection for evidence of contamination or sediment run-off</p>	<p>Zero noncompliance with pollution prevention plan and waste management plan</p> <p>Continuous improvement on percentage of unresolved complaints regarding potable water supply after Project has proposed solution/s during engagement</p> <p>Groundwater monitoring results meet project</p>	<p>Monthly - complaints, groundwater monitoring</p> <p>Weekly- site inspections</p>	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>sewage), treated and either reused (e.g., for toilet flushing, dust suppression) or discharged, in accordance with the environment project standards and national environmental guidance and regulations. All wastewater discharges will comply with permit conditions and the project environmental standards.</p> <p>An industry-recognised manufactured grease trap will be installed at the outlet of the kitchen(s) facilities to prevent greases and fats from entering the grey water streams.</p> <p>Treated sewage effluent which is not reused will be preferentially discharged to land. Before any discharge, the soil permeability will be evaluated, and engineered soakaways will be constructed, where required, to avoid impacts on land, surface water drainage and groundwater.</p>		<p>environmental standards No evidence of contamination or sediment run-off</p>		Officers, DWRM
Hoima 0 PS1	PS1	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	<p>As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.</p> <p>Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.</p>	Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include; NEMA, PAU, MEMD, District Environment Officers, DWRM
Sembabule 185 PS2	PS2	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	<p>As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.</p> <p>Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and</p>	Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project; Relevant Government bodies who may conduct independent monitoring or review the data

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.				include: NEMA, PAU, MEMD, District Environment Officers, DWRM
Kakumiro 40 MCPY1	MCPY1	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	<p>As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.</p> <p>Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.</p>	Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM
Mubende 126 MCPY2	MCPY2	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	<p>As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.</p> <p>Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location</p>	Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					for the community that is not or is less influenced by the project's abstraction.				Officers, DWRM
Rakai 283 MCPY4	MCPY4	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	<p>As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.</p> <p>Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.</p>	Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment Officers, DWRM
Hoima 0 PS1	PS1	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document</p>	Before and after photographs with regard to contouring, drainage, waste and debris.	No significant change	Weekly during reinstatement	Project and Project contractors; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>the condition of temporary sites at handover following reinstatement.</p> <p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will:</p> <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform pre-entry agreements including: <ul style="list-style-type: none"> o agreement for temporary measures to be installed (e.g., during disruption to drainage or irrigation, temporary fencing) o reinstatement requirements. Pre-entry agreements will be made with landowners, including reinstatement requirements, prior to access onto a site. 				
Sembabule 184.5 PS2	PS2	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.</p> <p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads</p>	Before and after photographs with regard to contouring, drainage, waste and debris.	No significant change	Weekly during reinstatement	<p>Project and Project contractors;</p> <p>Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will: <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform pre-entry agreements including: o agreement for temporary measures to be installed (e.g., during disruption to drainage or irrigation, temporary fencing) o reinstatement requirements. Pre-entry agreements will be made with landowners, including reinstatement requirements, prior to access onto a site. 				
Hoima 0 PS1	PS1	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.</p> <p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will:</p> <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform pre-entry agreements including: o agreement for 	Before and after photographs with regard to contouring, drainage, waste and debris.	No significant change	Weekly during reinstatement	<p>Project and Project contractors;</p> <p>Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					temporary measures to be installed (e.g., during disruption to drainage or irrigation, temporary fencing) o reinstatement requirements. Pre-entry agreements will be made with landowners, including reinstatement requirements, prior to access onto a site.				
Sembabule 184.5 PS2	PS2	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.</p> <p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will:</p> <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform pre-entry agreements including: o agreement for temporary measures to be installed (e.g., during disruption to drainage or irrigation, temporary fencing) o reinstatement requirements. Pre-entry agreements will be made with landowners, including reinstatement requirements, prior to access onto a site. 	Before and after photographs with regard to contouring, drainage, waste and debris.	No significant change	Weekly during reinstatement.	<p>Project and Project contractors;</p> <p>Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
TBC Side Slope Areas with Permanent Benching	Side Slope Areas with Permanent Benching	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan Soil management plan	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location • the number of trees and species to be removed during construction • conservation value of the species to be removed • variety of species to be replanted • provenance of species used for replanting • the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.</p> <p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will:</p> <ul style="list-style-type: none"> • provide baseline evidence in the event of a claim for damage • identify existing contamination such as illegal disposal • inform pre-entry agreements including: o agreement for temporary measures to be installed (e.g., during disruption to drainage or irrigation, temporary fencing) o reinstatement requirements. Pre-entry agreements will be made with landowners, including reinstatement requirements, prior to access onto a site. 	Before and after photographs with regard to contouring, drainage, waste and debris.	No significant change	Weekly during reinstatement	<p>Project and Project contractors;</p> <p>Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU</p>
TBC Side Slope Areas with Permanent Benching	Side Slope Areas with Permanent Benching	Visual intrusion of project components into landscape	Change of views	Reinstatement plan Soil management plan	<p>A strategy for tree removal and replanting will be developed; the strategy will consider:</p> <ul style="list-style-type: none"> • where trees are to be removed, the species and size/age of trees that will be recorded prior to removal; data to be recorded includes: trunk diameter at chest height, number of each species, species and, location 	Before and after photographs with regard to contouring, drainage, waste and debris.	No significant change	Weekly during reinstatement	<p>Project and Project contractors;</p> <p>Government</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> the number of trees and species to be removed during construction conservation value of the species to be removed variety of species to be replanted provenance of species used for replanting the region-specific environmental characteristics influencing replanting success. Preconstruction surveys will be referred to when deciding suitable locations for replanting of translocated species or species planted to compensate for those removed during construction. <p>Before construction personnel and equipment are demobilised, temporary buildings and equipment, aboveground and belowground infrastructure, utilities, tools and any excess material brought onsite or generated during construction and commissioning will be removed. All off ROW sites impacted upon will be reinstated to meet pre-entry agreements with the landowner and in accordance with location-specific reinstatement method statements or plans to be prepared and implemented. Location-specific closeout reports, including photographs, will be produced to document the condition of temporary sites at handover following reinstatement.</p> <p>A preconstruction survey, including photographs, will be undertaken to document the condition of the land on which the RoW, construction and permanent facilities and access roads will be located. The survey will include immovable assets, crops and any remediation required to the land before construction. The survey will:</p> <ul style="list-style-type: none"> provide baseline evidence in the event of a claim for damage identify existing contamination such as illegal disposal inform pre-entry agreements including: <ul style="list-style-type: none"> o agreement for temporary measures to be installed (e.g., during disruption to drainage or irrigation, temporary fencing) o reinstatement requirements. Pre-entry agreements will be made with landowners, including reinstatement requirements, prior to access onto a site. 				bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU
Kakumiro 41 MCPY1	MCPY1	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> be appropriate for the task required have a valid maintenance and inspection certificate or log books be allocated a unique identifier to be used in a maintenance log be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions not be allowed to idle – engines will be switched off when not in use. 	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan.	Weekly	Project and Project contractors; Government bodies who may conduct independent monitoring or

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.				review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD (OSH Department)
Mubende 124.6 MCPY2	MCPY2	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan	Weekly	<p>Project and Project contractors;</p> <p>Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD</p>
Sembabule 184.5-191.2 MCPY3	MCPY3	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan	Weekly	<p>Project and Project contractors;</p> <p>Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
									Officers, PAU, OSH Department - MGLSD
Kyotera 288 MCPY4	MCPY4	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan	Weekly	Project and Project contractors; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
TBC TBC Hydrotest Sections	Hydrotest Sections	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan	Weekly	Project and Project contractors; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Kakumiro 41 MCPY1	MCPY1	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan	Weekly	<p>Project and Project contractors;</p> <p>Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD</p>
Mubende 124.6 MCPY2	MCPY2	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan	Weekly	<p>Project and Project contractors;</p> <p>Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD</p>
Sembabule 184.5-191.2 MCPY3	MCPY3	Release of gases, exhausts and	Emissions of fine particulate matter causing reduced air quality from	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books 	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan	Weekly	<p>Project and Project contractors;</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		vapours to atmosphere	operation of generators		<ul style="list-style-type: none"> • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>				Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
Kyotera 288 MCPY4	MCPY4	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan.	Weekly	Project and Project contractors; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
TBC Hydrotest Sections	Hydrotest Sections	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions 	Zero noncompliance with pollution prevention plan	Zero noncompliance with pollution prevention plan	Weekly	Project and Project contractors; Government bodies who may conduct

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>				independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
Kakumiro 41 MCPY1	MCPY1	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution Prevention Plan Traffic and Road Safety Management Plan	<p>Where construction generated dust may affect sensitive receptors, the following mitigation measures will be considered:</p> <ul style="list-style-type: none"> dust suppression at work-sites and transport routes adherence to RoW speed limits supplemented by awareness training sheeting of fine materials being transported or stored on-site 	Implementation of dust suppression measures Site verification Number of related complaints	Zero noncompliance with dust suppression measures described in the Pollution Prevention Plan Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement	Weekly - site verification Monthly - complaints, documentation	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
Mubende 124.6 MCPY2	MCPY2	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution Prevention Plan Traffic and Road Safety Management Plan	<p>Where construction generated dust may affect sensitive receptors, the following mitigation measures will be considered:</p> <ul style="list-style-type: none"> dust suppression at work-sites and transport routes adherence to RoW speed limits supplemented by awareness training sheeting of fine materials being transported or stored on-site 	Implementation of dust suppression measures Site verification Number of related complaints	Zero noncompliance with dust suppression measures described in the Pollution Prevention Plan Continuous improvement on percentage of unresolved complaints on	Weekly - site verification Monthly - complaints, documentation	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
							project vehicle dust emissions after Project has proposed solution/s during engagement		review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
Sembabule 184.5-191.2 MCPY3	MCPY3	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution Prevention Plan Traffic and Road Safety Management Plan	Where construction generated dust may affect sensitive receptors, the following mitigation measures will be considered: • dust suppression at work-sites and transport routes • adherence to RoW speed limits supplemented by awareness training • sheeting of fine materials being transported or stored on-site	Implementation of dust suppression measures Site verification Number of related complaints	Zero noncompliance with dust suppression measures described in the Pollution Prevention Plan Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement.	Weekly - site verification Monthly - complaints, documentation	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
Kyotera 288 MCPY4	MCPY4	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution Prevention Plan Traffic and Road Safety Management Plan	Where construction generated dust may affect sensitive receptors, the following mitigation measures will be considered: • dust suppression at work-sites and transport routes • adherence to RoW speed limits supplemented by awareness training • sheeting of fine materials being transported or stored on-site	Implementation of dust suppression measures Site verification Number of related complaints	Zero noncompliance with dust suppression measures described in the Pollution Prevention Plan Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has	Weekly - site verification Monthly - complaints, documentation	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
							proposed solution/s during engagement		include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
TBC Hydrotest Sections	Hydrotest Sections	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution Prevention Plan Traffic and Road Safety Management Plan	Where construction generated dust may affect sensitive receptors, the following mitigation measures will be considered: • dust suppression at work-sites and transport routes • adherence to RoW speed limits supplemented by awareness training • sheeting of fine materials being transported or stored on-site	Implementation of dust suppression measures Site verification Number of related complaints	Zero noncompliance with dust suppression measures described in the Pollution Prevention Plan Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement	Weekly - site verification Monthly - complaints, documentation	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, OSH Department - MGLSD
Kakumiro 41 MCPY1	MCPY1	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution Prevention Plan	Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site. Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration. Preference will be given to selecting low noise and vibration emitting equipment for all construction works. To minimise emissions to air, vehicles, machines and equipment will: • be appropriate for the task required • have a valid maintenance and inspection certificate or log books	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD,

