

Appendix J: Environmental and Social Management Plan

August 2019

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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.

[Section J1.2](#) presents the location-specific ESMP that is arranged by district. For each unique location-and-impact-mitigation combination a separate line item is presented in the ESMP.

Each mitigation measure is given a unique code, dependent on the topic it relates to, e.g. SOL for soil, and a number. See [Table E4.1-1 in Appendix E4](#) for a list of codes. The full mitigation measure is listed under the relevant management plan in [Appendix E4](#).

1.1 Generic Impact ESMP Matrix

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

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
Soil compaction	Habitats of conservation importance	Impaired re-establishment of vegetation after construction	Reinstatement plan. Community health, safety and security plan.	SOL04. SOL05. SOL07. BIO38.	Project
Soil erosion	Habitats of conservation importance	Loss of topsoil through erosion by wind or water causing impaired reinstatement	Soil management plan. Reinstatement plan.	SOL12.	Project
Soil erosion	Habitats of conservation importance	Reduced primary productivity in watercourses, smothering of invertebrates, lethal or sublethal effects on fish, degradation of spawning habitat	Soil management plan. Reinstatement plan. Pollution prevention plan.	SOL12. WTR07. WTR11. BIO07. BIO13. BIO14.	Project
Loss of soil structure, fertility and seed bank	Habitats of conservation importance	Poor recolonisation due to anaerobic conditions in stored soil, reduced fertility and loss of entrained seeds	Soil management plan.	SOL07.	Project
Impeded flow of river or channel	Habitats of conservation importance	Loss of aquatic and water-margin habitats	Soil management plan. Reinstatement plan. Natural resource management plan.	BIO07. WTR06.	Project
Abstraction of water from river or channel	Habitats of conservation importance	Loss of aquatic or water-margin habitats	Soil management plan. Reinstatement plan. Natural resource management plan.	BIO07. BIO14. WTR06.	Project
Loss of habitat	Habitats of conservation importance	Permanent loss of habitat from AGIs and operational RoW	Soil management plan. Reinstatement plan. Biodiversity management plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
Loss of habitat	Habitats of conservation importance	Temporary loss of habitat from construction activities (RoW, other temporary worksites main camps and pipe yards MCPYs)	Biodiversity management plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
Loss of habitat	Habitats of conservation importance	Modified habitat structure following habitat reinstatement after construction	Biodiversity management plan.	BIO01. BIO03. BIO04. BIO38.	Project
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.	BIO01. BIO03. BIO04. BIO38.	Project
Introduction of competitive species or plant/animal diseases	Habitats of conservation importance	Poor re-colonisation by local flora through competition by non-natives following reinstatement	Biodiversity management plan.	BIO19.	Project
Disturbance or harm to wildlife	Habitats of conservation importance	Interaction between construction workers and habitats of conservation importance, especially relating to food and fuel	Biodiversity management plan. Project-induced in-migration plan. Community health, safety and security plan. Occupational health, safety and security plan.	BIO05. CHSW33. WHSW01.	Project
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.	ECO06.	Project
Disturbance, 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. Waste management plan.	WTR01. WTR02. SOL14. SOL15.	Project
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.	WTR01. WTR02. SOL14. SOL15	Project
Disposal of solid and liquid waste	Flora and fauna species of conservation importance (terrestrial and aquatic)	Increase in vermin around waste dumps and consequent increase in prey availability for carnivorous birds and mammals	Occupational health, safety and security plan. Pollution prevention plan. Waste management plan.	WHSW01.	Project

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

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
Disposal of solid and liquid waste	Flora and fauna species of conservation importance (terrestrial and aquatic)	Stress or mortality of flora and fauna due to disposal of solid and liquid waste	Pollution prevention plan. Waste management plan.	EPR01. EPR04. WTR01.	Project
Disposal of surplus water from working areas and hydrotest water	Flora and fauna species of conservation importance (terrestrial and aquatic)	Reduced primary productivity in watercourses, smothering of invertebrates, lethal or sublethal effects on fish, degradation of spawning habitat	Pollution prevention plan. Waste management plan.	WTR07. WTR20. WTR22.	Project
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.	WTR06.	Project
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	Biodiversity management plan. Natural resource management plan.	BIO16. WTR06.	Project
Disposal 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	Waste management plan. Natural resource management plan.	WTR08. WTR16. WTR18. WTR29.	Project
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.	WTR24. WTR28.	Project
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.	BIO01. BIO03. BIO08. BIO38.	Project
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.	BIO01. BIO03. BIO08. BIO38.	Project
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.	BIO24.	Project
Introduction of competitive species or plant/ 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.	BIO19.	Project
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.	BIO01. BIO03. BIO12. BIO36.	Project
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 plant and structures	Biodiversity management plan. Community health, safety and security plan. Transport and road safety management plan.	CHSW01. CHSW09. LIV03. WHSW07. WTR09. WTR10.	Project
Disturbance or harm to wildlife	Flora and fauna species of conservation importance	Increased gathering of flora and hunting of fauna species of conservation importance from PIIM to construction camps, from	Biodiversity management plan. Labour management plan. Community health, safety and security plan.	BIO05. CHSW33. ECO05. ECO06. SOL05.	Project

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

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
	(terrestrial and aquatic)	improved access along new or upgraded project access roads and access provided by RoW during construction and reinstatement.	Stakeholder engagement plan.		
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.	BIO06. BIO15.	Project
Noise, vibration and visual disturbance	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.	ACO01. ACO06. AIR02. BIO24. CHSW20. CHSW33.	Project
Accidental release of oil / chemicals	Flora and fauna species of conservation importance (terrestrial and aquatic)	Stress or mortality to flora and fauna due to spills of hazardous materials into watercourses	Pollution prevention plan. Waste management plan.	EPR01. EPR02. EPR04. WTR01.	Project
Use of raw materials and natural resources	Soil	Depletion of natural resources, for example, aggregate	Waste management plan. Natural resource management plan.	RES01. LNP02.	Project
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 decreased productivity.	Soil management plan. Community health, safety and security plan.	SOL04. SOL05. SOL06. SOL07.	Project
Soil erosion	Soil	Loss of topsoil causing reduced fertility and impaired reinstatement	Soil management plan. Community health, safety and security plan.	SOL04. SOL05. SOL06. SOL07.	Project
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.	SOL06. SOL07.	Project
Disturbance, treatment and disposal of known/unknown contamination	Soil	Mobilisation of soil contaminants	Pollution prevention plan. Reinstatement plan.	WTR01. WTR02. SOL14. SOL15	Project
Management of waste and accidental release of oil or chemicals	Soil	Soil contamination	Pollution prevention plan. Waste management plan.	EPR01. EPR04. WTR01. WTR02.	Project
Management of surplus subsoil and aggregate	Soil	Loss of soil structure, drainage, fertility and seed bank	Waste management plan.	SOL02. LSC03.	Project
Erosion	Surface water	Erosion of river or channel banks, scour, sediment contamination of surface waters	Soil management plan. Reinstatement plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Impeded flow of river or channel	Surface water	Deterioration of water quality	Biodiversity management plan. Soil management plan. Pollution prevention plan.	BIO07. BIO13. WTR05. WTR09. WTR10.	Project
Altered drainage pattern	Surface water	Trench can act as conduit for groundwater, draining higher areas and flooding lower areas	Reinstatement plan.	SOL17.	Project
Management of waste and accidental	Groundwater	Potential for groundwater contamination	Waste management plan. Pollution prevention plan. Natural resource management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project

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

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
release of oil or chemicals			Emergency preparedness and response plan.		
Visual intrusion of project components into landscape	Landscape	Change of landscape character and views caused by project components	Biodiversity management plan Reinstatement plan. Soil management plan.	BIO36. SOL02. SOL03. SOL09. SOL10. SOL13.	Project
Disposal of surplus subsoil and aggregate	Landscape	Permanent change of views as a result of disposal of surplus subsoil and aggregate	Soil management plan Waste management plan. Reinstatement plan.	LSC03. SOL10.	Project
Release of gases, exhausts and vapours to atmosphere	Air quality	Reduced air quality from combustion of fuel in construction equipment, vehicles and vessels.	Pollution prevention plan.	AIR02. AIR03.	Project
Release of gases, exhausts and vapours to atmosphere	Air quality	Hydrocarbon vapour emissions from refuelling operations causing reduced air quality	Pollution prevention plan.	WTR02.	Project
Dust	Air quality	Nuisance from dust emissions from construction site activities	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Noise	Acoustic environment	Disturbance or nuisance from noise from construction on the RoW	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Noise	Acoustic environment	Disturbance or nuisance from noise from traffic movement	Pollution prevention plan	ACO01. ACO07. AIR02.	Project
Noise	Acoustic environment	Disturbance or nuisance from noise during commissioning of the pipeline	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Vibration	Acoustic environment	Disturbance, nuisance or cosmetic / structural damage from vibration	Pollution prevention plan	ACO01. AIR02.	Project
Employment	Economy	The generation of national employment opportunities leading to an increase in household income and an improvement in living standards	Procurement and Supply Chain Management Plan Labour Management Plan Stakeholder Engagement Plan	ECO01. ECO04.	Project
Provision of goods and services	Economy	Project procurement providing opportunities for national businesses	Procurement and Supply Chain Management Plan	ECO01.	Project
Contribution to economy	Economy	Contribution to national economy from investment	Procurement and Supply Chain Management Plan	N/A	Project
Contribution to economy	Economy	Changes to the fiscal balance	N/A	N/A	Project
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.	ECO04. HR02.	Project
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.	HR02. ECO05. WSW12.	Project
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.	HR01. HR24.	Project
Employment	Local economy (nonland-based livelihoods)	Dissatisfaction arising from unmet expectations, over the scale and duration of local employment opportunities	Project-induced in-migration management plan. Labour management plan. Stakeholder engagement plan.	ECO04. ECO05. HR24.	Project
Employment	Local economy (nonland-based livelihoods)	Competition over employment opportunities	Project-induced in-migration management plan. Labour management plan. Stakeholder engagement plan.	ECO04. ECO05.	Project
Employment	Local economy (nonland-based livelihoods)	Diversion of workers gaining employment from the project away from existing local businesses or public-sector jobs	Procurement and supply chain management plan. Labour management plan. Stakeholder engagement plan.	ECO05. ECO08. HR24.	Project

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

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
Employment	Local economy (nonland-based livelihoods)	School drop outs seeking employment in the project supply chain	Procurement and supply chain management plan. Monitoring and reporting plan. Labour management plan. Stakeholder engagement plan.	HR22.	Project
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.	ECO01.	Project
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.	ECO01. ECO09.	Project
Provision of goods and services	Local economy (nonland-based livelihoods)	Improvements in road conditions for business owners and public transport	Procurement and supply chain management plan. Monitoring and reporting plan. Stakeholder engagement plan.	CHSW22	Project
Provision of goods and services	Local economy (nonland-based livelihoods)	Restriction of access to small businesses, street vendors and local markets during construction	Resettlement Action Plan. Monitoring and reporting plan. Stakeholder engagement plan.	LNP03.	Project
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.	CHSW02. CHSW18	Project
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.	BIO15. CHSW19.	Project
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.	LNP03.	Project
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.	LNP03.	Project
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.	LIV01	Project
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.	LNP03.	Project
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.	CHSW22. LNP03. GNL01.	Project
Loss/severance of land and disruption to land-based livelihoods	Land-based livelihoods	Reduction in honey production due to loss of habitat	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	CHSW22. LNP03. GNL01.	Project
Disruption to surface water catchments	Land-based livelihoods	Temporary disruption to surface water	Infrastructure and utilities management plan. Resettlement action plan. Reinstatement plan.	INF03. INF04.	Project
Restriction of access to fisheries	River-, lake- and marine-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.	CHSW22. LNP03. GNL01.	Project

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

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
Resettlement	River-, lake- and marine-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.	CHSW22. LNP03. GNL01.	Project
Resettlement	Land and property	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Resettlement	Land and property	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	LNP04. LNP06. CHSW22.	Project
Resettlement	Land and property	Land and property speculation by land owners	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	LNP04. LNP06. CHSW22.	Project
Resettlement	Land and property	New disputes and exacerbation of pre-existing disputes and conflict around land and property	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
Resettlement	Land and property	Permanent loss of physical structures due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
Resettlement	Land and property	Permanent loss of local enterprises	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22.	Project
Resettlement	Land and property	Loss of community infrastructure (schools, clinics, community halls) due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22.	Project