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 		maintenance of combustion equipment.		District Environment Officers, OSH Department - MGLSD
Mubende 124.6 MCPY2	MCPY2	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Sembabule 184.5-191.2 MCPY3	MCPY3	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use." 		combustion equipment.		Officers, OSH Department - MGLSD
Kyotera 288 MCPY4	MCPY4	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Kakumiro 41 MCPY1	MCPY1	Vibration	Disturbance or damage due to noise or vibration generation during development of construction facilities	Pollution Prevention Plan	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within:</p> <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Preconstruction record of condition. Documentation demonstrating noise and vibration assessments have been completed. Number of related complaints	Comprehensive preconstruction record of condition. Noise and vibration evaluations completed at sensitive receptors. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement	Once 30 days before construction commences for preconstruction record of condition and noise and vibration evaluations. Monthly for complaints.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
									Department - MGLSD
Mubende 124.6 MCPY2	MCPY2	Vibration	Disturbance or damage due to noise or vibration generation during development of construction facilities	Pollution Prevention Plan	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within:</p> <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Preconstruction record of condition. Documentation demonstrating noise and vibration assessments have been completed. Number of related complaints	Comprehensive preconstruction record of condition. Noise and vibration evaluations completed at sensitive receptors. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement	Once 30 days before construction commences for preconstruction record of condition and noise and vibration evaluations. Monthly for complaints.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Sembabule 184.5-191.2 MCPY3	MCPY3	Vibration	Disturbance or damage due to noise or vibration generation during development of construction facilities	Pollution Prevention Plan	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within:</p> <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Preconstruction record of condition. Documentation demonstrating noise and vibration assessments have been completed. Number of related complaints	Comprehensive preconstruction record of condition. Noise and vibration evaluations completed at sensitive receptors. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement	Once 30 days before construction commences for preconstruction record of condition and noise and vibration evaluations. Monthly for complaints.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Kyotera 288 MCPY4	MCPY4	Vibration	Disturbance or damage due to noise or vibration generation during development of construction facilities	Pollution Prevention Plan	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within:</p> <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Preconstruction record of condition. Documentation demonstrating noise and vibration assessments have been completed. Number of related complaints	Comprehensive preconstruction record of condition. Noise and vibration evaluations completed at sensitive receptors. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement	Once 30 days before construction commences for preconstruction record of condition and noise and vibration evaluations. Monthly for complaints.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Kakumiro 41 MCPY1	MCPY1	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Mubende 124.6 MCPY2	MCPY2	Noise	Disturbance or nuisance from	Pollution Prevention Plan	Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.	Noise levels at sensitive receptors; field	Zero exceedance of project environmental	Weekly for noise level monitoring at sensitive	Project and Project contractors;

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
			operation of the MCPYs		<p>Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	receptors. Monthly for documentation.	Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Sembabule 184.5-191.2 MCPY3	MCPY3	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Location specific assessments will be undertaken at sensitive receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Kyotera 288 MCPY4	MCPY4	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Location specific assessments will be undertaken at sensitive</p>	Noise levels at sensitive receptors; field verification. Number of related	Zero exceedance of project environmental standards. Continuous	Weekly for noise level monitoring at sensitive receptors.	Project and Project contractors;

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>receptors in proximity to project activities occurring between 7 p.m. and 7 a.m. to identify appropriate mitigation where there is potential to cause disturbance from noise and vibration.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>"To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use." 	complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Monthly for documentation.	Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Kakumiro 41 MCPY1	MCPY1	Noise	Disturbance or nuisance from noise generation during decommissioning of construction facilities	Pollution Prevention Plan	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within:</p> <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Mubende 124.6 MCPY2	MCPY2	Noise	Disturbance or nuisance from noise generation during decommissioning of construction facilities	Pollution Prevention Plan	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p>	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within: <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.		bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Sembabule 184.5-191.2 MCPY3	MCPY3	Noise	Disturbance or nuisance from noise generation during decommissioning of construction facilities	Pollution Prevention Plan	A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven. Preference will be given to selecting low noise and vibration emitting equipment for all construction works. Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within: <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Kyotera 288 MCPY4	MCPY4	Noise	Disturbance or nuisance from noise generation during decommissioning of construction facilities	Pollution Prevention Plan	A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven. Preference will be given to selecting low noise and vibration emitting equipment for all construction works. Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be implemented where appropriate. Notifications of work will	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					be given at least 72 hrs in advance of work to residents / occupants located within: • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads.	up to date on manufacturer's recommended maintenance and servicing.	engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.		monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Kakumiro 41 MCPY1	MCPY1	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution Prevention Plan	A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven. Preference will be given to selecting low noise and vibration emitting equipment for all construction works. Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within: • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads.	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Mubende 124.6 MCPY2	MCPY2	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution Prevention Plan	A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven. Preference will be given to selecting low noise and vibration emitting equipment for all construction works. Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within: • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD,

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	maintenance and servicing.	servicing and maintenance of combustion equipment.		District Environment Officers, OSH Department - MGLSD
Sembabule 184.5-191.2 MCPY3	MCPY3	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution Prevention Plan	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within:</p> <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH Department - MGLSD
Kyotera 288 MCPY4	MCPY4	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution Prevention Plan	<p>A preconstruction record of condition, including a photographic log, will be developed. The validity of any claims of damage resulting from project activities will be assessed against the preconstruction record of condition, repairs will be undertaken, or appropriate compensation paid if damage is proven.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>Activities that generate high levels of noise and vibration will be assessed to determine potential impacts and mitigation will be implemented where appropriate. Notifications of work will be given at least 72 hrs in advance of work to residents / occupants located within:</p> <ul style="list-style-type: none"> • 100 m of RoW prior to trenching • 50 m of RoW prior to lowering and laying of pipe • 50 m of RoW prior to backfilling and compaction • 250 m of any road upgrades and new access roads. 	Noise levels at sensitive receptors; field verification. Number of related complaints. Documentation to support that all combustion equipment on any Project or contractor site is up to date on manufacturer's recommended maintenance and servicing.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement. Zero noncompliance with scheduled servicing and maintenance of combustion equipment.	Weekly for noise level monitoring at sensitive receptors. Monthly for documentation.	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, OSH

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
									Department - MGLSD
Hoima 0 Kayere	Kayere	Provision of Goods and Services	Improvements in road conditions for business owners and public transport	Infrastructure and utilities management plan. Stakeholder engagement plan.	<p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Road traffic accidents and congestion	No annual increase in number of project related road traffic accidents No increases in project related road congestion	Quarterly	<p>Project and project contractors; in consultation with respective utility service providers;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, OHS Department MGLSD, District Local Governments</p>
Kakumiro 41 Katikara Trading Centre	Katikara Trading Centre	Employment	Competition over employment opportunities	Project-induced in-migration management plan. Stakeholder engagement plan.	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment. <p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. 	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints.	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Quarterly	<p>Project and project contractors;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, District Local Governments</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> The number and types of employment opportunities. The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary through targeted meetings scheduled at times and locations that may increase women's participation 				
Mubende 125.5 Kyenda	Kyenda	Employment	Competition over employment opportunities	Project-induced in-migration management plan. Stakeholder engagement plan.	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. Includes a local recruitment strategy. Considers social and cultural sensitivities. Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. <p>Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment.</p> <p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> The local recruitment strategy. Criteria for employment. The number and types of employment opportunities. The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary, through targeted meetings scheduled at times and locations that may increase women's participation 	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints.	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement.	Quarterly	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, District Local Governments
Sembabule 190 Sembabule Market Zone	Sembabule Market Zone	Employment	Competition over employment opportunities	Project-induced in-migration management plan. Stakeholder engagement plan.	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. Includes a local recruitment strategy. Considers social and cultural sensitivities. Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. <p>Targets for local recruitment from project-affected</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement.	Quarterly.	Project and project contractors; Relevant Government agencies who may conduct independent monitoring or

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment.</p> <p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary, through targeted meetings scheduled at times and locations that may increase women's participation 	Number of related complaints.			review include: MEMD, PAU, MGLSD, District Local Governments
Kakumiro 61 Buswabwera	Buswabwera	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	<p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding: notification; grievance procedure; compensation process. Number of related complaints	Continuous improvement on percentage of unresolved complaints on employment after Project has proposed solution/s during engagement	Quarterly	<p>Project in consultation with respective utility service providers;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, Local police, District Local Governments</p>
Mubende 111 Kabulasoke	Kabulasoke	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	<p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding: notification; grievance procedure; compensation process.	Continuous improvement on percentage of unresolved complaints on employment after Project has proposed solution/s during engagement	Quarterly	<p>Project in consultation with respective utility service providers;</p> <p>Relevant Government agencies who may</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Number of related complaints			conduct independent monitoring or review include: MEMD, PAU, Local police, District Local Governments
Gomba 160.5 Kyengera	Kyengera	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	<p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding: notification; grievance procedure; compensation process. Number of related complaints	Continuous improvement on percentage of unresolved complaints on employment after Project has proposed solution/s during engagement	Quarterly	<p>Project; in consultation with utility service providers;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, Local police, District Local Governments</p>
Sembabule 189 Nsambya	Nsambya	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	<p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding: notification; grievance procedure; compensation process. Number of related complaints	Continuous improvement on percentage of unresolved complaints on employment after Project has proposed solution/s during engagement	Quarterly	<p>Project in consultation with utility service providers;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU,</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
									Local police, District Local Governments
Lwengo 240 Bukulula	Bukulula	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	<p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding: notification; grievance procedure; compensation process. Number of related complaints	Continuous improvement on percentage of unresolved complaints on employment after Project has proposed solution/s during engagement	Quarterly	<p>Project in consultation with utility service providers;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, Local police, District Local Governments</p>
Kyotera 287.5 Lukoma	Lukoma	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	<p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding: notification; grievance procedure; compensation process. Number of related complaints	Continuous improvement on percentage of unresolved complaints on employment after Project has proposed solution/s during engagement	Quarterly	<p>Project in consultation with utility service providers;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, Local police, District Local Governments</p>
Kyotera 295.5 Mutukula Town	Mutukula Town	Employment	Dissatisfaction arising from unmet expectations over the scale and	Stakeholder engagement plan. Project-induced in-migration	<p>The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities.</p> <p>An approved recruitment procedure will be implemented that:</p>	Documentation demonstrating worker awareness training on limited duration of	Full coverage of workforce training at start of employment. Continuous	Monthly	Project and Project contractors;

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
			duration of project local employment opportunities	management plan.	<ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment. <p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in PACs. Care will be taken to reach women and vulnerable groups if necessary, through targeted meetings scheduled at times and locations that may increase women's participation 	employment and need to maintain existing livelihoods. Effective messaging to PACs (stakeholder engagement records). Number of related complaints.	improvement on percentage of unresolved related complaints after Project has proposed solution/s during engagement		Government agencies who may conduct independent monitoring or review include: MEMD, PAU, t MGLSD, District Local Governments
Kyotera 295.5 Mutukula Town	Mutukula Town	Employment	Competition over employment opportunities	Stakeholder engagement plan. Project-induced in-migration management plan.	<p>An approved recruitment procedure will be implemented that:</p> <ul style="list-style-type: none"> • Is transparent and open to all regardless of race, political opinion, colour, creed, sexuality or gender. • Includes a local recruitment strategy. • Considers social and cultural sensitivities. • Describes the employment criteria for the recruitment of professional, semiskilled and unskilled labour. • Prohibits discrimination or harassment of job applicants. Job descriptions will advertise vacancies in local languages in the PACs through accessible media and on the project website. Targets for local recruitment from project-affected communities will be set by the project. These will be designed to meet legal requirements. An employment office will be established in the local area to conduct local recruitment. <p>A public awareness programme to communicate employment and training opportunities will be implemented that includes but is not limited to:</p> <ul style="list-style-type: none"> • The local recruitment strategy. • Criteria for employment. • The number and types of employment opportunities. • The procedure for applying for employment. Information will be disseminated publicly, including via media announcements at regional and national levels and during public meetings in 	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints.	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Quarterly	Project and Project contractors; Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, District Local Governments

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					PACs. Care will be taken to reach women and vulnerable groups if necessary, through targeted meetings scheduled at times and locations that may increase women's participation				
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Permanent loss of grazing land	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, Local Government, MGLSD, MTWA
Mubende 125 PACs near MCPY2	PACs near MCPY2	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Permanent loss of grazing land	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA,

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>				MLHUD, Local Government, MGLSD, MTWA
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Permanent loss of grazing land	<p>Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.</p>	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	<p>Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints</p>	<p>Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement</p>	Monthly	<p>Project;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, Local Government, MGLSD, MTWA</p>
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Loss/Severance of Land and Disruption to	Permanent loss of grazing land	<p>Pollution prevention plan. Resettlement</p>	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of</p>	<p>Effectiveness on stakeholder messaging (by feedback</p>	<p>Compensation process compliant with resettlement action plan.</p>	Monthly	<p>Project;</p> <p>Relevant</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
		Land-Based Livelihoods		action plan. Monitoring and reporting plan.	<p>assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	<p>templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints</p>	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement		Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, Local Government, MGLSD, MTWA
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	<p>Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment.</p> <p>The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities.</p> <p>A retrenchment plan will be prepared, using the principles in the International Finance Corporation's Good Practice Note No. 4: Managing Retrenchment, 2005, with the aim of reducing the impacts of cessation of employment contracts.</p>	<p>Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints. Labour management plan is informed by preproject salary benchmarking.</p>	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement. Preproject salary benchmarking is completed.	Quarterly for complaints. For benchmarking, 90 days prior to construction commencing.	Project and Project contractors; Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, District Local Governments
Mubende 125 PACs near MCPY2	PACs near MCPY2	Employment	Household members seeking employment with	Stakeholder engagement plan. Labour	Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary	Effectiveness on stakeholder messaging (by feedback	Continuous improvement on percentage of unresolved	Quarterly for complaints. For benchmarking, 90	Project and Project contractors;

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
			the project will no longer be available for land-based livelihood activities	management plan.	and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment. The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities. A retrenchment plan will be prepared, using the principles in the International Finance Corporation's Good Practice Note No. 4: Managing Retrenchment, 2005, with the aim of reducing the impacts of cessation of employment contracts.	templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints. Labour management plan is informed by preproject salary benchmarking.	complaints after Project has proposed solution/s during engagement. Preproject salary benchmarking is completed.	days prior to construction commencing.	Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD; District Local Governments
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment. The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities. A retrenchment plan will be prepared, using the principles in the International Finance Corporation's Good Practice Note No. 4: Managing Retrenchment, 2005, with the aim of reducing the impacts of cessation of employment contracts.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints. Labour management plan is informed by pre-project salary benchmarking.	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement. Pre-project salary benchmarking is completed.	Quarterly for complaints. For benchmarking, 90 days prior to construction commencing.	Project and Project contractors; Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, District Local Governments
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	Financial management workshops will be held with workers to raise levels of financial literacy. During the recruitment process and throughout their contract, workers will be advised regularly that the duration of their employment is temporary and that they should maintain their existing livelihoods during this period and prepare through sound financial management for the ultimate termination of their employment. The Project will develop a campaign focused on providing realistic community expectations with regard to livelihood options and employment opportunities. A retrenchment plan will be prepared, using the principles in the International Finance Corporation's Good Practice Note No. 4: Managing Retrenchment, 2005, with the aim of reducing the impacts of cessation of employment contracts.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - recruitment opportunities and process - grievance procedure Number of related complaints. Labour management plan	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement. Pre-project salary benchmarking is completed.	Quarterly for complaints. For benchmarking, 90 days prior to construction commencing.	Project and Project contractors; Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD,

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
						is informed by pre-project salary benchmarking.			District Local Governments
Hoima, Kakumiro and Lwengo 0-240 PACs located in areas of high value crop production	PACs located in areas of high value crop production	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Permanent loss of land cultivated with high value cash crops	Resettlement action plan. Stakeholder engagement plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, Local Government, MGLSD
Kakumiro, Kyankwanzi and Mubende 69-112 PACs where there is a concentration of gold ASM activities	PACs where there is a concentration of gold ASM activities	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Permanent loss of access to artisanal gold mining sites	Resettlement action plan. Stakeholder engagement plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA,

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>				MLHUD, Local Government, MGLSD
Kakumiro, Gomba, Sembabule, Lwengo, Kyotera 53-289 PACs close to livestock watering points identified within the RoW	PACs close to livestock watering points identified within the RoW	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Temporary loss of access to livestock watering points	Resettlement action plan. Stakeholder engagement plan.	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Number of related complaints	Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Quarterly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, Local Government, MGLSD
Hoima 0 PACs near PS1	PACs near PS1	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Permanent loss of grazing land	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA,

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>				MLHUD, Local Government, MGLSD
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	PIIM	Reduction in local fish stocks due to PIIM	Project-induced in-migration management plan.	<p>The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM.</p> <p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Settlements developing around or near camps and AGIs. Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding project opportunities.	Zero unplanned settlements.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MAAIF, WMD, MLHUD
Mubende 125 PACs near MCPY2	PACs near MCPY2	PIIM	Reduction in local fish stocks due to PIIM	Project-induced in-migration management plan.	<p>The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM.</p> <p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Settlements developing around or near camps and AGIs. Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding project opportunities.	Zero unplanned settlements.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MAAIF, WMD, MLHUD

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	PIIM	Reduction in local fish stocks due to PIIM	Project-induced in-migration management plan.	<p>The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM.</p> <p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Settlements developing around or near camps and AGIs. Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding project opportunities.	Zero unplanned settlements.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MAAIF, WMD, MLHUD
Kyotera 283 PACs near MCPY4	PACs near MCPY4	PIIM	Reduction in local fish stocks due to PIIM	Project-induced in-migration management plan.	<p>The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM.</p> <p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Settlements developing around or near camps and AGIs. Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding project opportunities.	Zero unplanned settlements.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MAAIF, WMD, MLHUD
Hoima, Kakumiro, Mubende, Gomba, Sembabule, Kyotera 36.5-274 PACs close to pipeline river crossings	PACs close to pipeline river crossings	Impeded flow of river or channel	Reduction in artisanal fish catches due to changes in water flows and increased levels of sediment during open-cut crossing construction.	Pollution prevention plan. Reinstatement plan.	<p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Procedures will be developed, incorporating plans for erosion and sediment control and reinstatement. These will be produced before work begins at areas of fragile, sensitive or thin topsoil, side slopes or narrow ridges and at watercourse crossings. Sediment interception measures will be installed, inspected and maintained to prevent sediment runoff from the right-of-way or construction sites affecting watercourses, wetlands, waterbodies or environmentally sensitive areas. Procedures will include additional precautions to be taken and</p>	Documentation (records, reports etc) demonstrating that location specific method statements have been implemented Number of related complaints	Continuous improvement on percentage of unresolved complaints on water-based livelihoods after Project has proposed solution/s during engagement	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD,

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					<p>increased monitoring (minimum twice per week), with the aim of preserving the topsoil for subsequent replacement.</p> <p>Location-specific method statements will be produced for watercourse crossing construction. These method statements will incorporate plans for:</p> <ul style="list-style-type: none"> • erosion control • sediment control • maintaining environmental base flows downstream of water crossings for example by using measures such as pumping, channel diversions and fluming • notifying fisherfolk as appropriate • reinstatement • spill response equipment. <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>				PAU, District Environment Officers, DWRM, WMD, MAAIF
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Resettlement	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement.	Monthly	Project and other developers in the Aol; Relevant Government bodies who may conduct independent monitoring or review the data

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.				include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Mubende 125 PACs near MCPY2	PACs near MCPY2	Resettlement	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures. A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project and other developers in the Aol; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Resettlement	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed	Monthly	Project and other developers in the Aol; Relevant Government bodies who may

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	<p>Compensation records</p> <p>Number of related complaints</p>	<p>solution/s during engagement</p>		<p>conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government</p>
<p>Kyotera 283</p> <p>PACs near MCPY4</p>	<p>PACs near MCPY4</p>	<p>Resettlement</p>	<p>Permanent loss of private land due to project land acquisition</p>	<p>Resettlement action plan.</p> <p>Stakeholder engagement plan.</p> <p>Community health, safety and security plan.</p> <p>Monitoring and reporting plan.</p>	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	<p>Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure</p> <p>Compensation records</p> <p>Number of related complaints</p>	<p>Compensation process compliant with resettlement action plan.</p> <p>Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement</p>	<p>Monthly</p>	<p>Project and other developers in the Aol;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government</p>
<p>Kakumiro 40</p> <p>PACs near MCPY1</p>	<p>PACs near MCPY1</p>	<p>Resettlement</p>	<p>Land speculation by third parties</p>	<p>Resettlement action plan.</p> <p>Stakeholder engagement plan.</p> <p>Community health, safety</p>	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to</p>	<p>Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land</p>	<p>Zero noncompliance with stakeholder engagement plan.</p> <p>Continuous improvement on percentage of</p>	<p>Monthly</p>	<p>Project;</p> <p>Relevant Government bodies who may</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				and security plan. Monitoring and reporting plan.	<p>compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints	unresolved complaints after Project has proposed solution/s during engagement		conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Mubende 125 PACs near MCPY2	PACs near MCPY2	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>(such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>				
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Resettlement	Land speculation by third parties	<p>Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.</p>	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	<p>Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints</p>	<p>Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement</p>	Monthly	<p>Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government</p>
Kyotera 283	PACs near MCPY4	Resettlement	Land speculation by third parties	Resettlement action plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry</p>	Effectiveness on stakeholder	Zero noncompliance	Monthly	Project;

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
PACs near MCPY4				Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints	with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement		Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Resettlement	Land and property speculation by land owners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation.	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Number of related complaints			Local Government
Mubende 125 PACs near MCPY2	PACs near MCPY2	Resettlement	Land and property speculation by land owners	<p>Resettlement action plan.</p> <p>Stakeholder engagement plan.</p> <p>Community health, safety and security plan.</p> <p>Monitoring and reporting plan.</p>	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p>	<p>Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints</p>	<p>Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement</p>	Monthly	<p>Project;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.				
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Resettlement	Land and property speculation by land owners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Resettlement	Land and property speculation by land owners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed	Monthly	Project' Relevant Government bodies who may conduct independent monitoring or

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Project liaising with authorities regarding land and property speculation. Number of related complaints	solution/s during engagement		review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Resettlement	New disputes and exacerbation of pre-existing disputes and conflict around land and property	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding disputes and conflict. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government, Local police

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Mubende 125 PACs near MCPY2	PACs near MCPY2	Resettlement	New disputes and exacerbation of pre-existing disputes and conflict around land and property	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding disputes and conflict. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government, Local police
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Resettlement	New disputes and exacerbation of pre-existing disputes and conflict around land and property	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding disputes and conflict. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project and other developers in Aol; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.				Government, Local police
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Resettlement	New disputes and exacerbation of pre-existing disputes and conflict around land and property	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures. A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding disputes and conflict. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project and other developers in Aol; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government, Local police
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Resettlement	Permanent loss of physical structures due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>				Local Government
Mubende 125 PACs near MCPY2	PACs near MCPY2	Resettlement	Permanent loss of physical structures due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Resettlement	Permanent loss of physical structures due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of	Monthly	Project; Relevant Government bodies who may

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				and security plan. Monitoring and reporting plan.	<p>compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	- compensation process - grievance procedure Compensation records Number of related complaints	unresolved complaints after Project has proposed solution/s during engagement		conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Resettlement	Permanent loss of physical structures due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, Local Government

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					environmental and social performance. Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.				
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Resettlement	Permanent loss of local enterprises due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Mubende 125 PACs near MCPY2	PACs near MCPY2	Resettlement	Permanent loss of local enterprises due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU,

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Number of related complaints			MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Resettlement	Permanent loss of local enterprises due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Kyotera 283	PACs near MCPY4	Resettlement	Permanent loss of local	Resettlement action plan.	A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry	Effectiveness on stakeholder	Compensation process compliant	Monthly	Project.