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

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
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. Occupational health, safety and security plan. Community health, safety and security plan. Labour management plan. Pollution prevention plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22.	Project
Vibration	Land and property	The generation of vibrations during construction works	Infrastructure and utilities management plan.	ACO03. ACO06. LNP03. GNL01. CHSW22.	Project
Employment	Workers' health, safety and welfare	An improvement in the health and safety of people employed from disease awareness and reduction programmes	Occupational health, safety and security plan	CHSW07. CHSW31. CHSW32. WHSW12.	Project
Employment	Workers' health, safety and welfare	Risk of wildlife interaction/animal bites and contracting zoonotic diseases	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	WHSW06.	Project
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.	WHSW02. WHSW03. WHSW05. WHSW09. WHSW12. WHSW16. WHSW19.	Project
Use of Road Network	Social Infrastructure and Services	Road widening and improvement	N/A	CHSW22.	Project
Use of Rail Network	Social Infrastructure and Services	Railroad improvements between Dar es Salaam and Isaka	N/A	N/A	Project
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	INF04. LNP03. GNL01. CHSW22.	Project
Use of Road Network	Social Infrastructure and Services	Deterioration of road conditions	Infrastructure and utilities management plan	INF10. CHSW20. ACO09.	Project
Use of Road Network	Social Infrastructure and Services	Traffic congestion leading to delays	Stakeholder engagement plan. Transport and road safety management plan	CHSW17. CHSW20. INF08. INF14.	Project
Use of Road Network	Social Infrastructure and Services	Disruption of traffic flows	Infrastructure and utilities management plan. Transport and road safety management plan	ACO09. CHSW17. CHSW20. INF08. INF10. INF14	Project
Use of rail network	Social infrastructure and services	Temporary disruptions to freight and passenger improvements on railroad	Infrastructure and utilities management plan	INF15.	Project
Resettlement	Community health	Resettled households' exposure to areas of higher vector densities, increasing the burden of vector-related diseases	Resettlement action plan. Stakeholder engagement plan.	GNL01. LNP03.	Project
Resettlement	Community health	Resettled households' decreased food security	Resettlement action plan.	GNL01. LNP03.	Project
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.	CHSW06. CHSW16. HR36.	Project
Noise	Community health	Excessive noise exposure due to project activities	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	ACO01. ACO02. ACO04. ACO05.	Project

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

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
Disposal of Solid and Liquid Waste	Community health	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	N/A	Project
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. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WHSW11. CHSW31. HR22.	Project
Community safety	Community safety, security and welfare	Community health and safety incidents associated with construction activities causing accidents other than traffic accidents	Community health, safety and security plan. Occupational health, safety and security plan. Stakeholder engagement plan.	CHSW11. CHSW18. BIO06. WHSW08.	Project
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.	HR01. HR34. CHSW27.	Project
Community dynamics	Community safety, security and welfare	Conflict between PACs and project security personnel	Community health, safety and security plan. Stakeholder engagement plan.	CHSW03. CHSW14. CHSW21.	Project
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	CUH01. CUH02. CUH03.	Project
Disturbance or loss of cultural heritage	Tangible and intangible cultural heritage	Damage, disturbance or disruption of access of unknown Category 1 or Category 2 tangible cultural heritage, such as evidence of previous settlement and graves.	Cultural heritage management plan	CUH01. CUH02. CUH03. CUH04.	Project
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 healing and syncretism)	Cultural heritage management plan	CUH01. CUH02. CUH03. CUH04.	Project

Table J1.1-2 Generic Impact ESMP Matrix - Operations Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	Responsibility
Disturbance or harm to wildlife	Flora and fauna species of conservation importance (terrestrial and aquatic)	Maintenance activities causing minor habitat loss and alteration	Biodiversity management plan.	BIO34	Project
Soil erosion	Soil	Loss of topsoil causing reduced fertility and impaired reinstatement	Reinstatement plan. Biodiversity management plan.	BIO38	Project
Management of waste and accidental release of oil or chemicals	Soil	Soil contamination	Pollution prevention plan. Waste management plan.	EPR01. EPR04. WTR01. WTR02.	Project
Management of waste and accidental release of oil or chemicals	Surface water	Contamination of surface water	Pollution prevention plan. Waste management plan. Emergency preparedness and response plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
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.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Visual intrusion of project components into landscape	Landscape	Change of landscape character and views caused by project components	Biodiversity management plan. Reinstatement plan. Soil management plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Release of gases, exhausts and vapours to atmosphere	Air quality	Exhaust emissions from vehicles causing reduced air quality during operation	Pollution prevention plan.	AIR02. AIR03.	Project
Dust	Air quality	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Noise	Acoustic environment	Disturbance or nuisance from noise from traffic movement	Pollution prevention plan	ACO01. AIR02.	Project
Employment	Economy	The generation of national employment opportunities leading to an increase in household income and an improvement in living standards	Procurement and Supply Chain Management Plan. Labour Management Plan. Stakeholder Engagement Plan	ECO04. ECO05. HR02.	Project
Provision of goods and services	Economy	Project procurement providing opportunities for national businesses	Procurement and Supply Chain Management Plan	ECO01.	Project
Contribution to economy	Economy	Contribution to national economy from investment	Procurement and Supply Chain Management Plan	N/A	Project
Contribution to economy	Economy	Changes to the fiscal balance	N/A	N/A	Project
Employment	Local economy (nonland-based livelihoods)	School drop outs seeking employment in the project supply chain	Procurement and supply chain management plan. Monitoring and reporting plan. Labour management plan. Stakeholder engagement plan.	HR22.	Project
Provision of goods and services	Local economy (nonland-based livelihoods)	Improvements in road conditions for business owners and public transport	Procurement and supply chain management plan. Monitoring and reporting plan. Stakeholder engagement plan.	CHSW22.	Project
Employment	Workers' health, safety and welfare	An improvement in the health and safety of people employed from disease awareness and reduction programmes	Occupational health, safety and security plan	CHSW07. CHSW31. CHSW32. WHSW12.	Project

Table J1.1-2 Generic Impact ESMP Matrix - Operations Phase

Aspect	VEC	Potential Impact	Management Plan(s)	Mitigation Measures	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.	HR29. WHSW12.	Project
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. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WHSW11. CHSW31. HR22.	Project
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	CUH06	Project
Disturbance or loss of cultural heritage	Tangible and intangible cultural heritage	Damage or disturbance of Category 3 intangible cultural heritage	Cultural heritage management plan	CUH06	Project