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
PACs near MCPY4			enterprises due to project land acquisition	Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed. A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance. Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.	messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement		Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Hoima 15-22.5 PACs located between KP15 to KP22.5	PACs located between KP15 to KP22.5	Resettlement	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures. A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project and other developers in the Aol; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.				Local Government
Kyankwanzi 75-82.5 PACs located between KP75 to KP82.5	PACs located between KP75 to KP82.5	Resettlement	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project and other developers in the Aol; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Mubende 90-97.5 PACs located between KP90 to KP97.5	PACs located between KP90 to KP97.5	Resettlement	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project and other developers in the Aol; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU,

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.				MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Kyankwanzi 75-82.5 PACs located between KP75 to KP82.5	PACs located between KP75 to KP82.5	Resettlement	Permanent loss of physical structures due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process - grievance procedure Compensation records Number of related complaints	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Mubende 90-97.5 PACs located between KP90 to KP97.5	PACs located between KP90 to KP97.5	Resettlement	Permanent loss of physical structures due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding - compensation process	Compensation process compliant with resettlement action plan. Continuous improvement on percentage of unresolved complaints after	Monthly	Project; Relevant Government bodies who may conduct

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				Monitoring and reporting plan.	<p>restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>	- grievance procedure Compensation records Number of related complaints	Project has proposed solution/s during engagement		independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government
Hoima 0.5-15 PACs located between KP0.5 and KP15	PACs located between KP0.5 and KP15	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p> <p>Ensure that benefits for spouses or dependants of employees (such as health insurance or pension schemes) are offered on a non-discriminatory basis.</p> <p>A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding land and property speculation. Stakeholder records that demonstrate Project liaising with authorities regarding land and property speculation. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government, Local police

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.</p> <p>Spouses will be consulted and present during the land surveys, entitlement briefings and compensation agreements and both spouses will sign the compensation agreements.</p>				
Hoima 0.5-15 PACs located between KP0.5 and KP15	PACs located between KP0.5 and KP15	Resettlement	New disputes and exacerbation of pre-existing disputes and conflict around land and property	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding disputes and conflict. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	<p>Project and other developers in Aol;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government, Local police</p>
Sembabule 190 Sembabule Market Zone	Sembabule Market Zone	Resettlement	New disputes and exacerbation of pre-existing disputes and conflict around land and property	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	<p>The project will participate in regional cumulative environmental management initiatives being developed in collaboration with operators of current projects, developers of proposed projects, and led by the government. It is envisaged that initiative management priorities would be defined for implementation by industry participants. Objectives are expected to include: creation of a governance structure; assessment of regional cumulative impacts based on collective baseline data and ESIA's that have been prepared for projects in the region; establishment and monitoring of environmental and social thresholds; collaborative development of cumulative impact management plans and mitigation measures.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry</p>	Effectiveness on stakeholder messaging (by feedback templates or interviews) regarding disputes and conflict. Number of related complaints	Zero noncompliance with stakeholder engagement plan. Continuous improvement on percentage of unresolved complaints after Project has proposed solution/s during engagement	Monthly	<p>Project and other developers in Aol;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.				include: PAU, MEMD, NEMA, MLHUD, MGLSD, MTWA, District Local Government, Local police
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Employment	Increased risk of vector-related diseases amongst the local workforce	Occupational health, safety and security plan	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health
Mubende 125 PACs near MCPY2	PACs near MCPY2	Employment	Increased risk of vector-related diseases amongst the local workforce	Occupational health, safety and security plan	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
									Local Government, OSH Department - MGLSD, Ministry of Health
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Employment	Increased risk of vector-related diseases amongst the local workforce	Occupational health, safety and security plan	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Employment	Increased risk of vector-related diseases amongst the local workforce	Occupational health, safety and security plan	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
									Department - MGLSD, Ministry of Health
Kakumiro 41 Katikara Trading Centre	Katikara Trading Centre	Use of Road Network	Traffic congestion leading to delays	Stakeholder engagement plan. Transport and road safety management plan.	<p>Where a safety risk assessment has identified a potential for construction interfaces to cause traffic accidents, temporary traffic control measures (signage, flagmen, temporary traffic lights, barricades) will be implemented.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>A post-construction exit survey will be conducted covering all areas surveyed during preconstruction (and any additional land requirements during construction) to assess the condition of dwellings, roads used including bridges, drainage structures, signage, traffic management and other road infrastructure. Any actions, such as repairs, arising from the exit survey will be closed out on a timely basis to allow a prompt return to the relevant authority, village or landowner.</p> <p>An initial survey, supported by photographs, will be completed of the condition of roads to be used by the project including but limited to bridges, drainage structures, signage, traffic management and other road infrastructure. The survey will be agreed and signed by the road authority, local authority and any affected landowner. The survey will be made available to the road authority and municipal authorities if requested. The chosen project access routes will be improved as required to provide safe access for the project duration.</p>	Documentation supporting journey management	Zero noncompliance with the Stakeholder Engagement Plan and the Transport and the Road Safety Management Plan	Weekly whilst heavy loads are being transported Monthly thereafter	<p>Project in consultation with respective utility service providers;</p> <p>Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, District Local Government, UNRA, local police</p>
Mubende 125.5 Kyenda	Kyenda	Use of Road Network	Traffic congestion leading to delays	Stakeholder engagement plan. Transport and road safety management plan.	<p>Where a safety risk assessment has identified a potential for construction interfaces to cause traffic accidents, temporary traffic control measures (signage, flagmen, temporary traffic lights, barricades) will be implemented.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>Any planned diversion of utility services, closures of any road</p>	Documentation supporting journey management	Zero noncompliance with the Stakeholder Engagement Plan and the Transport and the Road Safety Management Plan	Weekly whilst heavy loads are being transported Monthly thereafter	<p>Project in consultation with respective utility service providers;</p> <p>Relevant Government</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>A post-construction exit survey will be conducted covering all areas surveyed during preconstruction (and any additional land requirements during construction) to assess the condition of dwellings, roads used including bridges, drainage structures, signage, traffic management and other road infrastructure. Any actions, such as repairs, arising from the exit survey will be closed out on a timely basis to allow a prompt return to the relevant authority, village or landowner.</p> <p>An initial survey, supported by photographs, will be completed of the condition of roads to be used by the project including but limited to bridges, drainage structures, signage, traffic management and other road infrastructure. The survey will be agreed and signed by the road authority, local authority and any affected landowner. The survey will be made available to the road authority and municipal authorities if requested. The chosen project access routes will be improved as required to provide safe access for the project duration.</p>				bodies that may conduct independent monitoring or review the data include: PAU, MEMD, District Local Government, UNRA, local police
Sembabule 190 Sembabule Market Zone	Sembabule Market Zone	Use of Road Network	Traffic congestion leading to delays	Stakeholder engagement plan. Transport and road safety management plan.	<p>Where a safety risk assessment has identified a potential for construction interfaces to cause traffic accidents, temporary traffic control measures (signage, flagmen, temporary traffic lights, barricades) will be implemented.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>A post-construction exit survey will be conducted covering all areas surveyed during preconstruction (and any additional land requirements during construction) to assess the condition of dwellings, roads used including bridges, drainage structures, signage, traffic management and other road infrastructure. Any actions, such as repairs, arising from the</p>	Documentation supporting journey management	Zero noncompliance with the Stakeholder Engagement Plan and the Transport and the Road Safety Management Plan	Weekly whilst heavy loads are being transported Monthly thereafter	Project in consultation with respective utility service providers; Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, District Local Government, UNRA, local police

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>exit survey will be closed out on a timely basis to allow a prompt return to the relevant authority, village or landowner.</p> <p>An initial survey, supported by photographs, will be completed of the condition of roads to be used by the project including but limited to bridges, drainage structures, signage, traffic management and other road infrastructure. The survey will be agreed and signed by the road authority, local authority and any affected landowner. The survey will be made available to the road authority and municipal authorities if requested. The chosen project access routes will be improved as required to provide safe access for the project duration.</p>				
Kyotera 295.5 Mutukula Town	Mutukula Town	Use of Road Network	Traffic congestion leading to delays	Stakeholder engagement plan. Transport and road safety management plan.	<p>Where a safety risk assessment has identified a potential for construction interfaces to cause traffic accidents, temporary traffic control measures (signage, flagmen, temporary traffic lights, barricades) will be implemented.</p> <p>Vehicle movements will be restricted to defined access routes and demarcated working areas (unless in the event of an emergency).</p> <p>Any planned diversion of utility services, closures of any road or track, or planned traffic diversions will be communicated to local authorities and affected communities at least 72 hours before the works. Information provided to the community will include (as relevant to the diversion) but not be limited to details of the timing and duration of the diversion; the route of traffic diversions; and traffic control measures for road crossings where delays and public safety are key factors.</p> <p>A post-construction exit survey will be conducted covering all areas surveyed during preconstruction (and any additional land requirements during construction) to assess the condition of dwellings, roads used including bridges, drainage structures, signage, traffic management and other road infrastructure. Any actions, such as repairs, arising from the exit survey will be closed out on a timely basis to allow a prompt return to the relevant authority, village or landowner.</p> <p>An initial survey, supported by photographs, will be completed of the condition of roads to be used by the project including but limited to bridges, drainage structures, signage, traffic management and other road infrastructure. The survey will be agreed and signed by the road authority, local authority and any affected landowner. The survey will be made available to the road authority and municipal authorities if requested. The chosen project access routes will be improved as required to provide safe access for the project duration.</p>	Documentation supporting journey management	Zero noncompliance with the Stakeholder Engagement Plan and the Transport and the Road Safety Management Plan	Weekly whilst heavy loads are being transported Monthly thereafter	<p>Project in consultation with respective utility service providers;</p> <p>Relevant Government bodies that may conduct independent monitoring or review the data include: PAU, MEMD, District Local Government, UNRA, local police</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Abstraction of Groundwater	Reduced availability of groundwater	Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.</p> <p>Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.</p>	Abstraction volumes, Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment and Natural Resources Officers, DWRM
Mubende 125 PACs near MCPY2	PACs near MCPY2	Abstraction of Groundwater	Reduced availability of groundwater	Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process.</p> <p>Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.</p>	Abstraction volumes, Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment and Natural Resources Officers, DWRM
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Abstraction of Groundwater	Reduced availability of groundwater	Natural resources management plan. Pollution prevention	<p>As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and</p>	Abstraction volumes, Documentation (reports, checklists, etc)	Zero noncompliance with water abstraction permit or the Natural	Weekly – during water abstraction activities.	Project; Relevant Government

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				plan. Waste management plan. Stakeholder engagement plan.	these alternative locations will be subject to the same testing and impact assessment process. Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.	demonstrating that water-use checks have occurred and are within permit conditions.	Resource Management Plan.		bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment and Natural Resources Officers, DWRM
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Abstraction of Groundwater	Reduced availability of groundwater	Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	As part of the permit application, hydraulic testing and hydrogeological impact assessments will be undertaken to evaluate the potential impact on local groundwater abstraction points. If the assessment indicates potential impacts to local users, alternative borehole locations will be considered and these alternative locations will be subject to the same testing and impact assessment process. Groundwater levels will be monitored once every two weeks by the Project at all sites where groundwater abstraction occurs for the project. The location of monitoring well(s) will be determined by a qualified hydrogeologist to ensure that they are installed in the correct formation and at the correct distance between project abstraction boreholes and community water points. If the local water supplies are derogated to the extent that complaints are made by the community as a result of project abstraction, then the Project will provide alternative water supplies at a convenient location for the community that is not or is less influenced by the project's abstraction.	Abstraction volumes; Documentation (reports, checklists, etc) demonstrating that water-use checks have occurred and are within permit conditions.	Zero noncompliance with water abstraction permit or the Natural Resource Management Plan.	Weekly – during water abstraction activities.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, PAU, MEMD, District Environment and Natural Resources Officers, DWRM
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Employment	The transmission of communicable diseases between the project's externally contracted workforce and PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management	As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs. Pre-deployment screenings will be described in the LMP and communicated during the recruitment process As part of the CHSSP, community-based programmes will be developed and implemented, in cooperation with Health	Number of instances of communicable diseases in workforce per worksite, Trends in communicable diseases in PACs	No increase in communicable diseases of workforce by category and worksite against baseline	Monthly	Project and Project contractors; Relevant Government bodies who may conduct

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				<p>plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.</p>	<p>Management Teams (HMTs) which consider:</p> <ul style="list-style-type: none"> • The development and implementation of a Community Malaria Control Programme. • The development and implementation of a Community HIV/TB Programme. • The development and implementation of a Community Water, Sanitation and Hygiene (WASH) Programme. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p> <p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p>				<p>independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health</p>
Mubende 125 PACs near MCPY2	PACs near MCPY2	Employment	The transmission of communicable diseases between the project's externally contracted workforce and PACs	<p>Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management</p>	<p>As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs.</p> <p>Pre-deployment screenings will be described in the LMP and communicated during the recruitment process</p> <p>As part of the CHSSP, community-based programmes will be developed and implemented, in cooperation with Health Management Teams (HMTs) which consider:</p> <ul style="list-style-type: none"> • The development and implementation of a Community Malaria Control Programme. • The development and implementation of a Community 	<p>Number of instances of communicable diseases in workforce per worksite Trends in communicable diseases in PACs</p>	<p>No increase in communicable diseases of workforce by category and worksite against baseline</p>	Monthly	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data</p>

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				plan. Stakeholder engagement plan.	<p>HIV/TB Programme.</p> <ul style="list-style-type: none"> The development and implementation of a Community Water, Sanitation and Hygiene (WASH) Programme. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p> <p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p>				include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Employment	The transmission of communicable diseases between the project’s externally contracted workforce and PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs.</p> <p>Pre-deployment screenings will be described in the LMP and communicated during the recruitment process</p> <p>As part of the CHSSP, community-based programmes will be developed and implemented, in cooperation with Health Management Teams (HMTs) which consider:</p> <ul style="list-style-type: none"> The development and implementation of a Community Malaria Control Programme. The development and implementation of a Community HIV/TB Programme. The development and implementation of a Community Water, Sanitation and Hygiene (WASH) Programme. 	Number of instances of communicable diseases in workforce per worksite Trends in communicable diseases in PACs	No increase in communicable diseases of workforce by category and worksite against baseline	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p> <p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p>				Local Government, OSH Department - MGLSD, Ministry of Health
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Employment	The transmission of communicable diseases between the project's externally contracted workforce and PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs.</p> <p>Pre-deployment screenings will be described in the LMP and communicated during the recruitment process</p> <p>As part of the CHSSP, community-based programmes will be developed and implemented, in cooperation with Health Management Teams (HMTs) which consider:</p> <ul style="list-style-type: none"> • The development and implementation of a Community Malaria Control Programme. • The development and implementation of a Community HIV/TB Programme. • The development and implementation of a Community Water, Sanitation and Hygiene (WASH) Programme. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and</p>	Number of instances of communicable diseases in workforce per worksite Trends in communicable diseases in PACs	No increase in communicable diseases of workforce by category and worksite against baseline	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department -

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>visitors.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p> <p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p>				MGLSD, Ministry of Health
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Employment	Inadequate vector management activities, causing an increase in vector resistance and negative impacts on preventative interventions implemented by local authorities	Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Mubende 125 PACs near MCPY2	PACs near MCPY2	Employment	Inadequate vector management activities, causing an increase in vector resistance and negative impacts on preventative interventions implemented by local authorities	Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health</p>
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Employment	Inadequate vector management activities, causing an increase in vector resistance and negative impacts on preventative interventions implemented by local authorities	Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department -</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
									MGLSD, Ministry of Health
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Employment	Inadequate vector management activities, causing an increase in vector resistance and negative impacts on preventative interventions implemented by local authorities	Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>A malaria and other vector control management plan will be developed and implemented to ensure adequate control over malaria and other vector-related conditions in camps.</p> <p>As part of the project OHSSP, vector management on all project sites will be risk based. Corridor controls for landscape maintenance, as well as integrated pest management procedures (environmental, biological and chemical), will be implemented.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p>	Documentation (records, reports etc) demonstrating that appropriate vector control management plans have been developed Instances of vector related medical cases	One health talk per month and full camp coverage of participation. Decreasing trend in vector related medical cases.	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Employment	Outbreaks of infectious conditions within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	<p>As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs.</p> <p>Pre-deployment screenings will be described in the LMP and communicated during the recruitment process</p> <p>As part of the CHSSP, community-based programmes will be developed and implemented, in cooperation with Health Management Teams (HMTs) which consider:</p> <ul style="list-style-type: none"> • The development and implementation of a Community Malaria Control Programme. • The development and implementation of a Community HIV/TB Programme. • The development and implementation of a Community Water, Sanitation and Hygiene (WASH) Programme. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local</p>	Communicable disease management plan provisions to prevent spread of infectious diseases.	No net increase in the incidence of communicable disease above background levels. Positive trend on worker suggestions for preventing diseases	Monthly	Project and Project contractors; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>workforce. This plan will apply to all project workers and visitors.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p> <p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p>				Department - MGLSD, Ministry of Health
Mubende 125 PACs near MCPY2	PACs near MCPY2	Employment	Outbreaks of infectious conditions within MCPYs affecting the health of PACs	<p>Community health, safety and security plan.</p> <p>Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.</p>	<p>As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs.</p> <p>Pre-deployment screenings will be described in the LMP and communicated during the recruitment process</p> <p>As part of the CHSSP, community-based programmes will be developed and implemented, in cooperation with Health Management Teams (HMTs) which consider:</p> <ul style="list-style-type: none"> • The development and implementation of a Community Malaria Control Programme. • The development and implementation of a Community HIV/TB Programme. • The development and implementation of a Community Water, Sanitation and Hygiene (WASH) Programme. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.</p> <p>Construction camps will be designated as having “closed”</p>	Communicable disease management plan provisions to prevent spread of infectious diseases.	No net increase in the incidence of communicable disease above background levels. Positive trend on worker suggestions for preventing diseases	Monthly	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p> <p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p>				
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Employment	Outbreaks of infectious conditions within MCPYs affecting the health of PACs	<p>Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.</p>	<p>As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs.</p> <p>Pre-deployment screenings will be described in the LMP and communicated during the recruitment process</p> <p>As part of the CHSSP, community-based programmes will be developed and implemented, in cooperation with Health Management Teams (HMTs) which consider:</p> <ul style="list-style-type: none"> • The development and implementation of a Community Malaria Control Programme. • The development and implementation of a Community HIV/TB Programme. • The development and implementation of a Community Water, Sanitation and Hygiene (WASH) Programme. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p>	Communicable disease management plan provisions to prevent spread of infectious diseases.	No net increase in the incidence of communicable disease above background levels. Positive trend on worker suggestions for preventing diseases	Monthly	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p>				
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Employment	Outbreaks of infectious conditions within MCPYs affecting the health of PACs	<p>Community health, safety and security plan. Occupational health, safety and security plan. Natural resources management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.</p>	<p>As part of the project OHSSP, a Communicable Disease Management Plan will be developed to manage infectious disease outbreaks in construction camps/MCPYs and prevention of spread to PACs.</p> <p>Pre-deployment screenings will be described in the LMP and communicated during the recruitment process</p> <p>As part of the CHSSP, community-based programmes will be developed and implemented, in cooperation with Health Management Teams (HMTs) which consider:</p> <ul style="list-style-type: none"> • The development and implementation of a Community Malaria Control Programme. • The development and implementation of a Community HIV/TB Programme. • The development and implementation of a Community Water, Sanitation and Hygiene (WASH) Programme. <p>A vaccination plan will be identified to prevent communicable diseases for which vaccinations are available from being transmitted between the national/international and local workforce. This plan will apply to all project workers and visitors.</p> <p>Construction camps will be designated as having “closed” status to prevent interactions between the workforce and PACs and prevent the spread of communicable disease. Policies will be developed to manage transgressions within the project disciplinary procedures and structures.</p> <p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health</p>	Communicable disease management plan provisions to prevent spread of infectious diseases.	No net increase in the incidence of communicable disease above background levels. Positive trend on worker suggestions for preventing diseases	Monthly	<p>Project and Project contractors;</p> <p>Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, District Local Government, OSH Department - MGLSD, Ministry of Health</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p> <p>As part of the project OHSSP, ensure that vector management on all project sites (camps and construction) align with national vector control programmes and strategies.</p> <p>As part of the OHSSP, a food and water management plan will be developed and implemented to reduce the risk of water- and food-borne disease outbreaks occurring among the workers and the associated risk of transmission to local communities.</p>				
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	PIIM	PIIM of job seekers affecting PACs	<p>Project-induced in-migration management plan.</p> <p>Community health, safety and security plan.</p> <p>Occupational health, safety and security plan.</p> <p>Resettlement action plan.</p> <p>Natural resource management plan.</p> <p>Pollution prevention plan.</p> <p>Waste management plan.</p> <p>Stakeholder engagement plan.</p>	<p>The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM.</p> <p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. <p>As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.</p>	<p>Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented</p> <p>Number of related complaints</p> <p>Stakeholder feedback on project perception (via targeted questionnaire)</p>	<p>Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement</p>	Monthly	<p>Project;</p> <p>Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, OHS Department MGLSD, District Local Governments</p>
Mubende 125 PACs near MCPY2	PACs near MCPY2	PIIM	PIIM of job seekers affecting PACs	<p>Project-induced in-migration management plan.</p> <p>Community health, safety and security plan.</p> <p>Occupational health, safety and security plan.</p>	<p>The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM.</p> <p>A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for:</p> <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	<p>Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented</p> <p>Number of related complaints</p> <p>Stakeholder</p>	<p>Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement</p>	Monthly	<p>Project;</p> <p>Relevant Government agencies who may conduct independent monitoring or</p>