1.2 Location-Specific Impact ESMP

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
TBC Various protected and internationally recognised areas (see Sec8 narrative for details)	Various protected and internationally recognised areas (see Sec8 narrative for details)	Loss of habitat	Temporary loss of habitat within protected and internationally recognised areas during pipeline construction	Biodiversity management plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
Muleba, Biharamulo, Chato 438-472 Burigi-Biharamulo GR and KBA	Burigi-Biharamulo GR and KBA	Loss of habitat	Permanent loss of old-growth forest on ridge (approx. 2% of primary forest within the AOI)	Soil management plan. Reinstatement plan. Biodiversity management plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
Singida, Hanang 979-996 Itigi-like thicket	Itigi-like thicket	Loss of habitat	Loss of Itigi-like thicket (c. 2% of Itigi-like thicket within the AOI)	Soil management plan. Reinstatement plan. Biodiversity management plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
Singida, Hanang 970-1097 Dry Miombo Woodland	Dry Miombo Woodland	Loss of habitat	Loss of dry miombo woodland of high bioquality (< 1% of habitat type within AOI)	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
Tanga 1424 Coastal vegetation mosaic near the Sigi River	Coastal vegetation mosaic near the Sigi River	Loss of habitat	Loss of coastal thicket and coastal woodland of high bioquality from within coastal vegetation mosaic (<1% of habitat type within AOI)	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
Tanga 1442 Coastal vegetation mosaic	Coastal vegetation mosaic	Loss of habitat	Loss of coastal thicket and coastal woodland of high bioquality from within coastal vegetation mosaic (<1% of habitat type within AOI)	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
302-1442 Locations which support Tanzania endemic birds	Locations which support Tanzania endemic birds	Loss of Habitat for Species of Conservation Importance	Temporary loss of nesting habitat for endemic bird through site clearance	Biodiversity management plan.	BIO01. BIO03. BIO08. BIO27.	Project
420-645 Ponds and wetlands containing the endemic bubbling puddle frog	Ponds and wetlands containing the endemic bubbling puddle frog	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Direct mortality and destruction of breeding habitat for bubbling puddle frog where construction affects ponds	Biodiversity management plan.	BIO01. BIO03. BIO08. BIO28.	Project
Missenyi 302-312 Minziro NFR, IBA and KBA	Minziro NFR, IBA and KBA	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of breeding and foraging habitat and disturbance to species using the reserve through pipeline construction	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Missenyi 302-312 Minziro NFR and IBA	Minziro NFR and IBA	Loss of Habitat for Species of Conservation Importance	Loss of breeding and foraging habitat for ashy red colobus monkey through pipeline construction	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Missenyi 302-312 Minziro NFR and IBA	Minziro NFR and IBA	Disturbance or Harm to Wildlife	Disturbance (noise and visual) to ashy red colobus monkey	Pollution prevention plan.	ACO01. BIO24.	Project
Missenyi 302-312 Minziro NFR and IBA	Minziro NFR and IBA	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Habitat loss and disturbance (noise and visual) to birds in the Important Bird Area (IBA) causing restrictions in species' distributions (blue swallow (IUCN vulnerable))	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Bukoba Rural 350 Lake Ikimba	Lake Ikimba	Disposal of solid and liquid waste, Disposal of black and grey water, Accidental release of oil / chemicals and Disturbance or Harm to Wildlife	Potential pathway for contamination or sediment during construction on the lake's tributaries and disturbance (noise and visual) affecting birds of conservation importance.	Soil management plan. Pollution prevention plan. Waste management plan. Biodiversity management plan.	BIO22. EPR01. EPR02. EPR04. WTR01.	Project
Muleba, Biharamulo, Chato 438-472 Burigi-Biharamulo GR and KBA	Burigi-Biharamulo GR and KBA	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of breeding and foraging habitat for IUCN CR species (white-backed vulture), IUCN EN species (steppe eagle) and multiple keystone species (raptors, owls, lion, leopard)	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Muleba, Biharamulo, Chato 438-472 Burigi-Biharamulo GR and KBA	Burigi-Biharamulo GR and KBA	Disturbance or Harm to Wildlife	Disturbance (noise, visual) to IUCN CR species (white-backed vulture), IUCN EN species (steppe eagle) and multiple keystone species (raptors, owls, lion, leopard) during construction	Pollution prevention plan. Biodiversity management plan.	ACO01. BIO24. BIO25.	Project
Muleba, Biharamulo, Chato 438-472 Burigi-Biharamulo GR and KBA	Burigi-Biharamulo GR and KBA	Loss of Habitat for Species of Conservation Importance	Loss of breeding and forage habitat for creation of two new access tracks into the reserve	Reinstatement plan. Biodiversity management plan.	BIO33.	Project
Biharamulo 456-459 Burigi-Biharamulo GR and KBA	Burigi-Biharamulo GR and KBA	Loss of Habitat for Species of Conservation Importance	Facilitated access leading to habitat loss species in Burigi-Biharamulo GR through increased deforestation, hunting and human activity	Community health, safety and security plan. Labour management plan. Biodiversity management plan.	SOL05. BIO05.CHSW20. CHSW33. ECO06.	Project
Nzega 701 Coating facility	Coating facility	Disturbance or Harm to Wildlife	Disturbance to species using the nearby Mwakalundi FR from construction activities and PIIM around the coating facility	Stakeholder engagement plan. Labour management plan.	SOL05. BIO05. ECO06. CHSW20.	Project
Igunga, Iramba 828-868 Wembere Steppe KBA and IBA	Wembere Steppe KBA and IBA	Loss of Habitat for Species of Conservation Importance	Loss of habitat within the IBA for a range of species it supports including the endemic species: Karamoja Apalis (IUCN VU), grey-breasted spurfowl (IUCN LC) and bubbling puddle frog (IUCN LC)	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Igunga, Iramba 828-868 Wembere Steppe KBA and IBA	Wembere Steppe KBA and IBA	Disturbance or Harm to Wildlife	Disturbance (noise and visual) to endemic species: Karamoja Apalis (IUCN vulnerable), grey-breasted spurfowl (IUCN least)	Pollution prevention plan.	ACO01. BIO24.	Project
Singida 936 Singida Lakes IBA	Singida Lakes IBA	Disposal of solid and liquid waste, Disposal of black and grey water, Accidental release of oil / chemicals and Disturbance or Harm to Wildlife	Potential pathway for contamination / sediment during construction on tributaries to lakes. Site is an IBA that supports migratory/congregatory species.	Soil management plan. Pollution prevention plan. Waste management plan. Biodiversity management plan.	BIO22. EPR01. EPR02. EPR04. WTR01.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Singida 936-996 Itigi-like thicket	Itigi-like thicket	Loss of Habitat for Species of Conservation Importance	Loss of endemic and or range-restricted (Black Star) plant species	Biodiversity management plan.	BIO01. BIO03. BIO04. BIO08. BIO38.	Project
Kondo 1035-1037 Swaga Swaga Game Reserve	Swaga Swaga Game Reserve	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of habitat surrounding the GR and potential disturbance (noise, lighting) which supports IUCN VU species (lion, leopard, elephant) as well as endemic or restricted range species	Biodiversity management plan.	BIO01. BIO03. BIO08. BIO38.	Project
Kondo 1035-1037 MCPY12	MCPY12	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Facilitated access leading to habitat loss to species in Swaga Swaga GR through increased deforestation, hunting and human activity.	Biodiversity management plan.	BIO01. BIO03. BIO08. BIO38.	Project
Kondo, Chemba 1028-1097 Miombo Woodland	Miombo Woodland	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of endemic range-restricted and vulnerable plant species	Biodiversity management plan.	BIO01. BIO03. BIO04. BIO08. BIO12. BIO38.	Project
Kiteto 1144-1224 Talamai OA and PRS1	Talamai OA and PRS1	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of breeding and forage habitat to species of conservation importance through the construction of MCPY13, MCPY14, PRS1 and the pipeline.	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Kiteto, Kilindi 1224-1238 Kitwai GCA (part of the Masai Steppe IBA)	Kitwai GCA (part of the Masai Steppe IBA)	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of breeding and forage habitat to species of conservation importance through the construction of MCPY13, MCPY14, PRS1 and the pipeline.	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Kiteto 1143.6 MCPY13	MCPY13	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of breeding and forage habitat to species of conservation importance through the construction of MCPY13, MCPY14, PRS1 and the pipeline.	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Kilindi 1237.5 MCPY14	MCPY14	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Loss of breeding and forage habitat to species of conservation importance through the construction of MCPY13, MCPY14, PRS1 and the pipeline.	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Kiteto 1144-1224 Talamai OA	Talamai OA	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)	Biodiversity management plan.	ACO01. BIO24.	Project
Kiteto, Kilindi 1224-1238 Kitwai GCA (part of the Masai Steppe IBA)	Kitwai GCA (part of the Masai Steppe IBA)	Disturbance or Harm to Wildlife	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)	Biodiversity management plan.	ACO01. BIO24.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Kiteto 1143.6 MCPY13	MCPY13	Disturbance or Harm to Wildlife	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)	Biodiversity management plan.	ACO01. BIO24.	Project
Kilindi 1237.5 MCPY14	MCPY14	Disturbance or Harm to Wildlife	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)	Biodiversity management plan.	ACO01. BIO24.	Project
Kiteto 1172 PRS1	PRS1	Disturbance or Harm to Wildlife	Disturbance (noise, lighting) to IUCN EN species (African wild dog), IUCN VU species (lion, leopard, elephant, giraffe, pancake tortoise) and migrant species (African migrant butterfly)	Biodiversity management plan.	ACO01. BIO24.	Project
Kiteto 1144-1224 Talamai OA	Talamai OA	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Direct mortality and habitat fragmentation for pancake tortoise	Biodiversity management plan.	BIO18. BIO21.	Project
Kiteto, Kilindi 1224-1238 Kitwai GCA (part of the Masai Steppe IBA)	Kitwai GCA (part of the Masai Steppe IBA)	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Direct mortality and habitat fragmentation for pancake tortoise	Biodiversity management plan.	BIO18. BIO21.	Project
Kiteto 1143.6 MCPY13	MCPY13	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Direct mortality and habitat fragmentation for pancake tortoise	Biodiversity management plan.	BIO18. BIO21.	Project
Kilindi 1237.5 MCPY14	MCPY14	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Direct mortality and habitat fragmentation for pancake tortoise	Biodiversity management plan.	BIO18. BIO21.	Project
Kiteto 1172 PRS1	PRS1	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Direct mortality and habitat fragmentation for pancake tortoise	Biodiversity management plan.	BIO18. BIO21.	Project
Kiteto 1143.6 MCPY13	MCPY13	Disturbance or Harm to Wildlife	Disturbance to species using adjacent habitat through increase noise, lighting and human activity at the camp. Exacerbated by PIIM and subsequent induced development	Project induced in-migration management plan. Pollution prevention plan.	ACO01. BIO24. ECO06.	Project
Kilindi 1237.5 MCPY14	MCPY14	Disturbance or Harm to Wildlife	Disturbance to species using adjacent habitat through increase noise, lighting and human activity at the camp. Exacerbated by PIIM and subsequent induced development	Project induced in-migration management plan. Pollution prevention plan.	ACO01. BIO24. ECO06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Kiteto 1144-1224 Talamai OA	Talamai OA	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Use of upgraded access road into reserve by nonproject persons. Facilitated access leading to habitat loss and disturbance to bird and mammal species in Talamai OA through increased deforestation, noise, lighting, hunting and human activity during construction and operation	Biodiversity management plan. Labour management plan. Community health, safety and security plan. Stakeholder engagement plan.	SOL05. ECO06.	Project
Kiteto 1172 PRS1	PRS1	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Use of upgraded access road into reserve by nonproject persons. Facilitated access leading to habitat loss and disturbance to bird and mammal species in Talamai OA through increased deforestation, noise, lighting, hunting and human activity during construction and operation	Biodiversity management plan. Labour management plan. Community health, safety and security plan. Stakeholder engagement plan.	SOL05. ECO06.	Project
Tanga 1424 Coastal vegetation mosaic near the Sigi River	Coastal vegetation mosaic near the Sigi River	Disturbance or Harm to Wildlife	Loss of high and very high sensitivity plant species	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO04. BIO08. BIO12. BIO38.	Project
Tanga 1443 Coastal vegetation mosaic near the MST	Coastal vegetation mosaic near the MST	Disturbance or Harm to Wildlife	Loss of high and very high sensitivity plant species	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO04. BIO08. BIO12. BIO38.	Project
Tanga 1443 MST	MST	Loss of Habitat for Species of Conservation Importance	Habitat loss during construction of pipeline and MST for endemic and migratory species from site clearance	Biodiversity management plan. Reinstatement plan.	BIO01. BIO03. BIO08. BIO38.	Project
Tanga 1443 MST	MST	Disturbance or Harm to Wildlife	Disturbance during construction for endemic and migratory species from site clearance	Biodiversity management plan. Community health, safety and security plan. Transport and road safety management plan.	ACO01. BIO24.	Project
Tanga 1443 MST	MST	Loss of Habitat for Species of Conservation Importance and Disturbance or Harm to Wildlife	Upgrade of access road to MST. Loss of breeding and forage habitat and disturbance to endemic and migratory species through increase noise, lighting and human activity during construction of roads	Biodiversity management plan. Community health, safety and security plan. Transport and road safety management plan. Project induced in-migration management plan.	ACO01. BIO24. ECO06. SOL05.	Project
Muleba, Biharamulo, Chato 420-469 Protected and internationally recognised areas (Ruiga River FR)	Protected and internationally recognised areas (Ruiga River FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan.	BIO01.	Project
Chato 535-549 Protected and internationally recognised areas (Burigi-Biharamulo FR)	Protected and internationally recognised areas (Burigi-Biharamulo FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan.	BIO01.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Chato, Geita 551-557 Protected and internationally recognised areas (Uyovu FR)	Protected and internationally recognised areas (Uyovu FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan.	BIO01.	Project
Mbogwe, Kahama Township Authority 622-644.5 Protected and internationally recognised areas (Ngogwa Busangi FR)	Protected and internationally recognised areas (Ngogwa Busangi FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan.	BIO01.	Project
Nzega 698-701 Protected and internationally recognised areas (Mwakalundi FR)	Protected and internationally recognised areas (Mwakalundi FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan.	BIO01.	Project
Missenyi 302-312 Minziro NFR, IBA and KBA	Minziro NFR, IBA and KBA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan.	BIO01. BIO03. BIO08. BIO11. BIO19. BIO21. BIO26. BIO38. ACO01. ACO07. ACO08.	Project
Muleba, Biharamulo, Chato 438-472 Burigi-Biharamulo GR and KBA	Burigi-Biharamulo GR and KBA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan. Pollution prevention plan.	BIO01. BIO03. BIO08. BIO11. BIO19. BIO21. BIO26. BIO38. ACO01. ACO07. ACO08.	Project
Kiteto 1144-1238 Talamai OA	Talamai OA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan. Pollution prevention plan.	BIO01. BIO03. BIO08. BIO11. BIO19. BIO21. BIO26. BIO38. ACO01. ACO07. ACO08.	Project
Kiteto, Kilindi 1224-1238 Kitwai GCA	Kitwai GCA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan. Pollution prevention plan.	BIO01. BIO03. BIO08. BIO11. BIO19. BIO21. BIO26. BIO38. ACO01. ACO07. ACO08.	Project
Kilindi 1302.6 Handeni GCA	Handeni GCA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan. Pollution prevention plan.	BIO01. BIO03. BIO08. BIO11. BIO19. BIO21. BIO26. BIO38. ACO01. ACO07. ACO08.	Project
Tanga East African Coastal Forest EBA	East African Coastal Forest EBA	Loss of Habitat Disturbance to Wildlife	Disturbance to species using habitat surrounding the MST and PIIM leading to increased deforestation and bushmeat hunting leading to a loss of integrity or ecological function	Biodiversity management plan. Project induced in-migration plan. Stakeholder engagement plan. Pollution prevention plan.	ACO01. BIO24.	Project