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.	feedback on project perception (via targeted questionnaire)			review include: MEMD, PAU, OHS Department MGLSD, District Local Governments
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM. A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, OHS Department MGLSD, District Local Governments
Kyotera 283 PACs near MCPY4	PACs near MCPY4	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan.	The Project will identify potential PIIM areas of concern and work with local leaders to establish mitigation measures that will include informing PACs of risks and opportunities associated with PIIM. A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	As part of the CHSSP, a cooperation agreement with the Council Health Management Teams (CHMT) will be reached including periodic meetings to discuss potential health impacts, proposed mitigation measures and longitudinal monitoring of specific key health indicators during construction.	feedback on project perception (via targeted questionnaire)			review include: MEMD, PAU, OHS Department MGLSD, District Local Governments
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	PIIM	Reduction in the availability of potable water in PACs due to PIIM	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, District Local Government, DWRM, NEMA
Mubende 125 PACs near MCPY2	PACs near MCPY2	PIIM	Reduction in the availability of potable water in PACs due to PIIM	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.		feedback on project perception (via targeted questionnaire)			review include: MEMD, PAU, District Local Government, DWRM, NEMA
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	PIIM	Reduction in the availability of potable water in PACs due to PIIM	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, District Local Government, DWRM, NEMA
Kyotera 283 PACs near MCPY4	PACs near MCPY4	PIIM	Reduction in the availability of potable water in PACs due to PIIM	Project-induced in-migration management plan. Community health, safety and security plan. Occupational health, safety and security plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.		feedback on project perception (via targeted questionnaire)			review include: MEMD, PAU, District Local Government, DWRM, NEMA
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Provision of Goods and Services	Nutrition of PACs compromised by reduced food security	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation demonstrating that community programmes have been developed and implemented Number of meetings with DHMTs per district Number of related complaints	At least one DHMT meeting every second month. Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement.	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD,
Mubende 125 PACs near MCPY2	PACs near MCPY2	Provision of Goods and Services	Nutrition of PACs compromised by reduced food security	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation demonstrating that community programmes have been developed and implemented Number of meetings with DHMTs per district Number of related complaints	At least one DHMT meeting every second month. Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement.	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD,

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
				management plan. Stakeholder engagement plan.					
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Provision of Goods and Services	Nutrition of PACs compromised by reduced food security	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation demonstrating that community programmes have been developed and implemented Number of meetings with DHMTs per district Number of related complaints	At least one DHMT meeting every second month. Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement.	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD,
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Provision of Goods and Services	Nutrition of PACs compromised by reduced food security	Community health, safety and security plan. Occupational health, safety and security plan. Resettlement action plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: <ul style="list-style-type: none"> • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. 	Documentation demonstrating that community programmes have been developed and implemented Number of meetings with DHMTs per district Number of related complaints	At least one DHMT meeting every second month. Continuous improvement on percentage of unresolved complaints on project vehicle dust emissions after Project has proposed solution/s during engagement.	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD,
Kakumiro 40	PACs near MCPY1	Community Dynamics	Change in local community	Project-induced in-migration	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify	Documentation (records, reports,	Continuous improvement on	Monthly	Project;

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
PACs near MCPY1			dynamics due to employment opportunities	management plan. Community health, safety and security plan. Stakeholder engagement plan.	requirements for: • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement		Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government
Mubende 125 PACs near MCPY2	PACs near MCPY2	Community Dynamics	Change in local community dynamics due to employment opportunities	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Community Dynamics	Change in local community dynamics due to employment opportunities	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Community Dynamics	Change in local community dynamics due to employment opportunities	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Community Dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government, Ministry of Health
Mubende 125 PACs near MCPY2	PACs near MCPY2	Community Dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include:

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					PACs that complaints related to interactions with public or private security forces will be addressed.	project perception (via targeted questionnaire)			MEMD, PAU, MGLSD, NEMA, District Local Government, Ministry of Health
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Community Dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government, Ministry of Health
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Community Dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	A PIIMP will aim to reduce the number of people that arrive into project-affected communities; the PIIM will also identify requirements for: • Monitoring effects of in-migration and demographic change. • Monitoring relations between communities and in-migrants. • Education of project workers and local communities on impacts related to in-migration. The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.	Documentation (records, reports, etc.) demonstrating that a PIIM management plan has been developed and implemented Number of related complaints Stakeholder feedback on project perception (via targeted questionnaire)	Continuous improvement on percentage of unresolved complaints on in-migration after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government, Ministry of Health
Kakumiro 40	PACs near MCPY1	Community Dynamics	Tensions between non-local construction	Community health, safety and security plan.	A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also	Effectiveness of messaging (by feedback templates or	Continuous decrease in noncompliance with worker's code	Monthly	Project; Relevant

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
PACs near MCPY1			workforce and PACs	Stakeholder engagement plan. Resettlement action plan.	interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of noncompliance, workers will be disciplined in accordance with project disciplinary procedures and structures.	interviews) regarding implementation of workers' code of conduct on PACs, incoming workforce and local workforce (by category) Number of noncompliance with worker's code of conduct. Number of related complaints	of conduct. Continuous improvement on percentage of unresolved related complaints after Project has proposed solution/s during engagement		Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government, Local police
Mubende 125 PACs near MCPY2	PACs near MCPY2	Community Dynamics	Tensions between non-local construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of noncompliance, workers will be disciplined in accordance with project disciplinary procedures and structures.	Effectiveness of messaging (by feedback templates or interviews) regarding implementation of workers' code of conduct on PACs, incoming workforce and local workforce (by category) Number of noncompliance with worker's code of conduct. Number of related complaints	Continuous decrease in noncompliance with worker's code of conduct. Continuous improvement on percentage of unresolved related complaints after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, NEMA, District Local Government, Local police
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Community Dynamics	Tensions between non-local construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of noncompliance, workers will be disciplined in accordance with project disciplinary procedures and structures.	Effectiveness of messaging (by feedback templates or interviews) regarding implementation of workers' code of conduct on PACs, incoming workforce and local workforce (by category) Number of noncompliance with worker's code	Continuous decrease in noncompliance with worker's code of conduct. Continuous improvement on percentage of unresolved related complaints after Project has proposed solution/s during engagement	Monthly	Project and Project contractors; Relevant Government agencies who may conduct independent monitoring or review include:

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
						of conduct. Number of related complaints			MEMD, PAU, MGLSD, District Local Government, Local police
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Community Dynamics	Tensions between non-local construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	A workers' code of conduct outlining expected worker behaviours will be developed and implemented. This code of conduct will cover the interaction between the national and international workforce and local workforce but also interactions with unemployed PAC members. Compliance with the workers' code of conduct will be a contractual requirement for all contractor, including subcontractors' employees. In the event of noncompliance, workers will be disciplined in accordance with project disciplinary procedures and structures.	Effectiveness of messaging (by feedback templates or interviews) regarding implementation of workers' code of conduct on PACs, incoming workforce and local workforce (by category) Number of noncompliance with worker's code of conduct. Number of related complaints	Continuous decrease in noncompliance with worker's code of conduct. Continuous improvement on percentage of unresolved related complaints after Project has proposed solution/s during engagement	Monthly	Project and Project contractors; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, MGLSD, District Local Government, Local police
Kakumiro 40 PACs near MCPY1	PACs near MCPY1	Community Welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs	Stakeholder Engagement Plan	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.	Applicable stakeholder engagement records.	Zero significant residual impacts.	Once, during decommissioning of construction facilities	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, NEMA, District Local Government
Mubende 125 PACs near MCPY2	PACs near MCPY2	Community Welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs	Stakeholder Engagement Plan	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.	Applicable stakeholder engagement records.	Zero significant residual impacts.	Once, during decommissioning of construction facilities	Project; Relevant Government agencies who may conduct

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
									independent monitoring or review include: MEMD, PAU, NEMA, District Local Government
Sembabule 195.5 PACs near MCPY3	PACs near MCPY3	Community Welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs	Stakeholder Engagement Plan	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.	Applicable stakeholder engagement records.	Zero significant residual impacts.	Once, during decommissioning of construction facilities	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, NEMA, District Local Government
Kyotera 283 PACs near MCPY4	PACs near MCPY4	Community Welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs	Stakeholder Engagement Plan	A Stakeholder Engagement Plan will be developed and implemented, identifying how the Project will engage and consult with internal and external stakeholders to keep them informed about project activities, understand and respond to their concerns and report to them on the project's environmental and social performance.	Applicable stakeholder engagement records.	Zero significant residual impacts.	Once, during decommissioning of construction facilities	Project; Relevant Government agencies who may conduct independent monitoring or review include: MEMD, PAU, NEMA, District Local Government
Hoima 11 CHU129: Pentecostal Church.	CHU129: Pentecostal Church.	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural Heritage Management Plan	A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include: <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site 	Compliance with the CHMP Documentation supporting that findings reported by the ICHM are evaluated and any necessary action required to protect	Zero noncompliance with the CHMP Full audit trail of findings to action	Every 3 months (quarterly)	Project; Relevant Government bodies including

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<ul style="list-style-type: none"> Excavation of a site a watching brief during vegetation removal or topsoil stripping requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p> <p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> regular report on progress of excavations a post-excavation assessment report a research archive a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p> <p>Information on intangible cultural heritage (ICH) collected during the preconstruction survey will be evaluated and integrated into the cultural heritage management plan (CHMP). This will include information on vulnerable groups if present.</p>	intangible cultural heritage is implemented			NEMA, MEMD, PAU, Ministry of Tourism, Wildlife and Antiquities (MTWA) Department of Museums and Monuments
Kakumiro 43.15 CUH441: Pentecostal Church.	CUH441: Pentecostal Church.	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural Heritage Management Plan	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> Avoidance of a site Access constraints to reduce disturbance to a site Excavation of a site a watching brief during vegetation removal or topsoil stripping requirements to maintain access to cultural heritage assets 	Compliance with the CHMP Documentation supporting that findings reported by the ICHM are evaluated and any necessary action required to protect intangible cultural heritage is implemented	Zero noncompliance with the CHMP Full audit trail of findings to action	Every 3 months (quarterly)	Project; Relevant Government bodies including NEMA, MEMD, PAU, Ministry of Tourism, Wildlife

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KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p> <p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p> <p>Information on intangible cultural heritage (ICH) collected during the preconstruction survey will be evaluated and integrated into the cultural heritage management plan (CHMP). This will include information on vulnerable groups if present.</p>				and Antiquities (MTWA) Department of Museums and Monuments
Sembabule 184.8 CHU413: Kraal.	CHU413: Kraal.	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural Heritage Management Plan	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site • Excavation of a site • a watching brief during vegetation removal or topsoil stripping • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management</p>	Compliance with the CHMP Documentation supporting that findings reported by the ICHM are evaluated and any necessary action required to protect intangible cultural heritage is implemented	Zero noncompliance with the CHMP Full audit trail of findings to action	Every 3 months (quarterly)	Project; Relevant Government bodies including NEMA, MEMD, PAU, Ministry of Tourism, Wildlife and Antiquities (MTWA) Department of