TBC 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.	Soil management plan. Community health, safety and security plan.	SOL04. SOL05. SOL06. SOL07.	Project
TBC 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. Community health, safety and security plan.	SOL04. SOL05. SOL06. SOL07.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Bukombe 604.7 Kigosi River	Kigosi River	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Nzega 713.1 Nawa River	Nawa River	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Nzega 729 Floodplain draining to the Nzega urban water-supply reservoir	Floodplain draining to the Nzega urban water-supply reservoir	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Nzega 739.8 Ephemeral watercourse	Ephemeral watercourse	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Igunga 796.7-813.6 Ephemeral watercourse	Ephemeral watercourse	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Iramba 854.8 Kinkungu River	Kinkungu River	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Kondoa 1044 Bubu River	Bubu River	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Chemba 1064 Bubu tributary	Bubu tributary	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Handeni 1337.1 Mnyuzi River	Mnyuzi River	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Singida 914.7 Watercourse at MCPY11	Watercourse at MCPY11	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Kiteto 1143.6 Watercourse at MCPY13	Watercourse at MCPY13	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Handeni Township Authority 1318 Watercourse at MCPY15	Watercourse at MCPY15	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Singida 931.1 Watercourse at PS1	Watercourse at PS1	Erosion and increased suspended sediment in watercourses	Erosion of river or channel banks, scour, sediment contamination of surface waters	Reinstatement plan. Soil management plan.	BIO07. BIO14. BIO17. BIO36. WTR03. WTR05.	Project
Muleba 405.5-419 ERU-MCPY6 at road KP3.5 and 5.9 Watercourse at MCPY6 PAR-PS3 ERU-PS3 at road KP5.0 and KP5.5 Watercourse at PS3	ERU-MCPY6 at road KP3.5 and 5.9 Watercourse at MCPY6 PAR-PS3 ERU-PS3 at road KP5.0 and KP5.5 Watercourse at PS3	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Watercourse at PS3						
Kondo 1035 ERU-MCPY12 at road KP2.7, 4.1, 6.0 and 7.4	ERU-MCPY12 at road KP2.7, 4.1, 6.0 and 7.4	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Kiteto 1143.6-1172 ERU-MCPY13 at road KP0.46, 2.4, 3.1, 3.5, 3.9, 4.7, 6.4, 10.2 and 11.1 Watercourse at MCPY13 Floodplain Watercourse PRS1	ERU-MCPY13 at road KP0.46, 2.4, 3.1, 3.5, 3.9, 4.7, 6.4, 10.2 and 11.1 Watercourse at MCPY13 Floodplain Watercourse PRS1	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Kilindi 1237.5 ERU-MCPY14 at road KP7.3 and 11.4	ERU-MCPY14 at road KP7.3 and 11.4	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Missenyi 325.5 Land at MCPY5	Land at MCPY5	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Igunga 800 Land at MCPY10 824.9 PS5	Land at MCPY10 824.9 PS5	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Singida 914.7 Watercourse at MCPY11	Watercourse at MCPY11	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Handeni Township Authority 1318 Watercourse at MCPY15	Watercourse at MCPY15	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Muheza 1403.5 Watercourse at MCPY16	Watercourse at MCPY16	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Biharamulo 458.1-458.3 Permanent wetland	Permanent wetland	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Mbogwe 610 PAR-PS4	PAR-PS4	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Handeni 1330 ERU-PRS2 at road KP1.1 and KP1.5 PRS2	ERU-PRS2 at road KP1.1 and KP1.5 PRS2	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Nzega 701-702 Coating facility	Coating facility	Management of waste and accidental	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
		release of oil or chemicals			WTR18. EPR01. EPR04.	
Tanga 1443 MST and LOF	MST and LOF	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Singida 914.7 Watercourse at PS6	Watercourse at PS6	Management of waste and accidental release of oil or chemicals	Contamination of surface water	Soil management plan. Reinstatement plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Mbogwe 610 PAR-PS4 at road KP0.2	PAR-PS4 at road KP0.2	Impeded flow in watercourses	Deterioration in surface water quality	Biodiversity management plan. Soil management plan. Pollution prevention plan.	BIO07. WTR05. WTR09. WTR10.	Project
Handeni 1330 ERU-PRS2 at road KP1.5	ERU-PRS2 at road KP1.5	Impeded flow in watercourses	Deterioration in surface water quality	Biodiversity management plan. Soil management plan. Pollution prevention plan.	BIO07. WTR05. WTR09. WTR10.	Project
Handeni 1370 Pangani River	Pangani River	Open-cut crossing	Deterioration in water quality	Reinstatement plan. Soil management plan. Natural resource management plan. Pollution prevention plan.	BIO07. BIO13. WTR05. WTR09. WTR10.	Project
Missenyi 325.5 MCPY5	MCPY5	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Muleba 419 MCPY6	MCPY6	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Chato 513 MCPY7	MCPY7	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Bukombe 594.5 MCPY8	MCPY8	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Nzega 701-702 MCPY9	MCPY9	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Igunga 800 MCPY10	MCPY10	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Singida 914.7 MCPY11	MCPY11	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Kondoa 1035 MCPY12	MCPY12	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Kiteto 1143.6 MCPY13	MCPY13	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Kilindi 1237.5 MCPY14	MCPY14	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
					WTR17. WTR18.	
Handeni Township Authority 1318 MCPY15	MCPY15	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Muheza 1403.5 MCPY16	MCPY16	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Nzega 701-702 Coating facility	Coating facility	Management of black and grey water	Contamination of groundwater	Pollution prevention plan. Waste management plan.	WTR01. WTR02. WTR08. WTR17. WTR18.	Project
Missenyi 325.5 MCPY5	MCPY5	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Muleba 419 MCPY6 405.4 PS3	MCPY6 405.4 PS3	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Chato 513 MCPY7	MCPY7	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Bukombe 594.5 MCPY8	MCPY8	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Nzega 701-702 MCPY9	MCPY9	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Igunga 800 MCPY10 824.9 PS5	MCPY10 824.9 PS5	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Singida 914.7 MCPY11	MCPY11	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Kondoa 1035 MCPY12	MCPY12	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Kiteto 1143.6 MCPY13	MCPY13	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Kilindi 1237.5 MCPY14	MCPY14	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
					WTR18. EPR01. EPR04.	
Handeni Township Authority 1318 MCPY15	MCPY15	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Muheza 1403.5 MCPY16	MCPY16	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Nzega 701-702 Coating facility	Coating facility	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Mbogwe 610 PS4	PS4	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Singida 914.7 PS6	PS6	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Handeni 1330 PRS2	PRS2	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Tanga 1443 MST and LOF	MST and LOF	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Waste management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Missenyi 325.5 MCPY5	MCPY5	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Muleba 419 MCPY6	MCPY6	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Chato 513 MCPY7	MCPY7	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Bukombe 594.5 MCPY8	MCPY8	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Nzega 701-702 MCPY9	MCPY9	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Igunga 800 MCPY10	MCPY10	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Singida 914.7 MCPY11	MCPY11	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Kondoa 1035 MCPY12	MCPY12	Abstraction of groundwater	Decreased water level due to water	Natural resource management plan	WTR24. WTR28.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
			abstraction for project use			
Kiteto 1143.6 MCPY13	MCPY13	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Kilindi 1237.5 MCPY14	MCPY14	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Muheza 1403.5 MCPY16	MCPY16	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Nzega 701-702 Coating facility	Coating facility	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Muleba, Biharamulo, Chato 420.5-469 Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserves	Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserves	Visual intrusion of project components into landscape	Change of landscape character	Biodiversity management plan. Reinstatement plan. Soil management plan.	BIO36. SOL10. SOL13.	Project
Muleba, Biharamulo, Chato 420.5-469 Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserves	Ruiga River Forest Reserve and Burigi-Biharamulo Game Reserves	Visual intrusion of project components into landscape	Change of views	Biodiversity management plan. Reinstatement plan. Soil management plan.	BIO36. SOL10. SOL13.	Project
Chemba 1082-1106 Potential blasting locations	Potential blasting locations	Visual intrusion of project components into landscape	Change of landscape character	Waste management plan. Reinstatement plan. Soil management plan.	LSC03. ACO08.	Project
Chemba 1082-1106 Potential blasting locations	Potential blasting locations	Visual intrusion of project components into landscape	Change of views	Waste management plan. Reinstatement plan. Soil management plan.	LSC03. ACO08.	Project
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.	SOL09.	Project
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.	SOL09.	Project
Missenyi 325.5 MCPY5	MCPY5	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Missenyi 325.5 MCPY5	MCPY5	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Muleba 419 MCPY6 405.4 PS3	MCPY6 405.4 PS3	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Muleba 419 MCPY6 405.4 PS3	MCPY6 405.4 PS3	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Chato 513 MCPY7	MCPY7	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Chato 513 MCPY7	MCPY7	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Bukombe 594.5 MCPY8	MCPY8	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Bukombe 594.5 MCPY8	MCPY8	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Nzega 702 MCPY9	MCPY9	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Nzega 702 MCPY9	MCPY9	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Igunga 800 MCPY10 824.9 PS5	MCPY10 824.9 PS5	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Igunga 800 MCPY10 824.9 PS5	MCPY10 824.9 PS5	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Singida 914.7 MCPY11	MCPY11	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Singida 914.7 MCPY11	MCPY11	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Kondoa 1035 MCPY12	MCPY12	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Kondoa 1035 MCPY12	MCPY12	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Kiteto 1143.6 MCPY13 1172 PRS1	MCPY13 1172 PRS1	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Kiteto 1143.6 MCPY13 1172 PRS1	MCPY13 1172 PRS1	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Kilindi 1237.5 MCPY14	MCPY14	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Kilindi 1237.5 MCPY14	MCPY14	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Muheza 1403.5 MCPY16	MCPY16	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Muheza 1403.5 MCPY16	MCPY16	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Nzega 701-702 Coating facility	Coating facility	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Nzega 701-702 Coating facility	Coating facility	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Mbogwe 610 PS4	PS4	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Mbogwe 610 PS4	PS4	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Singida 914.7 PS6	PS6	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Singida 914.7 PS6	PS6	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Handeni 1330 PRS2	PRS2	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Handeni 1330 PRS2	PRS2	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Tanga 1443 MST and LOF	MST and LOF	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	SOL10. SOL13.	Project
Tanga 1443 MST and LOF	MST and LOF	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	SOL10. SOL13.	Project
Missenyi 325.5 MCPY5	MCPY5	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Muleba 419 MCPY6	MCPY6	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Chato 513 MCPY7	MCPY7	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Bukombe 594.5 MCPY8	MCPY8	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Nzega 701-702 MCPY9	MCPY9	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Igunga 800 MCPY10	MCPY10	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Singida 914.7 MCPY11	MCPY11	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Kondoa 1035 MCPY12	MCPY12	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Kiteto 1143.6 MCPY13	MCPY13	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Kilindi 1237.5 MCPY14	MCPY14	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Muheza 1403.5 MCPY16	MCPY16	Release of gases, exhausts and vapours to atmosphere	Emissions of gaseous substances causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
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	AIR02. AIR03.	Project
Missenyi 325.5 MCPY5	MCPY5	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Muleba 419 MCPY6	MCPY6	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Chato 513 MCPY7	MCPY7	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Bukombe 594.5 MCPY8	MCPY8	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Nzega 701-702 MCPY9	MCPY9	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Igunga 800 MCPY10	MCPY10	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter from operation of generators causing reduced air quality	Pollution prevention plan	AIR02. AIR03.	Project
Singida 914.7 MCPY11	MCPY11	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Kondoa 1035 MCPY12	MCPY12	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Kiteto 1143.6 MCPY13	MCPY13	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Kilindi 1237.5 MCPY14	MCPY14	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
Muheza 1403.5 MCPY16	MCPY16	Release of gases, exhausts and vapours to atmosphere	Emissions of fine particulate matter causing reduced air quality from operation of generators	Pollution prevention plan	AIR02. AIR03.	Project
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	AIR02. AIR03.	Project
Missenyi 325.5 MCPY5	MCPY5	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Muleba 419 MCPY6	MCPY6	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Chato 513 MCPY7	MCPY7	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Bukombe 594.5 MCPY8	MCPY8	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Nzega 701-702 MCPY9	MCPY9	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Igunga 800 MCPY10	MCPY10	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Singida 914.7 MCPY11	MCPY11	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Kondoa 1035 MCPY12	MCPY12	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Kiteto 1143.6 MCPY13	MCPY13	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Kilindi 1237.5 MCPY14	MCPY14	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Muheza 1403.5 MCPY16	MCPY16	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
TBC Hydrotest sections	Hydrotest sections	Dust	Nuisance from mobilisation of dust by project vehicles	Pollution prevention plan. Traffic and road safety management plan.	AIR01.	Project
Nzega 701-702 Coating facility	Coating facility	Release of gases, exhausts and vapours to atmosphere	Emissions to air from the coating facility during operation	Pollution prevention plan.	AIR04.	Project
Missenyi 325.5 MCPY5	MCPY5	Noise	Disturbance or nuisance from noise generation during	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
			development of construction facilities			
Muleba 419 MCPY6	MCPY6	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Chato 513 MCPY7	MCPY7	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Bukombe 594.5 MCPY8	MCPY8	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Nzega 701-702 MCPY9	MCPY9	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Igunga 800 MCPY10	MCPY10	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Singida 914.7 MCPY11	MCPY11	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Kondoa 1035 MCPY12	MCPY12	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Kiteto 1143.6 MCPY13	MCPY13	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Kilindi 1237.5 MCPY14	MCPY14	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Muheza 1403.5 MCPY16	MCPY16	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Nzega 701-702 Coating facility	Coating facility	Noise	Disturbance or nuisance from noise generation during development of construction facilities	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Missenyi 325.5 MCPY5	MCPY5	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Muleba 419 MCPY6	MCPY6	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Chato 513 MCPY7	MCPY7	Vibration	Disturbance or damage from vibration generation during	Pollution prevention plan	ACO03. ACO04. ACO05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
			decommissioning of construction facilities			
Bukombe 594.5 MCPY8	MCPY8	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Nzega 701-702 MCPY9	MCPY9	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Igunga 800 MCPY10	MCPY10	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Singida 914.7 MCPY11	MCPY11	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Kondoa 1035 MCPY12	MCPY12	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Kiteto 1143.6 MCPY13	MCPY13	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Kilindi 1237.5 MCPY14	MCPY14	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Muheza 1403.5 MCPY16	MCPY16	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Nzega 701-702 Coating facility	Coating facility	Vibration	Disturbance or damage from vibration generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Missenyi 325.5 MCPY5	MCPY5	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Muleba 419 MCPY6	MCPY6	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Chato 513 MCPY7	MCPY7	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Bukombe 594.5 MCPY8	MCPY8	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Nzega 701-702 MCPY9	MCPY9	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Igunga 800 MCPY10	MCPY10	Noise	Disturbance or nuisance from	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
			operation of the MCPYs			
Singida 914.7 MCPY11	MCPY11	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Kondoa 1035 MCPY12	MCPY12	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Kiteto 1143.6 MCPY13	MCPY13	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Kilindi 1237.5 MCPY14	MCPY14	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Muheza 1403.5 MCPY16	MCPY16	Noise	Disturbance or nuisance from operation of the MCPYs	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Nzega 701-702 Coating facility	Coating facility	Noise	Disturbance or nuisance from operation of the coating facility	Pollution prevention plan	ACO01. ACO02. ACO04. AIR02.	Project
Chemba 1082-1106 Potential blasting locations	Potential blasting locations	Vibration	Damage to structures from blasting during construction with charges up to 2 kg MIC	Pollution prevention plan	ACO08	Project
Nzega 701-702 Coating facility	Coating facility	Noise	Disturbance or nuisance from noise generation during decommissioning of construction facilities	Pollution prevention plan	ACO03. ACO04. ACO05.	Project
Tanga 1424 Sigi River crossing	Sigi River crossing	Noise	Disturbance or nuisance from noise generated by horizontal directional drilling	Pollution prevention plan	ACO01. ACO02. ACO04.	Project
Missenyi 324 Kagera River crossing	Kagera River crossing	Noise	Disturbance or nuisance from noise generated by horizontal directional drilling	Pollution prevention plan	ACO01. ACO02. ACO04.	Project
Tanga 1424 Sigi River crossing	Sigi River crossing	Vibration	Generation of ground borne vibration causing potential structural or cosmetic damage during HDD	Pollution prevention plan	ACO01. ACO02. ACO04.	Project
Missenyi 324 Kagera River crossing	Kagera River crossing	Vibration	Generation of ground borne vibration causing potential structural or cosmetic damage during HDD	Pollution prevention plan	ACO01. ACO02. ACO04.	Project
Kiteto 1169 Kimana	Kimana	Provision of goods and services	Improvements in road conditions for business owners and public transport	Infrastructure and utilities management plan. Stakeholder engagement plan.	INF04. GNL01.	Project
Muheza 1405 Tanganyika	Tanganyika	Employment	Competition over employment opportunities	Infrastructure and utilities management plan. Stakeholder engagement plan.	INF04. GNL01.	Project
Muleba 418.5 Nkomero	Nkomero	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	INF04. GNL01.	Project
Kondoa 1038.5 Serya	Serya	Temporary Road Closure	Increased transportation costs and travel time with	Infrastructure and utilities management plan. Stakeholder engagement plan.	INF04. GNL01.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
			economic consequences			
Chemba 1139.5 Ndaleta	Ndaleta	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	INF04. GNL01.	Project
Chato 513 Mkungo	Mkungo	Temporary Road Closure	Increased transportation costs and travel time with economic consequences	Infrastructure and utilities management plan. Stakeholder engagement plan.	INF04. GNL01.	Project
Tanga 1141-1442.5 Putini and Chongoleani	Putini and Chongoleani	Employment	Dissatisfaction arising from unmet expectations	Stakeholder engagement plan. Project-induced in-migration management plan.	HR24. ECO04. ECO05.	Project
Tanga 1141-1442.5 Putini and Chongoleani	Putini and Chongoleani	Employment	Competition over employment opportunities	Stakeholder engagement plan. Project-induced in-migration management plan.	ECO04. ECO05.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	Employment	Household members seeking employment with the project will no longer be available for land-based livelihood activities	Stakeholder engagement plan. Labour management plan.	HR01. HR24. ECO07.	Project
Mbogwe 552 Iparamasa Village	Iparamasa Village	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of access to artisanal mining sites	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
Bukombe 608 Lubeho Village	Lubeho Village	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of access to artisanal mining sites	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
Kahama Township Authority 665 Zongomera Village	Zongomera Village	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of access to artisanal mining sites	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
Kiteto 1169 Kimana Village	Kimana Village	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of access to artisanal mining sites	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
557.4-583.9 604.7-639.7 Mbogwe District	Mbogwe District	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of access to licensed mining concessions	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
639.8-694.3 Kahama Township Authority	Kahama Township Authority	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of access to licensed mining concessions	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
Geita 556.4-557.4 Geita District	Geita District	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of access to licensed mining concessions	Pollution prevention plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. CHSW22. CHSW27.	Project
Mbogwe 405.4 PACs near PS4	PACs near PS3	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Mbogwe 610 PACs near PS4	PACs near PS4	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Igunga 824.9 PACs near PS5	PACs near PS5	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Singida 914.7 PACs near PS6	PACs near PS6	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Tanga 1442 PACs near the MST	PACs near the MST	Loss/severance of land and disruption to land-based livelihoods	Permanent loss of grazing land	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	PIIM	Reduction in local fish stocks due to PIIM.	Project-induced in-migration management plan.	HR33. ECO06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	PIIM	Reduction in local fish stocks due to PIIM.	Project-induced in-migration management plan.	HR33. ECO06.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	PIIM	Reduction in local fish stocks due to PIIM.	Project-induced in-migration management plan.	HR33. ECO06.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	PIIM	Reduction in local fish stocks due to PIIM.	Project-induced in-migration management plan.	HR33. ECO06.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	PIIM	Reduction in local fish stocks due to PIIM.	Project-induced in-migration management plan.	HR33. ECO06.	Project
TBC PACs close to pipeline river crossings	PACs close to pipeline river crossings	Impeded flow in watercourses	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.	CHSW22. SOL12. WTR05. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Impeded flow in watercourses	Loss of, or restriction of access to, existing fishing grounds, transit routes, fish landing sites and market sites due to the MEZ	Resettlement action plan. Marine livelihoods restoration plan.	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Impeded flow in watercourses	Loss of, or restriction of access to, intertidal gleaning sites due to the MEZ	Resettlement action plan. Marine livelihoods restoration plan.	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Impeded flow in watercourses	Damage to, or displacement of, fishing gear by project construction vessels	Community health, safety and security plan. Stakeholder engagement plan. Marine vessel management plan.	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Impeded flow in watercourses	Displacement of fishing effort (from loss of, or restriction of access to, grounds) into adjacent grounds	Resettlement action plan.	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Noise	Loss or displacement of fish due to construction activities affecting fishing livelihoods	Resettlement action plan. Stakeholder engagement plan. Monitoring and reporting plan.	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Noise	Noise impacts on fisherfolk	Stakeholder engagement plan. Community health, safety and security plan. Resettlement action plan. Marine vessel management plan. Monitoring and reporting plan.	CHSW22. GNL01. ACO01.	Project
Tanga 1429-1442.5 Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Community safety	Increased risk of accidents due to increased boat traffic outside the restricted areas	Community health, safety and security plan. Resettlement action plan. Marine vessel management plan. Stakeholder engagement plan. Monitoring and reporting plan.	MPHY07. CHSW22. MLIV01. MCHSW02.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Tanga 1429-1442.5 Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	PIIM	Reduction in local fish stocks due to PIIM	Project-induced in- migration management plan.	HR33. ECO06	Project
Chemba PACs between KP1082 and KP1106	PACs between KP1082 and KP1106	Vibration	The generation of vibrations during construction works	Pollution prevention plan	ACO03. ACO06. LNP03. GNL01. CHSW22.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	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.	GNL10. HR37. LNP03.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	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.	GNL10. HR37. LNP03.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	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.	GNL10. HR37. LNP03.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	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.	GNL10. HR37. LNP03.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	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.	GNL10. HR37. LNP03.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	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.	GNL10. HR37. LNP03.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	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.	GNL10. HR37. LNP03.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	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.	GNL10. HR37. LNP03.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	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.	GNL10. HR37. LNP03.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	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.	GNL10. HR37. LNP03.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Resettlement	Permanent loss of private land due to project land acquisition	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan.	GNL10. HR37. LNP03.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				Monitoring and reporting plan.		
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	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.	GNL10. HR37. LNP03.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	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.	GNL10. HR37. LNP03.	Project
Muheza PACs between KP1380 and KP1410	PACs between KP1380 and KP1410	Resettlement	Permanent loss of private land due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Igunga 800 PACs near MCPY10	PACs near MCPY10	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Singida 914.7 PACs near MCPY11	PACs near MCPY11	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Kondoa 1035 PACs near MCPY12	PACs near MCPY12	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Kiteto 1143.6 PACs near MCPY13	PACs near MCPY13	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				Monitoring and reporting plan.		
Kilindi 1237.5 PACs near MCPY14	PACs near MCPY14	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Handeni Township Authority 1318 PACs near MCPY15	PACs near MCPY15	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Muheza 1403.5 PACs near MCPY16	PACs near MCPY16	Resettlement	Land speculation by third parties	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Igunga 800 PACs near MCPY10	PACs near MCPY10	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Singida 914.7 PACs near MCPY11	PACs near MCPY11	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Kondoa 1035 PACs near MCPY12	PACs near MCPY12	Resettlement	Land and property specilation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Kiteto 1143.6 PACs near MCPY13	PACs near MCPY13	Resettlement	Land and property speculation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Kilindi 1237.5 PACs near MCPY14	PACs near MCPY14	Resettlement	Land and property speculation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Handeni Township Authority 1318 PACs near MCPY15	PACs near MCPY15	Resettlement	Land and property speculation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Muheza 1403.5 PACs near MCPY16	PACs near MCPY16	Resettlement	Land and property speculation by landowners	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan. Monitoring and reporting plan.	LNP03. GNL01. HR18. CHSW22. CHSW27. LIV06.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	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.	GNL10. HR37. LNP03.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	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.	GNL10. HR37. LNP03.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	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.	GNL10. HR37. LNP03.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	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.	GNL10. HR37. LNP03.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	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.	GNL10. HR37. LNP03.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	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.	GNL10. HR37. LNP03.	Project
Igunga 800 PACs near MCPY10	PACs near MCPY10	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.	GNL10. HR37. LNP03.	Project
Singida 914.7 PACs near MCPY11	PACs near MCPY11	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.	GNL10. HR37. LNP03.	Project
Bukombe 1035 PACs near MCPY12	PACs near MCPY12	Resettlement	New disputes and exacerbation of pre- existing disputes and	Resettlement action plan. Stakeholder engagement plan. Community health, safety and security plan.	GNL10. HR37. LNP03.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
			conflict around land and property	Monitoring and reporting plan.		
Nzega 1143.6 PACs near MCPY13	PACs near MCPY13	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.	GNL10. HR37. LNP03.	Project
Nzega 1237.5 PACs near MCPY14	PACs near MCPY14	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.	GNL10. HR37. LNP03.	Project
Handeni Township Authority 1318 PACs near MCPY15	PACs near MCPY15	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.	GNL10. HR37. LNP03.	Project
Muheza 1403.5 PACs near MCPY16	PACs near MCPY16	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.	GNL10. HR37. LNP03.	Project
Chemba PACs between KP1380 and KP1410	PACs between KP1380 and KP1410	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.	GNL10. HR37. LNP03.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Igunga 800 PACs near MCPY10	PACs in proximity to MCPY10	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Singida 914.7 PACs near MCPY11	PACs in proximity to MCPY11	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Bukombe 1035 PACs near MCPY12	PACs in proximity to MCPY12	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 1143.6 PACs near MCPY13	PACs in proximity to MCPY13	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 1237.5	PACs in proximity to MCPY14	Resettlement	Permanent loss of physical structures due	Stakeholder engagement plan. Resettlement action	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
PACs near MCPY14			to project land acquisition	plan. Monitoring and reporting plan.		