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>plan (CHMP) and any appropriate licences obtained.</p> <p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure.</p> <p>The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p> <p>Information on intangible cultural heritage (ICH) collected during the preconstruction survey will be evaluated and integrated into the cultural heritage management plan (CHMP). This will include information on vulnerable groups if present.</p>				Museums and Monuments
Lwengo 226.5 CHU398: Kyawagonya Cemetery.	CHU398: Kyawagonya Cemetery.	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural Heritage Management Plan	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site • Excavation of a site • a watching brief during vegetation removal or topsoil stripping • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p> <p>A senior cultural heritage monitor (SCHM) will ensure that the</p>	Compliance with the CHMP Documentation supporting that findings reported by the ICHM are evaluated and any necessary action required to protect intangible cultural heritage is implemented	Zero noncompliance with the CHMP Full audit trail of findings to action	Every 3 months (quarterly)	Project; Relevant Government bodies including NEMA, MEMD, PAU, Ministry of Tourism, Wildlife and Antiquities (MTWA) Department of Museums and Monuments

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p> <p>Information on intangible cultural heritage (ICH) collected during the preconstruction survey will be evaluated and integrated into the cultural heritage management plan (CHMP). This will include information on vulnerable groups if present.</p>				
Kyotera 244.6 CHU399: Kanga / Rusheshe cemetery.	CHU399: Kanga / Rusheshe cemetery.	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural Heritage Management Plan	<p>A preconstruction survey of the RoW will be undertaken to collect data on location, extent and mitigation measures of known and unknown assets (tangible and intangible cultural heritage (TCH and ICH)) and to consult community leaders about ICH sites or practices not yet identified. A report including a GIS file will be prepared that will recommend location-specific actions to be undertaken that could include:</p> <ul style="list-style-type: none"> • Avoidance of a site • Access constraints to reduce disturbance to a site • Excavation of a site • a watching brief during vegetation removal or topsoil stripping • requirements to maintain access to cultural heritage assets <p>A schedule of sites and actions to be undertaken will be prepared and included in the cultural heritage management plan (CHMP) and any appropriate licences obtained.</p> <p>A senior cultural heritage monitor (SCHM) will ensure that the cultural heritage management plan (CHMP) will be implemented, in agreement with relevant government authorities, in advance of construction. The CHMP will include a chance finds procedure. The cultural heritage team will</p>	Compliance with the CHMP Documentation supporting that findings reported by the ICHM are evaluated and any necessary action required to protect intangible cultural heritage is implemented	Zero noncompliance with the CHMP Full audit trail of findings to action	Every 3 months (quarterly)	Project; Relevant Government bodies including NEMA, MEMD, PAU, Ministry of Tourism, Wildlife and Antiquities (MTWA) Department of Museums and Monuments

Table J1.2-1 Location-Specific ESMP Matrix – Construction Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
					<p>schedule regular meetings and progress reports so that government authorities and appropriate community leaders are kept informed, including:</p> <ul style="list-style-type: none"> • regular report on progress of excavations • a post-excavation assessment report • a research archive • a final publication of results of tangible or intangible heritage investigations as appropriate to the significance of the outcomes. • chance finds reports will be provided to the government authority and relevant stakeholders. <p>The SCHM will be supported by a tangible cultural heritage monitor (TCHM) and an intangible cultural heritage monitor (ICHM) to evaluate the effectiveness of the cultural heritage protection measures and deliver awareness training for all project personnel.</p> <p>Information on intangible cultural heritage (ICH) collected during the preconstruction survey will be evaluated and integrated into the cultural heritage management plan (CHMP). This will include information on vulnerable groups if present.</p>				

Table J1.2-2 Location-Specific ESMP Matrix – Operational Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 4.5-8 Wambabya FR	Wambabya FR	Loss of Habitat and Disturbance or Harm to Wildlife	Loss of ecological function and integrity of protected site through impacts on species and habitats	Biodiversity Management Plan	All mitigation described in the biodiversity management plan and the pollution prevention plan will contribute to control this impact. NOTE: correct implementation of construction phase mitigation will contribute to the operational phase control of this impact.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement.	Reinstatement completed according to reinstatement plan.	Monthly until reinstated vegetation reaches maturity.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment and Natural Resources Officers, PAU, NFA
Kyankwanzi 78-82 Taala FR	Taala FR	Loss of Habitat and Disturbance or Harm to Wildlife	Loss of ecological function and integrity of protected site through impacts on species and habitats	Biodiversity Management Plan	All mitigation described in the biodiversity management plan and the pollution prevention plan will contribute to control this impact. NOTE: correct implementation of construction phase mitigation will contribute to the operational phase control of this impact.	Comprehensive data records from supplementary preconstruction surveys Compliance with site-specific management plans. Reinstatement.	Reinstatement completed according to reinstatement plan.	Monthly until reinstated vegetation reaches maturity.	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, UWA, District Environment and Natural Resources Officers, PAU, NFA

Table J1.2-2 Location-Specific ESMP Matrix – Operational Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0 PS1	PS1	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan Pollution prevention plan	NOTE: correct implementation of this construction phase mitigation will manage this impact.	Restored vegetation in terms of floral diversity, density and cover.	Floral species diversity, density and cover meets reinstatement objectives.	Weekly until vegetation is established in reinstated areas; twice yearly there-after	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU
Sembabule 184.5 PS2	PS2	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan Pollution prevention plan	NOTE: correct implementation of this construction phase mitigation will manage this impact.	Restored vegetation in terms of floral diversity, density and cover.	Floral species diversity, density and cover meets reinstatement objectives.	Weekly until vegetation is established in reinstated areas; twice yearly there-after	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU

Table J1.2-2 Location-Specific ESMP Matrix – Operational Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0 PS1	PS1	Visual intrusion of project components into landscape	Change of views	Reinstatement plan Pollution prevention plan	NOTE: correct implementation of this construction phase mitigation will manage this impact.	Restored vegetation in terms of floral diversity, density and cover.	Floral species diversity, density and cover meets reinstatement objectives.	Weekly until vegetation is established in reinstated areas; twice yearly there-after	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU
Sembabule 184.5 PS2	PS2	Visual intrusion of project components into landscape	Change of views	Reinstatement plan Pollution prevention plan	NOTE: correct implementation of this construction phase mitigation will manage this impact.	Restored vegetation in terms of floral diversity, density and cover.	Floral species diversity, density and cover meets reinstatement objectives.	Weekly until vegetation is established in reinstated areas; twice yearly there-after	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU

Table J1.2-2 Location-Specific ESMP Matrix – Operational Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0 PS1	PS1	Release of gases, exhausts and vapours to atmosphere	Increased NO ₂ concentrations at ground level from operation of bulk heaters (long and short term)	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Atmospheric emissions	No exceedance of national regulations and project environmental standards with regards to air quality and emission limits.	Annually	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD (OSH Department)
Sembabule 184.5 PS2	PS2	Release of gases, exhausts and vapours to atmosphere	Increased NO ₂ concentrations at ground level from operation of bulk heaters (long and short term)	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Atmospheric emissions	No exceedance of national regulations and project environmental standards with regards to air quality and emission limits.	Annually	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD (OSH Department)

Table J1.2-2 Location-Specific ESMP Matrix – Operational Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0 PS1	PS1	Release of gases, exhausts and vapours to atmosphere	Increased PM _{2.5} and PM ₁₀ concentrations at ground level from operation of bulk heaters (long and short term)	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Atmospheric emissions	No exceedance of national regulations and project environmental standards with regards to air quality and emission limits.	Annually	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD (OSH Department)
Sembabule 184.5 PS2	PS2	Release of gases, exhausts and vapours to atmosphere	Increased PM _{2.5} and PM ₁₀ concentrations at ground level from operation of bulk heaters (long and short term)	Pollution Prevention Plan	<p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. <p>Vehicles or equipment seen to be emitting excessive black smoke will not be permitted to continue work and will be sent for maintenance.</p>	Atmospheric emissions	No exceedance of national regulations and project environmental standards with regards to air quality and emission limits.	Annually	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD (OSH Department)

Table J1.2-2 Location-Specific ESMP Matrix – Operational Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0 PS1	PS1	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation of the pump stations.	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	Noise levels at sensitive receptors; field verification. Number of related complaints.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement.	Monthly for complaints. Annually for verification.	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD (OSH Department)
Sembabule 184.5 PS2	PS2	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation of the pump stations.	Pollution Prevention Plan	<p>Project noise emissions will not result in an exceedance of PES or national legislative noise criteria at any existing sensitive receptor site.</p> <p>Preference will be given to selecting low noise and vibration emitting equipment for all construction works.</p> <p>To minimise emissions to air, vehicles, machines and equipment will:</p> <ul style="list-style-type: none"> • be appropriate for the task required • have a valid maintenance and inspection certificate or log books • be allocated a unique identifier to be used in a maintenance log • be maintained regularly in accordance with the manufacturer's recommendations to maximise fuel efficiency and help reduce emissions • not be allowed to idle – engines will be switched off when not in use. 	Noise levels at sensitive receptors; field verification. Number of related complaints.	Zero exceedance of project environmental standards. Continuous improvement on percentage of unresolved complaints on noise after Project has proposed solution/s during engagement.	Monthly for complaints. Annually for verification.	Project; Government bodies who may conduct independent monitoring or review the data include: NEMA, MEMD, District Environment Officers, PAU, MGLSD (OSH Department)

Table J1.2-2 Location-Specific ESMP Matrix – Operational Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0 PACs near PS1	PACs near PS1	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Accidental damage to crops during maintenance activities	Stakeholder engagement plan. Resettlement action plan.	<p>If project activities affect land-based livelihoods because of interruption to irrigation, drainage or agricultural production, appropriate compensation will be provided in accordance with the RAP.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Number of related complaints Stakeholder records demonstrating effective messaging addressing the grievance procedure.	Continuous improvement on percentage of unresolved complaints on appropriate compensation after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, Local Government
Sembabule 184.5 PACs near PS2	PACs near PS2	Loss/Severance of Land and Disruption to Land-Based Livelihoods	Accidental damage to crops during maintenance activities	Stakeholder engagement plan. Resettlement action plan.	<p>If project activities affect land-based livelihoods because of interruption to irrigation, drainage or agricultural production, appropriate compensation will be provided in accordance with the RAP.</p> <p>A Resettlement Policy Framework (RPF) has been developed in line with national legislation, Good International Industry Practice (GIIP) and IFC Performance Standard 5. The RPF will outline procedures related to compensation for loss of assets and livelihood restoration. A Resettlement Action Plan (RAP) will describe the modalities of identifying Project Affected People (PAP) and the procedures related to compensation for loss of assets and livelihood restoration strategies. Post resettlement monitoring of livelihood restoration measures will be implemented. Additional measures will be developed and implemented where necessary to ensure livelihoods are restored as a minimum to pre-project levels.</p> <p>The Project will implement a grievance procedure to provide opportunities for PACs to express grievances about project activities. The grievance process will be communicated to and promoted within all PACs; it will be clearly communicated to PACs that complaints related to interactions with public or private security forces will be addressed.</p>	Number of related complaints Stakeholder records demonstrating effective messaging addressing the grievance procedure.	Continuous improvement on percentage of unresolved complaints on appropriate compensation after Project has proposed solution/s during engagement	Monthly	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: PAU, MEMD, NEMA, MLHUD, Local Government

Table J1.2-2 Location-Specific ESMP Matrix – Operational Phase

KP Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Parameter to be monitored	Performance Indicators/Targets or Acceptance Criteria	Monitoring Frequency	Responsibility
Hoima 0 PACs near PS1	PACs near PS1	Disposal of Solid and Liquid Waste	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	Compliance with waste management plan	Documentation (reports, records, etc) supporting that audits of waste facilities being used by the project are completed	Zero noncompliance Waste Management Plan	Every 6 months	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: MEMD, NEMA, Local Government
Sembabule 184.5 PACs near PS2	PACs near PS2	Disposal of Solid and Liquid Waste	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	Compliance with waste management plan	Documentation (reports, records, etc) supporting that audits of waste facilities being used by the project are completed	Zero noncompliance Waste Management Plan	Every 6 months	Project; Relevant Government bodies who may conduct independent monitoring or review the data include: MEMD, NEMA, Local Government

J2 MONITORING PARAMETERS

EACOP has prepared a project environmental standards (PES) document (see Appendix F) that proposes project-wide standards based on national and international standards applicable at the time of writing. The PES, together with any applicable new legislation, the requirements of permits, licences and approvals obtained for the project and requirements for monitoring contained within the commitments register form the framework for project compliance monitoring.

Table J2.1-1 and Table J2.1-2 specify the minimum monitoring requirements for the construction and operational phases, respectively. These requirements will be incorporated into the monitoring and reporting plans for the construction and operational phases.

J2.1 Construction Phase**Table J2.1.1 Monitoring – Construction Phase**

Identifier	Activity/Issue	Location(s)	Frequency	Parameters	Monitoring Methodology	Commitment No	Comments
A1	Dust impacts on sensitive receptors	Access roads, MCPYs and other areas of dust generation	Daily	Dust clouds; dust deposition on sensitive receptors; grievances received	Visual; grievance log	AIR01	
A2	Air emission controls	At any work location nominated by EACOP	Daily	black smoke from mobile generators and pumps and heavy plant and equipment	Visual; grievances received	AIR03	
A3	Air emissions from mobile waste incinerators	MCPYs	To be proposed by Contractor, subject to review and approval by EACOP	Parameters provided in Waste Incineration Emission Standards, Appendix F PES, Section 2.1.5, Table 2.12	To be proposed by Contractor, subject to review and approval by EACOP	-	
N1	Noise from generators, vehicles and equipment	Residential properties, schools; other receptors if required by the conditions of any licence required	Before and immediately after the commencement of construction activities; and subsequently monthly, or whenever new noise sources have been introduced or grievances received; or in accordance with the conditions of any licence required if more stringent	Parameters provided in Construction Noise, Appendix F PES, Section 4.2, Table 4.2-1 or the conditions of any licence required if more stringent	In accordance with any licence conditions, or as proposed by Contractor subject to review and approval by EACOP if no licence required	ACO01; ACO02; CHSW25	
N2	Blasting and piling	Residential properties, schools; other receptors if required by the conditions of any licence required;	During blasting and piling	Parameters provided in Construction Noise, Appendix F PES, Section 4.2, Table 4.2-1 or the conditions of any licence required if more stringent	In accordance with any licence conditions or as proposed by Contractor, subject to review and approval by EACOP, where no licence required	ACO06; ACO08; CHSW25	
P1	Potential pollution from fuel storage	Each location where fuel stored	Initially, every 2 weeks; and subsequently monthly, if approved by EACOP	Volumes of fuel received and dispatched	Inventory of the fuel received and dispatched for project use will be taken at each fuel centre location. The result of the inventory will be compared to tank measurements on a monthly basis.	WTR01	
P2	Potential pollution from machinery at work sites and maintenance areas	Each work area where machinery is located	Periodically	Currency of technical service certificates	Contractor to maintain log of certificates and copies to be kept with each item	AIR02	
P3	Potential pollution from spills during refuelling	Every refuelling location	Continuous during the refuelling process	No overfill	To be proposed by Contractor, subject to review and approval by EACOP	WTR02	
P4	Potential pollution from inappropriately stored hazardous materials and wastes	Each location where hazardous materials and wastes stored	Weekly	Storage conditions in accordance with requirements of MSDSs, chemical and waste management plans	To be proposed by Contractor, subject to review and approval by EACOP	SOL15; WTR01	

Identifier	Activity/Issue	Location(s)	Frequency	Parameters	Monitoring Methodology	Commitment No	Comments
P5	Potential pollution due to equipment leaking oil and lubricants	Each watercourse crossing, machinery, equipment and pumps within 50m of each watercourse crossing	Daily	Leak-free equipment, bunds around pumps in place and not over full	To be proposed by Contractor, subject to review and approval by EACOP	-	
S1	Erosion detection and control	Areas cleared and graded	Before predictable major storms and after storm events; minimum twice a week	Areas of possible erosion	Visual	SOL12; WTR03	Once identified, areas of possible erosion will be treated or covered with erosion control materials. Barriers (berms or terraces) will be installed to redirect runoff to stable vegetated areas
S2	Drainage control	Roads and accesses	Daily	No sedimentation of watercourses	Visual	SOL18	The primary aim of these daily inspections is to ensure that barriers, berms, silt fences etc are working effectively to direct sediment run-off to stable vegetated areas and to prevent sediment run-off to watercourses.
	Watercourse margin protection	Pipeline Crossings of watercourses	Daily	No sedimentation of watercourses Sufficient buffer zone at watercourses		BIO14; WTR05	
	Geotechnical cut-off walls, berms, silt fences etc installed to minimise sediment run-off and erosion	All locations	Daily	No sedimentation of watercourses Signs of erosion or slope failure Sediment control		SOL12; WTR03; WTR05	
S3	Erosion detection and control	Pipeline river crossings	Regularly, and after heavy rainfall, up to a minimum of two years after construction	Areas of possible erosion	To be proposed by Contractor, subject to review and approval by PTP	WTR05	Monitoring should be continued at specific locations if chronic erosion occurs, or if riparian vegetation recovery is delayed.
S4	Topsoil storage	Topsoil storage stacks	After topsoil is stored for more than six months	Presence of weeds; compaction and erosion	Weeds – visual; Probe - compaction	SOL07	
W1	Quality and quantity of project water supplies	At point of supply	Prior to and during use	Parameters provided in Drinking Water Standards, Appendix F PES, Table 3.3-1 (for potable water supplies) or water permit conditions for other supplies; volume and rate (T, pH, TDS, TSS, nitrates and true colour of user's water; flow rate)	Laboratory	WTR13; WTR23	
W2	Impacts on community wells of groundwater abstraction for the project	Monitoring wells drilled to monitor impacts	Prior to use and once every 2 weeks during use or as specified by water permit, whichever is more stringent	Parameters provided in Drinking Water Standards, Appendix F PES, Table 3.3-1 (for potable water supplies) or water permit conditions for other supplies; volume and rate (T, pH, TDS, TSS, nitrates and true colour of user's water; flow rate)	Laboratory	WTR23; WTR27; WTR28; WTR30	

Identifier	Activity/Issue	Location(s)	Frequency	Parameters	Monitoring Methodology	Commitment No	Comments
W3	Withdrawal of water from surface water courses, including hydrotest water	Withdrawal location	Prior to use, then monthly during use, or in accordance with permit requirements, whichever is more stringent	In accordance with permit requirements. To include volume and rate	Meter	WTR06	Any sensitive ecological receptors that require monitoring will be notified to the Contractor by EACOP
W4	Licensed and unlicensed water intakes, irrigation works and private domestic water systems in the immediate vicinity of the RoW	Any located within 50 m of RoW	Before, during, and after construction (post-reinstatement)	Parameters provided in Drinking Water Standards, Appendix F PES, Table 3.3-1 (for potable water supplies) or water permit conditions for other supplies; volume and rate (T, pH, TDS, TSS, nitrates and true colour of user's water; flow rate)	Laboratory	WTR23; WTR30	
W5	Impacts of construction at or near watercourses or other surface waterbodies on water quality	Watercourses – within area of influence and upstream (control point) of area of influence.	Before, during, and after construction or in accordance with current legislation and/or permit requirements, whichever is more stringent Daily during river crossing / instream works or in accordance with permit requirements or standards, whichever is more stringent	Turbidity, sedimentation, oil, other contamination	Visual assessment	MBIO12; WTR07; WTR11	
W6	Discharges of wastewater including black and grey water	MCPYs	Prior to use, then monthly, or in accordance with permit requirements, whichever is more stringent	Parameters provided in Appendix F PES, Table 3.1-1 and/or wastewater permit conditions whichever is more stringent; volume and rate.	Laboratory	WTR08; WTR13	
W7	Discharge of Hydrostatic Test water	Water in pipe or sedimentation basin, if used	Prior to discharge of each test section	In accordance with wastewater permit conditions; Appendix F PES, Section 3.1 Industrial Effluent and Sewage Discharge Standards, Table 3.1-1; volume, rate; any substances added to the hydrostatic test water	Laboratory test; to include a microtox bioassay if the water used for testing contains methanol, ethylene glycol, or other additives	N/A	Visual monitor that no soil erosion occurs. If discharged to land, monitor to ensure that discharge does not cause erosion or flooding.
W8	Surface water run-off	MCPYs	Daily visual; monthly laboratory test	In accordance with wastewater permit conditions; Appendix F PES, Section 3.1 Industrial Effluent and Sewage Discharge Standards, Table 3.1-1 and/or wastewater permit conditions whichever is more stringent	Laboratory	WTR20	

J2.2 Operational Phase

Table J2.2.1 Monitoring – Operational Phase

Identifier	Activity/Issue	Location(s)	Frequency	Parameters	Monitoring Methodology	Commitment No	Comments
A4	Air emissions from combustion plant	Crude oil bulk heaters at pumping stations	In accordance with any licence conditions or as proposed by Contractor, subject to review and approval by EACOP, where no licence required	PES, Table 2.1-1 or the conditions of any licence required if more stringent	In accordance with any licence conditions or as proposed by Contractor, subject to review and approval by EACOP, where no licence required	AIR05	
N3	Noise emissions from combustion plant	Dwelling(s) nearest to the crude oil bulk heaters at pumping stations	In accordance with any licence conditions or as proposed by Contractor, subject to review and approval by EACOP, where no licence required	PES, Table 4.1-1 or the conditions of any licence required if more stringent	In accordance with any licence conditions or as proposed by Contractor, subject to review and approval by EACOP, where no licence required	ACO01	
P3	Potential pollution from spills during refuelling	Every refuelling location	Continuous during the refuelling process	No overfill	To be proposed by Contractor, subject to review and approval by EACOP	WTR02	
S5	Soil erosion affecting security and integrity of the pipeline	RoW	Monthly – all locations; weekly at locations susceptible to erosion	Rill or gully formation	Visual	SOL16	
W6	Discharges of wastewater including black and grey water	Pumping stations	Prior to use, then monthly, or in accordance with permit requirements, whichever is more stringent	PES, Table 3.1-1 and/or wastewater permit conditions whichever is more stringent; volume and rate.	Laboratory	WTR08; WTR13	
W8	Surface water run-off	Pumping stations	Daily visual; monthly laboratory test	PES, Table 3.1-1 and/or wastewater permit conditions whichever is more stringent	Laboratory	WTR20	