Handeni Township Authority 1318 PACs near MCPY15	PACs in proximity to MCPY15	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Muheza 1403.5 PACs near MCPY16	PACs in proximity to MCPY16	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Chemba PACs between KP1380 and KP1410	PACs between KP1380 and KP1410	Resettlement	Permanent loss of physical structures due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Igunga 800 PACs near MCPY10	PACs near MCPY10	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Singida 914.7 PACs near MCPY11	PACs near MCPY11	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Bukombe 1035 PACs near MCPY12	PACs near MCPY12	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 1143.6 PACs near MCPY13	PACs near MCPY13	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Nzega 1237.5 PACs near MCPY14	PACs near MCPY14	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Handeni Township Authority 1318 PACs near MCPY15	PACs near MCPY15	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Muheza 1403.5 PACs near MCPY16	PACs near MCPY16	Resettlement	Permanent loss of local enterprises due to project land acquisition	Stakeholder engagement plan. Resettlement action plan. Monitoring and reporting plan.	LNP03. GNL01. HR37. CHSW22. CHSW27.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Resettlement	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.	LNP03. LIV06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Muleba 419 PACs near MCPY6	PACs near MCPY6	Resettlement	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.	LNP03. LIV06.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Resettlement	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.	LNP03. LIV06.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Resettlement	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.	LNP03. LIV06.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Resettlement	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.	LNP03. LIV06.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Resettlement	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.	LNP03. LIV06.	Project
Igunga 800 PACs near MCPY10	PACs near MCPY10	Resettlement	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.	LNP03. LIV06.	Project
Singida 914.7 PACs near MCPY11	PACs near MCPY11	Resettlement	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.	LNP03. LIV06.	Project
Kondoa 1035 PACs near MCPY12	PACs near MCPY12	Resettlement	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.	LNP03. LIV06.	Project
Kiteto 1143.6 PACs near MCPY13	PACs near MCPY13	Resettlement	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.	LNP03. LIV06.	Project
Kilindi 1237.5 PACs near MCPY14	PACs near MCPY14	Resettlement	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.	LNP03. LIV06.	Project
Handeni Township Authority 1318 PACs near MCPY15	PACs near MCPY15	Resettlement	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.	LNP03. LIV06.	Project
Muheza 1403.5 PACs near MCPY16	PACs near MCPY16	Resettlement	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.	LNP03. LIV06.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan.	CHSW06. CHSW16. HR36.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				Labour management plan.		
Muleba 419 PACs near MCPY6	PACs near MCPY6	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	Employment	Increased risk of vector-related diseases among the local workforce	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
	PACs near MCPY6	Damage to third-party infrastructure (pipeline, cables and community infrastructure)	Temporary disruption to power supply due to planned outage or accidental damage to cables or other pipelines during pipeline construction	Infrastructure and utilities management plan	INF04. LNP03. GNL01. CHSW22.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Damage to third-party infrastructure (pipeline, cables and community infrastructure)	Temporary disruption to power supply due to planned outage or accidental damage to cables or other pipelines during pipeline construction	Infrastructure and utilities management plan	INF04. LNP03. GNL01. CHSW22.	Project
Muheza 1405 Tanganyika	Tanganyika	Use of Road Network	Traffic congestion leading to delays	Stakeholder engagement plan. Transport and road safety management plan.	CHSW05. CHSW20. INF04. INF10. INF13.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management	WTR24. WTR28.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				plan. Stakeholder engagement plan.		
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	Abstraction of groundwater	Reduced availability of groundwater	Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	WTR24. WTR28.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	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 resource management plan. Pollution prevention plan. Waste management	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				plan. Stakeholder engagement plan.		
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	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 resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Employment	Inadequate vector management activities causing an increase in vector resistance and negative impacts on preventative interventions	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	CHSW06. CHSW16. HR36.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
			implemented by local authorities			
Muleba 419 PACs near MCPY6	PACs near MCPY6	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Igunga 800 PACs near MCPY10	PACs near MCPY10	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Singida 914.7 PACs near MCPY11	PACs near MCPY11	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Bukombe 1035 PACs near MCPY12	PACs near MCPY12	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Nzega 1143.6 PACs near MCPY13	PACs near MCPY13	Employment	Inadequate vector management activities causing an increase in vector resistance and negative impacts on	Community health, safety and security plan. Occupational health, safety and security plan.	CHSW06. CHSW16. HR36.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
			preventative interventions implemented by local authorities	Labour management plan.		
Nzega 1237.5 PACs near MCPY14	PACs near MCPY14	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Handeni Township Authority 1318 PACs near MCPY15	PACs near MCPY15	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Muheza 1403.5 PACs near MCPY16	PACs near MCPY16	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. Labour management plan.	CHSW06. CHSW16. HR36.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				plan. Stakeholder engagement plan.		
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan. Waste management plan. Stakeholder engagement plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	Employment	Outbreaks of infectious diseases within MCPYs affecting the health of PACs	Community health, safety and security plan. Occupational health, safety and security plan. Natural resource management plan. Pollution prevention plan.	CHSW07. CHSW15. CHSW23. CHSW32. CHSW33. CHSW34. HR36. WHSW05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				Waste management plan. Stakeholder engagement plan.		
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	PIIM	PIIM of job seekers affecting PACs	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	HR33. ECO06. CHSW34.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	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.	ECO06.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	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.	ECO06.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	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.	ECO06.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	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.	ECO06.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	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.	ECO06.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	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.	ECO06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				Pollution prevention plan. Waste management plan. Stakeholder engagement plan.		
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	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.	ECO06.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	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.	ECO06.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	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.	ECO06.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	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.	ECO06.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	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.	ECO06.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	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	ECO06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				plan. Stakeholder engagement plan.		
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	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.	ECO06.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	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.	ECO06.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	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.	ECO06.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	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.	ECO06.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	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.	ECO06.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	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.	ECO06.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	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	ECO06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				plan. Stakeholder engagement plan.		
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	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.	ECO06.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	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.	ECO06.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	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.	ECO06.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	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.	ECO06.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	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.	ECO06.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	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.	ECO06.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	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.	ECO06.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	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.	ECO06. GNL01.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	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.	ECO06. GNL01.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	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.	ECO06. GNL01.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	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.	ECO06. GNL01.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	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.	ECO06. GNL01.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	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.	ECO06. GNL01.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	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.	ECO06. GNL01.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	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.	ECO06. GNL01.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	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.	ECO06. GNL01.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	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.	ECO06. GNL01.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	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.	ECO06. GNL01.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	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.	ECO06. GNL01.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	Community dynamics	Change in local community dynamics due to employment opportunities	Project-induced in-migration management plan. Community health, safety and security plan.	ECO06. GNL01.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
				Stakeholder engagement plan.		
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management plan. Community health, safety and security plan. Stakeholder engagement plan.	ECO06. GNL01.	Project
Muheza 1403.5	PACs in proximity to MCPY16	Community dynamics	PIIM causing an increase in social ills	Project-induced in-migration management	ECO06. GNL01.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
PACs in proximity to MCPY16				plan. Community health, safety and security plan. Stakeholder engagement plan.		
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Muleba 419 PACs near MCPY6	PACs near MCPY6	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	Community dynamics	Tensions between nonlocal construction workforce and PACs	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	WHSW11.	Project
Missenyi 325.5 PACs near MCPY5	PACs near MCPY5	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Muleba 419 PACs near MCPY6	PACs near MCPY6	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Chato 513 PACs near MCPY7	PACs near MCPY7	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Bukombe 594.5 PACs near MCPY8	PACs near MCPY8	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Nzega 701-702 PACs near MCPY9	PACs near MCPY9	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Nzega 701-702 PACs near Coating Facility	PACs near Coating Facility	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Igunga 800 PACs in proximity to MCPY10	PACs in proximity to MCPY10	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Singida 914.7 PACs in proximity to MCPY11	PACs in proximity to MCPY11	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Kondoa 1035 PACs in proximity to MCPY12	PACs in proximity to MCPY12	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Kiteto 1143.6 PACs in proximity to MCPY13	PACs in proximity to MCPY13	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Kilindi 1237.5 PACs in proximity to MCPY14	PACs in proximity to MCPY14	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Handeni Township Authority 1318 PACs in proximity to MCPY15	PACs in proximity to MCPY15	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Muheza 1403.5 PACs in proximity to MCPY16	PACs in proximity to MCPY16	Community welfare	Conversion of MCPY structures into community facilities, leading to improved service provision in PACs.	Stakeholder Engagement Plan	CHSW22	Project
Tanga 1429-1442.5 Mleni, Mabokweni, Helani, Putini and Chongoleani (KP1429-1442.5)	Mleni, Mabokweni, Helani, Putini and Chongoleani (KP1429-1442.5)	Community dynamics	Conflict between PACs and project security personnel	Community health, safety and security plan. Stakeholder engagement	CHSW03. CHSW21.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Chongoleani (KP1429–1442.5)				plan. Resettlement action plan.		
Missenyi 325.3-325.7 CHT068: Major mound CHT069: Remains of mud walls, evidence of recently abandoned houses CHT074: Remains of mud walls, evidence of recently abandoned houses CHT085: Major mound	CHT068: Major mound CHT069: Remains of mud walls, evidence of recently abandoned houses CHT074: Remains of mud walls, evidence of recently abandoned houses CHT085: Major mound	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Bukoba Rural 357.6 CHT347: surface potsherds, Shahitogi CHT086: Two tombs	CHT347: surface potsherds, Shahitogi CHT086: Two tombs	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Muleba 405.9-431.1 CH348: Grave at Kigagati CH350: Surface potsherds, Bikokwa	CH348: Grave at Kigagati CH350: Surface potsherds, Bikokwa	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Chato 492.8-552.5 CHT088: Cultural mound with ashes within a farmland. CHT194: One potsherd CHT195: Nine lithic materials CHT090: Cultural mound CHT091: Ethnographic objects; contemporary ceramics with decoration CHT092: Cultural mound with many diagnostic ceramics CHT093: Scatters of ceramics about 400 m ² . Late Stone Age materials. Number of diagnostic decorated ceramics. Area of archaeological potential.	CHT088: Cultural mound with ashes within a farmland. CHT194: One potsherd CHT195: Nine lithic materials CHT090: Cultural mound CHT091: Ethnographic objects; contemporary ceramics with decoration CHT092: Cultural mound with many diagnostic ceramics CHT093: Scatters of ceramics about 400 m ² . Late Stone Age materials. Number of diagnostic decorated ceramics. Area of archaeological potential.	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Biharamulo 506.4 CHT310: Surface lithics, Kasozibakaya	CHT310: Surface lithics, Kasozibakaya	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Mbogwe 557.8-633 CHT197: Grave CHT198: Grave CHT200: Six potsherds CHT205: Four potsherds CH314: Surface potsherds, Lubeho CHT094: Three tombs; according to Mstafaka Saliboko, these belong to the Mpangabure family	CHT197: Grave CHT198: Grave CHT200: Six potsherds CHT205: Four potsherds CH314: Surface potsherds, Lubeho CHT094: Three tombs; according to Mstafaka Saliboko, these belong to the Mpangabure family	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Mpangabure family CHT209: One lithic-like tool CHT210: Four potsherds	CHT209: One lithic-like tool CHT210: Four potsherds					
Mbogwe 566.5 CHT256: Mwingilo-lbambula ritual site	CHT256: Mwingilo-lbambula ritual site	Disturbance or loss of cultural heritage	Damage or disturbance of traditional beliefs or practices	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Kahama Township Authority 658.5-683.6 CHT211: Two decorated potsherds CHT264: Family members agreed that grave can be relocated, if affected, and liaison is required with the family at an appropriate time in advance of construction CHT252: Nyahanga graveyard site CHT251: Mhungula graveyard site CH316: Surface potsherds, Bumbiti	CHT211: Two decorated potsherds CHT264: Family members agreed that grave can be relocated, if affected, and liaison is required with the family at an appropriate time in advance of construction CHT252: Nyahanga graveyard site CHT251: Mhungula graveyard site CH316: Surface potsherds, Bumbiti	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Kahama Township Authority 658.6 CHT315: Malindi Ritual site with Mahari grave CHT265: Ritual tree with grave. Villagers use the tree for ritual performances. According to the village leadership, both can be relocated and liaison is required with the village leadership at an appropriate time in advance of construction.	CHT315: Malindi Ritual site with Mahari grave CHT265: Ritual tree with grave. Villagers use the tree for ritual performances. According to the village leadership, both can be relocated and liaison is required with the village leadership at an appropriate time in advance of construction.	Disturbance or loss of cultural heritage	Damage or disturbance of traditional beliefs or practices	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Nzega 699.2-742.4 CHT096: Daub that signifies an abandoned settlement CHT097: Cultural mound CHT095: Recorded iron ore but no evidence of iron smelting nearby CHT266: Three stone tools; three potsherds CHT267: One potsherd CH317: Grave at Sagida CHT268: Three potsherds	CHT096: Daub that signifies an abandoned settlement	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Igunga 773.1-822.5 CHT269: Two potsherds; stone tool CHT249: Pottery Site 2 CHT250: Pottery Site 3	CHT269: Two potsherds; stone tool CHT249: Pottery Site 2 CHT250: Pottery Site 3	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Site 3 CHT270: Four lithic materials	CHT270: Four lithic materials					
Iramba 873.1-899.2 CHT271: One grave CHT272: Two decorated potsherds CHT061: Ntwiga 3. Information from members of the ESIA team indicate that the site is 40 km away from here, no local knowledge of the site but site retained in the database of sites until position confirmed. CHT102: Cultural mounds CHT123: Scatter of ceramics CHT273: Four graves. When Lunuwa well dries, the elders of Mukulu conduct rituals on top of these old graves. They slaughter black sheep on the grave and eat its meat without salt. They take the manure of the sheep to Lunuwa well and spread it in the well. Thereafter, the well will fill with water. CHT274: Stone microlith, late Stone Age CHT275; One potsherd to stone tools CHT276: Two graves	CHT271: One grave CHT272: Two decorated potsherds CHT061: Ntwiga 3. Information from members of the ESIA team indicate that the site is 40 km away from here, no local knowledge of the site but site retained in the database of sites until position confirmed. CHT102: Cultural mounds CHT123: Scatter of ceramics CHT273: Four graves. When Lunuwa well dries, the elders of Mukulu conduct rituals on top of these old graves. They slaughter black sheep on the grave and eat its meat without salt. They take the manure of the sheep to Lunuwa well and spread it in the well. Thereafter, the well will fill with water. CHT274: Stone microlith, late Stone Age CHT275; One potsherd to stone tools CHT276: Two graves	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Singida 931.1-974.6 CHT277: Two graves CHT278: Two graves at PS6 CHT279: Amburiya clan bury people in this area. More than seven graves. This area is still used for burials. CHT125: Four grinding stones, six pestles and materials of later Stone Age CHT280: Six graves. Sometimes the Igauri villagers conduct rituals on the graves whenever there are socio-cultural problems. CHT281: Three potsherds and one grinding stone CHT282: Four graves: Leti Nyuha, Change Nyuha,	CHT277: Two graves	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Mbula Nyuha and Mwinga Nyuha; all buried 1936 CHT238: Ifombou Mosque southwest of KP938 CH320: Graveyard, Ifombou II CH321: Graveyard, Ifombou I CHT283: Three Graves: Sita Nkunguli Msagha, Tandu Msaghu Nyuha and Muna Wawa Nyuha; all buried before 1936 CH322: Graveyard, Ifombou III CHT284: Five potsherds CHT285: Old grave of Ihafwa Muna Kingi. The only mark is a tree called Moghiankuya in the Nyaturu language. CH323: STP78 Pottery, Mrama CHT286: Three historic potsherds CHT287: 10 graves belonging to the Wanyamninga clan CHT288: Old grave belonging to Makiya CHT289: Four historic potsherds CHT290: Two graves: Juma Hango (1995) and Said Hango Ghambuja (1995) CHT291: One grave believed to be very old CHT176: Recorded rock art; diagnostic ceramics probably dating to the Iron Age CHT292: Grave of Marove Sangwa, buried 1968 CHT293: Three potsherds CHT295: Three graves: Shabani Gufa (2000), Mwanjuma Gufa (1998) and Hawa Shabani Gufa (1996) CHT047: Fifteen potsherds CHT296: Seven historic potsherds on the surface CHT183: Daub and limited cultural mounds, 19th-century settlement that was probably abandoned during villagisation CHT297: One diagnostic pottery sherd						
Singida 962.7 CHT053: Mrama	CHT053: Mrama tree. Under the Mrama tree, the	Disturbance or loss of cultural heritage	Damage or disturbance of traditional beliefs or practices	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
tree. Under the Mrama tree, the elders of the Nyankindi clan normally conduct rituals when they need rainfall. They slaughter a black sheep, eat its meat without salt and burn the bones.	elders of the Nyankindi clan normally conduct rituals when they need rainfall. They slaughter a black sheep, eat its meat without salt and burn the bones.					
Hanang 997.3-1007.3 CHT298: Worshipping tree (tiita) for local people. Villagers normally pray when rain is needed. CHT299: Three ritual trees for rainmaking and other social activities CH324: STP64 lithic tool, Masusu	CHT298: Worshipping tree (tiita) for local people. Villagers normally pray when rain is needed. CHT299: Three ritual trees for rainmaking and other social activities CH324: STP64 lithic tool, Masusu	Disturbance or loss of cultural heritage	Damage or disturbance of traditional beliefs or practices	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Kondoa 1030.4-1039.8 CHT301: Grave CHT302: Furnace walls, slags, tuyeres, pottery and charcoal CHT263: Five Christian graves southwest of pipeline	CHT301: Grave CHT302: Furnace walls, slags, tuyeres, pottery and charcoal CHT263: Five Christian graves southwest of pipeline	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Chemba 1064.6-1115.8 CH325: Family graveyard, Cheku B CH326: Surface potsherds, Salala CHT304: Kulaki Early Iron Age pottery site	CH325: Family graveyard, Cheku B CH326: Surface potsherds, Salala CHT304: Kulaki Early Iron Age pottery site	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Kiteto 1161.1-1235.3 CHT303: Kalikala Early Iron Age pottery site CHT228: Amei historic pottery site northwest to KP1205 CH327: surface lithic materials, Loolera CH328: STP30 potsherds, Loolera	CHT303: Kalikala Early Iron Age pottery site CHT228: Amei historic pottery site northwest to KP1205 CH327: surface lithic materials, Loolera CH328: STP30 potsherds, Loolera	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Kiteto 1208.5 CHT227: Olpulu site	CHT227: Olpulu site	Disturbance or loss of cultural heritage	Damage or disturbance of traditional beliefs or practices	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Kilindi 1246-1300.1 CH329: STP29 lithics and surface potsherds, Ngiligili CH330: STP25 lithics Stone Age stratified site, Komukota CHT331: STP23 lithics and potsherds, Kikwembe CHT332: STP24 lithic materials, Matembo	CH329: STP29 lithics and surface potsherds, Ngiligili CH330: STP25 lithics Stone Age stratified site, Komukota CHT331: STP23 lithics and potsherds, Kikwembe CHT332: STP24 lithic materials, Matembo	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Handeni Township Authority 1303.8 CHT114: Kwamadule graveyard	CHT114: Kwamadule graveyard	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Handeni 1310-1365.5 CHT115: Ruins CHT333: Surface potsherds, Misima CHT117: Settlement CHT334: Said Daudi, 12-year-old grave CHT335: Sonyoro Kalau, 5-year-old grave CHT337: STP18 potsherd and lithic materials, Nkale CHT118: Enclosure CHT338: STP15 potsherds, Sindeni CHT339: STP16 potsherds, Sindeni CHT127: Chang'ombe Sir Juma graves	CHT115: Ruins CHT333: Surface potsherds, Misima CHT117: Settlement CHT334: Said Daudi, 12-year-old grave CHT335: Sonyoro Kalau, 5-year-old grave CHT337: STP18 potsherd and lithic materials, Nkale CHT118: Enclosure CHT338: STP15 potsherds, Sindeni CHT339: STP16 potsherds, Sindeni CHT127: Chang'ombe Sir Juma graves	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Handeni 1331.5 CHT120: Sindeni Kwamwenkubi traditional forest	CHT120: Sindeni Kwamwenkubi traditional forest	Disturbance or loss of cultural heritage	Damage or disturbance of traditional beliefs or practices	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Muheza 1378.4-1409.7 CHT340: STP12 daub and surface potsherds, Mamboleo CHT145: Kibanda Pottery Site 2 CHT159: Sembwana Dawa graves CHT160: Seif Lupatu graves CHT258: Colonial railway CHT345: surface potsherds, Mkanyageni GP4 CHT259: Colonial railway siding	CHT340: STP12 daub and surface potsherds, Mamboleo CHT145: Kibanda Pottery Site 2 CHT159: Sembwana Dawa graves CHT160: Seif Lupatu graves CHT258: Colonial railway CHT345: surface potsherds, Mkanyageni GP4 CHT259: Colonial railway siding	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Tanga 1436-1437.9 CHT207: Helani/Ndaoya CHT185: Spread of ceramics over 20 m ² area CHT037: Graves from one family	CHT207: Helani/Ndaoya	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Tanga 1441 CHT212: Chongoleani spiritual site	CHT212: Chongoleani spiritual site	Disturbance or loss of cultural heritage	Damage or disturbance of traditional beliefs or practices	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Tanga 1442 CHT213: Chongoleani archaeology	CHT213: Chongoleani archaeology	Disturbance or loss of cultural heritage	Damage or disturbance of feature	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Tanga 1442 CHT214: Chongoleani spiritual site	CHT214: Chongoleani spiritual site	Disturbance or loss of cultural heritage	Damage or disturbance of traditional beliefs or practices	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Tanga 1443 CHT187: Spread of ceramics and a shrine under the baobab tree at MST	CHT187: Spread of ceramics and a shrine under the baobab tree at MST	Disturbance or loss of cultural heritage	Disturbance (noise and visual) to ashy red colobus monkey	Cultural heritage management plan	CUH01. CUH02. CUH04. CUH05.	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Resuspension of sediment (increase of turbidity)	Marine vessel management plan, Biodiversity management plan, Monitoring and reporting plan	MPHY04, MPHY07, MBIO03, MBIO12	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Direct physical loss or disturbance within the construction footprint	Biodiversity management plan	MPHY04, MBIO01, MBIO02, MBIO03,	Project
Tanga 1443 LOF	LOF	Vessel and equipment use	Increase of pollution and nutrients in the water column from vessel discharges, leaks, spills (including cement) during construction	Pollution prevention plan, Marine vessel management plan	MBIO07, MPHY02, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation (offshore)	Change in bathymetry from sedimentation due to pile installation activities	Marine vessel management plan, Biodiversity management plan, Monitoring and reporting plan	MPHY01, MPHY04, MBIO03, MBIO12	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Suspension of sediment – increased turbidity	Marine vessel management plan, Biodiversity management plan, Monitoring and reporting plan	MPHY04, MPHY07, MBIO01, MBIO02, MBIO03, MBIO12	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Suspension of sediment – smothering	Marine vessel management plan, Biodiversity management plan, Monitoring and reporting plan	MPHY04, MPHY07, MBIO01, MBIO02, MBIO03, MBIO12	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Indirect physical loss or disturbance outside the construction footprint	Biodiversity management plan	MPHY04, MBIO01, MBIO02, MBIO03	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Indirect physical loss or disturbance inside the construction footprint	Biodiversity management plan, Marine vessel management plan	MPHY03, MPHY04, MBIO01, MBIO02, MBIO03	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Physical / physiological: Permanent threshold shift (PTS) and Temporary threshold shift (TTS): Indian Ocean humpback dolphin, humpback whale and dugong	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan. Further studies - See Section 5.5.4	MBIO02, MBIO04, MBIO05, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Physical / physiological: Permanent threshold shift (PTS) and Temporary threshold shift (TTS): other low and medium frequency cetaceans	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan. Further studies - See Section 5.5.4	MBIO02, MBIO04, MBIO05, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Physical / physiological: Mortality and potential injury, Recoverable injury and Temporary threshold shift (TTS) for other species of all hearing categories of fish, including eggs and larvae (except TTS as n/a)	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan. Further studies - See Section 5.5.4	MBIO02, MPHY04, MPHY07	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Physical / physiological: Mortality and potential injury, Recoverable injury and Temporary threshold shift (TTS) for coelacanth	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan. Further studies - See Section 5.5.4	MBIO06, MBIO02, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Physical / physiological: Mortality and potential injury, Recoverable injury and Temporary threshold shift (TTS) for Napoleon wrasse	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan. Further studies - See Section 5.5.4	MBIO02, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Physical / physiological: Mortality and potential injury, Recoverable injury and Temporary threshold shift (TTS) for sawfish	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan. Further studies - See Section 5.5.4	MBIO02, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Physical / physiological: Mortality and potential injury: hawksbill, leatherback and green turtles	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan. Further studies - See Section 5.5.4	MBIO02, MBIO04, MBIO05, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Physical / physiological: Mortality and potential injury: loggerhead and olive ridley turtles	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan. Further studies - See Section 5.5.4	MBIO02, MBIO04, MBIO05, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Indian Ocean humpback dolphin, humpback whale and dugong: behavioural responses	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan	MBIO05	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Other low and medium frequency cetaceans: behavioural responses	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan	MBIO05	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Coelacanth: behavioural responses	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan	MBIO02, MBIO06, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Napoleon wrasse: behavioural responses	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan	MBIO02, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Other species of all hearing categories of fish: behavioural responses	Biodiversity management plan, Pollution prevention plan, Marine vessel management plan	MBIO02, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Underwater noise impacts on birds	Biodiversity management plan, Pollution prevention plan	MBIO02, MBIO04, MBIO05, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	Vessel and equipment use	Alteration / disruption of behaviour (movement, migration, feeding) of fish and invertebrates due to night time lighting	Marine vessel management plan, Biodiversity management plan, Pollution prevention plan	MBIO06, MBIO09, MPHY07	Project
Tanga 1443 LOF	LOF	Vessel and equipment use	Change in behaviour (movement, feeding, migration) of seabirds due to night time lighting	Marine vessel management plan, Biodiversity management plan, Pollution prevention plan	MBIO06, MBIO09, MPHY07	Project
Tanga 1443 LOF	LOF	Vessel and equipment use	Change in behaviour (movement, orientation, feeding, migration) of marine megafauna, particularly turtles, due to lighting	Marine vessel management plan, Biodiversity management plan, Pollution prevention plan	MBIO06, MBIO09, MPHY07	Project

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

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Tanga 1443 LOF	LOF	Vessel and equipment use	Potential impact from increase of pollution, nutrients and turbidity in the water column from vessel discharges	Pollution prevention plan, Marine vessel management plan	MBIO07, MPHY07	Project
Tanga 1443 LOF	LOF	Pile installation and vessel and equipment use	Introduction and/or facilitation of AIS[1]	Biodiversity management plan, Pollution prevention plan	MBIO07, MBIO10, MBIO11	Project
Tanga 1443 LOF	LOF	Pile installation and Vessel and equipment use	Underwater noise impacts (Physical / physiological: Mortality and potential injury, Recoverable injury and Temporary threshold shift (TTS)) on Napoleon wrasse	Biodiversity management plan, Pollution Prevention Plan	MBIO02, MPHY04, MPHY07	Project
Tanga 1443 LOF	LOF	LOF construction exclusion zone	Disruption to vessel movements	Stakeholder engagement plan, Community health, safety and security plan, Marine vessel management plan	MCHSW01, MCHSW02, MCHSW03, MLIV01	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Igunga 825 PS5	PS5	Disturbance or Harm to Wildlife	NOx emissions and acid deposition causing impaired growth of plants affecting habitat quality	Pollution prevention plan.	AIR05.	Project
Tanga 1443 MST	MST	Disturbance or Harm to Wildlife	NOx emissions and acid deposition causing impaired growth of plants affecting habitat quality	Pollution prevention plan.	AIR05.	Project
Tanga 1443 MST	MST	Loss of Habitat and Disturbance or Harm to Wildlife	PIIM causing deforestation for fuel and cultivation	Project induced in-migration management plan. Labour management plan. Stakeholder engagement plan.	ECO06.	Project
Tanga 1443 MST	MST	Disturbance or Harm to Wildlife	Disturbance (noise, lighting and activity) for endemic and migratory species of conservation importance in surrounding habitats from LOF and MST operation. Exacerbated by PIIM and subsequent induced development	Biodiversity management plan. Community health, safety and security plan. Transport and road safety management plan. Project induced in-migration management plan.	ACO01. ECO06.	Project
Muleba, Biharamulo, Chato 420-469 Protected and internationally recognised areas (Ruiga River FR)	Protected and internationally recognised areas (Ruiga River FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects 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.	Project
Chato 535-549 Protected and internationally recognised areas (Burigi-Biharamulo FR)	Protected and internationally recognised areas (Burigi-Biharamulo FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects 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.	Project
Chato, Geita 551-557 Protected and internationally recognised areas (Uyovu FR)	Protected and internationally recognised areas (Uyovu FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects 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.	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Mbogwe, Kahama Township Authority 622-644.5 Protected and internationally recognised areas (Ngogwa Busangi FR)	Protected and internationally recognised areas (Ngogwa Busangi FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects 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.	Project
Nzega 698-701 Protected and internationally recognised areas (Mwakalundi FR)	Protected and internationally recognised areas (Mwakalundi FR)	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects 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.	Project
Missenyi 302-312 Minziro NFR, IBA and KBA	Minziro NFR, IBA and KBA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects 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.	Project
Muleba, Biharamulo, Chato 438-472 Burigi–Biharamulo GR and KBA	Burigi–Biharamulo GR and KBA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan. Pollution prevention 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.	Project
Kiteto 1144-1238 Talamai OA	Talamai OA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan. Pollution prevention 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.	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Kiteto, Kilindi 1224-1238 Kitwai GCA	Kitwai GCA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan. Pollution prevention 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.	Project
Kilindi 1302.6 Handeni GCA	Handeni GCA	Loss of Habitat Disturbance to Wildlife	Loss of ecological function and integrity of protected site through in-combination effects on species and habitats	Biodiversity management plan. Pollution prevention 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.	Project
Tanga 1442 East African Coastal Forest EBA	East African Coastal Forest EBA	Loss of Habitat Disturbance to Wildlife	Disturbance to species using habitat surrounding the MST and PIIM leading to increased deforestation and bushmeat hunting leading to a loss of integrity or ecological function	Biodiversity management plan. Project induced in- migration plan. Stakeholder engagement plan. Pollution prevention plan.	BIO01. BIO03. BIO08. BIO32. BIO38. ECO05. ECO06. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Muleba 405.4 PS3	PS3	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Natural resource management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Mbogwe 610 PS4	PS4	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Natural resource management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Igunga 824.9 PS5	PS5	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Natural resource management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Singida 914.7 PS6	PS6	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Natural resource management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Handeni 1330 PRS2	PRS2	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Natural resource management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Tanga 1443 MST and LOF	MST and LOF	Management of waste and accidental release of oil or chemicals	Contamination of groundwater	Natural resource management plan	WTR01. WTR02. WTR08. WTR17. WTR18. EPR01. EPR04.	Project
Muleba 405.4 PS3	PS3	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Mbogwe 610 PS4	PS4	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Igunga 824.9 PS5	PS5	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Singida 914.7 PS6	PS6	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Kiteto 1172 PRS1	PRS1	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Handeni 1330 PRS2	PRS2	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Tanga 1443 MST and LOF	MST and LOF	Abstraction of groundwater	Decreased water level due to water abstraction for project use	Natural resource management plan	WTR24. WTR28.	Project
Missenyi 325.5 MCPY5	MCPY5	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Missenyi 325.5 MCPY5	MCPY5	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Muleba 419 MCPY6	MCPY6	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Muleba 419 MCPY6	MCPY6	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Chato 513 MCPY7	MCPY7	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Chato 513 MCPY7	MCPY7	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Bukombe 594.5 MCPY8	MCPY8	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
					will manage this impact.	
Bukombe 594.5 MCPY8	MCPY8	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Nzega 702 MCPY9	MCPY9	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Nzega 702 MCPY9	MCPY9	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Igunga 800 MCPY10	MCPY10	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Igunga 800 MCPY10	MCPY10	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Singida 914.7 MCPY11	MCPY11	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Singida 914.7 MCPY11	MCPY11	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Kiteto 1143.6 MCPY13	MCPY13	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Kiteto 1143.6 MCPY13	MCPY13	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
					this construction phase mitigation will manage this impact.	
Kilindi 1237.5 MCPY14	MCPY14	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Kilindi 1237.5 MCPY14	MCPY14	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Handeni Township Authority 1318 MCPY15	MCPY15	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Muheza 1403.5 MCPY16	MCPY16	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Muheza 1403.5 MCPY16	MCPY16	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Nzega 701-702 Coating facility	Coating facility	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Nzega 701-702 Coating facility	Coating facility	Visual intrusion of project components into landscape	Change of views	Reinstatement plan	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Muleba 405.4 PS3	PS3	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Muleba 405.4 PS3	PS3	Visual intrusion of project components into landscape	Change of views	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Mbogwe 610 PS4	PS4	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Mbogwe 610 PS4	PS4	Visual intrusion of project components into landscape	Change of views	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Igunga 824.9 PS5	PS5	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Igunga 824.9 PS5	PS5	Visual intrusion of project components into landscape	Change of views	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Singida 914.7 PS6	PS6	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Singida 914.7 PS6	PS6	Visual intrusion of project components into landscape	Change of views	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Kiteto 1172 PRS1	PRS1	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
					will manage this impact.	
Kiteto 1172 PRS1	PRS1	Visual intrusion of project components into landscape	Change of views	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Handeni 1330 PRS2	PRS2	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Handeni 1330 PRS2	PRS2	Visual intrusion of project components into landscape	Change of views	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Tanga 1443 MST and LOF	MST and LOF	Visual intrusion of project components into landscape	Change of landscape character	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Tanga 1443 MST and LOF	MST and LOF	Visual intrusion of project components into landscape	Change of views	Reinstatement plan. Pollution prevention plan.	BIO36. SOL02. SOL07. SOL09. SOL12. NOTE: correct implementation of this construction phase mitigation will manage this impact.	Project
Muleba 405.4 PS3	PS3	Release of gases, exhausts and vapours to atmosphere	Increased NO2 concentrations at ground level from operation of generators and bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Igunga 824.9 PS5	PS5	Release of gases, exhausts and vapours to atmosphere	Increased NO2 concentrations at ground level from operation of generators and bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Tanga 1443 MST and LOF	MST and LOF	Release of gases, exhausts and vapours to atmosphere	Increased NO2 concentrations at ground level from operation of generators and bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Mbogwe 610 PS4	PS4	Release of gases, exhausts and vapours to atmosphere	Increased NO2 concentrations at ground level from operation of bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Singida 914.7 PS6	PS6	Release of gases, exhausts and vapours to atmosphere	Increased NO2 concentrations at ground level from operation of bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Muleba 405.4 PS3	PS3	Release of gases, exhausts and vapours to atmosphere	Increased PM10 and PM2.5 concentrations at ground level from operation of generators and bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Igunga 824.9 PS5	PS5	Release of gases, exhausts and vapours to atmosphere	Increased PM10 and PM2.5 concentrations at ground level from operation of generators and bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Tanga 1443 MST and LOF	MST and LOF	Release of gases, exhausts and vapours to atmosphere	Increased PM10 and PM2.5 concentrations at ground level from operation of generators and bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Mbogwe 610 PS4	PS4	Release of gases, exhausts and vapours to atmosphere	Increased PM2.5 and PM10 concentrations at ground level from operation of bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Singida 914.7 PS6	PS6	Release of gases, exhausts and vapours to atmosphere	Increased PM2.5 and PM10 concentrations at ground level from operation of bulk heaters (long and short term)	Pollution prevention plan.	AIR02. AIR03. AIR06.	Project
Muleba 405.4 PS3	PS3	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation	Pollution prevention plan	ACO01. ACO04. AIR02.	Project
Mbogwe 610 PS4	PS4	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation	Pollution prevention plan	ACO01. ACO04. AIR02.	Project
Igunga 824.9 PS5	PS5	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation	Pollution prevention plan	ACO01. ACO04. AIR02.	Project
Singida 914.7 PS6	PS6	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation	Pollution prevention plan	ACO01. ACO04. AIR02.	Project
Tanga 1443 MST	MST	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation	Pollution prevention plan	ACO01. ACO04. AIR02.	Project
Tanga 1442 LOF	LOF	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation	Pollution prevention plan	ACO01. ACO04. AIR02.	Project
Kiteto 1172 PRS1	PRS1	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation	Pollution prevention plan	ACO01. ACO04. AIR02.	Project
Handeni 1330 PRS2	PRS2	Noise	Increase in existing baseline noise environment causing disturbance and nuisance from operation	Pollution prevention plan	ACO01. ACO04. AIR02.	Project
Tanga 1141-1442.5 Putini and Chongoleani	Putini and Chongoleani	Employment	The generation of project local employment opportunities	Procurement and supply chain management plan. Labour management plan. Stakeholder engagement plan.	HR02. HR05. ECO04. ECO05.	Project
Tanga 1141-1442.5 Putini and Chongoleani	Putini and Chongoleani	Employment	The provision of training and skill development opportunities within employment.	Labour management plan. Procurement and supply chain management plan.	HR02. ECO05. WHSW12.	Project
Tanga 1141-1442.5 Putini and Chongoleani	Putini and Chongoleani	Provision of goods and services	Project procurement providing opportunities for local businesses	Procurement and supply chain management plan. Labour management plan.	ECO01.	Project
Muleba 405.4 PACs near PS3	PACs near PS3	Loss/severance of land and disruption to land-based livelihoods	Accidental damage to crops during maintenance activities	Stakeholder engagement plan. Labour management plan.	INF07. LNP03. GNL01.	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Mbogwe 610 PACs near PS4	PACs near PS4	Loss/severance of land and disruption to land-based livelihoods	Accidental damage to crops during maintenance activities	Stakeholder engagement plan. Labour management plan.	INF07. LNP03. GNL01.	Project
Igunga 824.9 PACs near PS5	PACs near PS5	Loss/severance of land and disruption to land-based livelihoods	Accidental damage to crops during maintenance activities	Stakeholder engagement plan. Labour management plan.	INF07. LNP03. GNL01.	Project
Singida 914.7 PACs near PS6	PACs near PS6	Loss/severance of land and disruption to land-based livelihoods	Accidental damage to crops during maintenance activities	Stakeholder engagement plan. Labour management plan.	INF07. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni, Mabokweni, Helani, Putini and Chongoleani	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Impeded flow in watercourses	Loss of, or restriction of access to, existing fishing grounds, transit routes, fish landing sites and market sites due to the MEZ	Resettlement action plan. Marine livelihoods restoration plan.	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni, Mabokweni, Helani, Putini and Chongoleani	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Impeded flow in watercourses	Loss of, or restriction of access to, intertidal gleaning sites due to the MEZ	Resettlement action plan. Marine livelihoods restoration plan	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni, Mabokweni, Helani, Putini and Chongoleani	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Impeded flow in watercourses	Damage to, or displacement of, fishing gear by project construction vessels	Community health, safety and security plan. Stakeholder engagement plan. Marine vessel management plan.	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni, Mabokweni, Helani, Putini and Chongoleani	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Impeded flow in watercourses	Displacement of fishing effort (from loss of, or restriction of access to, grounds) into adjacent grounds	Resettlement action plan. Stakeholder engagement plan. Monitoring and reporting plan. Marine livelihoods restoration plan.	CHSW22. LNP03. GNL01.	Project
Tanga 1429-1442.5 Mleni, Mabokweni, Helani, Putini and Chongoleani	Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa	Community safety	Increased risk of accidents due to increased boat traffic outside the restricted areas	Community health, safety and security plan. Resettlement action plan. Marine vessel management plan. Stakeholder engagement plan. Monitoring and reporting plan.	MPHY07. CHSW22. MLIV01. MCHSW02.	Project
Muleba 405.4 PACS near PS3	PACS near PS3	Employment	Increased risk of developing noncommunicable diseases in local workers	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	WHSW19.	Project
Igunga 824.9 PACS near PS5	PACS near PS5	Employment	Increased risk of developing noncommunicable diseases in local workers	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	WHSW19.	Project
Tanga 1442 PACs near , MST and LOF	PACs near , MST and LOF	Employment	Increased risk of developing noncommunicable diseases in local workers	Community health, safety and security plan. Occupational health, safety and security plan. Labour management plan.	WHSW19.	Project
Muleba 405.4 PACs near PS3	PACs near PS3	Noise	Excessive noise exposure due to project activities	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	ACO01.	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Mbogwe 610 PACs near PS4	PACs near PS4	Noise	Excessive noise exposure due to project activities	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	ACO01.	Project
Igunga 824.9 PACs near PS5	PACs near PS5	Noise	Excessive noise exposure due to project activities	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	ACO01.	Project
Singida 914.7 PACs near PS6	PACs near PS6	Noise	Excessive noise exposure due to project activities	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	ACO01.	Project
Tanga 1442 PACs near MST and LOF	PACs near MST	Noise	Excessive noise exposure due to project activities	Community health, safety and security plan. Pollution prevention plan. Stakeholder engagement plan.	ACO01.	Project
Muleba 405.4 PACs near PS3	PACs near PS3	Disposal of solid and liquid waste	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	N/A	Project
Mbogwe 610 PACs near PS4	PACs near PS4	Disposal of solid and liquid waste	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	N/A	Project
Igunga 824.9 PACs near PS5	PACs near PS5	Disposal of solid and liquid waste	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	N/A	Project
Singida 914.7 PACs near PS6	PACs near PS6	Disposal of solid and liquid waste	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	N/A	Project
Tanga 1442 PACs near MST and LOF	PACs near MST	Disposal of solid and liquid waste	Increased pressure on regional waste management facilities due to project activities	Waste management plan.	N/A	Project
Muleba 405.4 PACs near PS3	PACs near PS3	Disposal of solid and liquid waste	Contamination of water due to disposal of solid and liquid waste, disposal of surplus water or accidental release of oil or chemicals	Occupational health, safety and security plan. Pollution prevention plan. Waste management plan.	WHSW01.	Project
Muleba 405.4 PACs near PS3	PACs near PS3	Release of gases, exhausts and vapours to atmosphere	Increased risk of respiratory diseases due to project activities	Pollution prevention plan.	AIR05.	Project
Igunga 824.9 PACs near PS5	PACs near PS5	Release of gases, exhausts and vapours to atmosphere	Increased risk of respiratory diseases due to project activities	Pollution prevention plan.	AIR05.	Project
PACs near MST 1442 PACs near MST and LOF	PACs near MST and LOF	Release of gases, exhausts and vapours to atmosphere	Increased risk of respiratory diseases due to project activities	Pollution prevention plan.	AIR05.	Project
Mleni mtaa, Mabokweni mtaa, Helani hamlet, Putini mtaa and Chongoleani mtaa(KP1429– 1442.5) 1429-1442.5 Mleni, Mabokweni, Helani, Putini and	Mleni, Mabokweni, Helani, Putini and Chongoleani (KP1429–1442.5)	Community dynamics	Conflict between PACs and project security personnel	Community health, safety and security plan. Stakeholder engagement plan. Resettlement action plan.	CHSW03. CHSW21.	Project

Table J1.2-2 Location-Specific Impact ESMP Matrix - Operations Phase

Location	Landmark	Aspect	Potential Impact	Management Plan	Mitigation Measure	Responsibility
Chongoleani (KP1429–1442.5)						
Tanga 1443 LOF	LOF	LOF operation	Change to water quality from resuspension of sediment during LOF operations from propeller wash	Marine vessel management plan	MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Degradation in water quality (salinity) due to the discharge from MST holding pond to the shore/intertidal area	Pollution prevention plan	MPHY06	Project
Tanga 1443 LOF	LOF	LOF operation	Change to water quality during LOF operations including runoff from LOF and vessel discharges	Pollution prevention plan, Marine vessel management plan	MBIO07, MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Change in bathymetry from scour around the new permanent LOF structure	Marine vessel management plan, Biodiversity management plan, Monitoring and reporting plan	MPHY01, MPHY07, MBIO02, MBIO12	Project
Tanga 1443 LOF	LOF	LOF operation	Loss of habitat due to scour under the LOF	Biodiversity management plan	MPHY01	Project
Tanga 1443 LOF	LOF	LOF operation	Impact from discharges from tanker at berth	Pollution prevention plan, Marine vessel management plan	MBIO07, MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Suspension of sediment – increased turbidity	Marine vessel management plan	MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Physical loss and disturbance of benthos from scour	Marine vessel management plan, Biodiversity management plan, Monitoring and reporting plan	MPHY01, MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Impacts to fauna from underwater noise	Marine vessel management plan	MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Alteration / disruption of behaviour (movement, migration, feeding) of fish and invertebrates due to night time lighting	Marine vessel management plan, Pollution prevention plan	MBIO09, MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Change in behaviour (movement, feeding, migration) of seabirds due to night time lighting	Marine vessel management plan, Pollution prevention plan	MBIO09, MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Change in behaviour (movement, orientation, feeding, migration) of marine megafauna, particularly turtles, due to lighting	Marine vessel management plan, Pollution prevention plan	MBIO09, MPHY07	Project
Tanga 1443 LOF	LOF	LOF operation	Impact from discharges from LOF	Pollution prevention plan	MPHY06	Project
Tanga 1443 LOF	LOF	LOF operation	Introduction and/or facilitation of AIS	Biodiversity management plan, Pollution prevention plan	MBIO07, MBIO10, MBIO11	Project
Tanga 1443 LOF	LOF	LOF operation exclusion zone	Disruption to vessel movements	Marine vessel management plan	MCHSW01	Project