

The Republic of Malawi

# MINISTRY OF AGRICULTURE

# SHIRE VALLEY TRANSFORMATION PROGRAMME (SVTP) II

# **Terms of References**

Name of Project: SHIRE VALLEY TRANSFORMATION PROGRAMME (SVTP) II

**Project** 

Project ID No.: P176575

Loan No./Credit No./ Grant No.:

CONSULTANCY SERVICES FOR THE PREPARATION OF DESIGNS, COST ESTIMATES, ENVIRONMENTAL AND SOCIAL SAFEGUARD INSTRUMENTS, AND SUPERVISION OF CONSTRUCTION FOR INFRASTRUCTURE DEVELOPMENT IN PROTECTED AREAS

Date: November 2023

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# List of acronyms and abbreviations

BSc Bachelor of Sciences

C-ESMP Contractor's Environmental and Social Management Plan

ESF Environmental and Social Framework

EM- Elephant Marsh

ESHS Environmental, Social, Health and Safety
ESIA Environmental and Social Impact Assessment
ESMP Environmental and Social Management Plan

ESS Environmental and Social Safeguards

HSE Health, Safety and Environment

PMT Project Management Team SEA Sexual Exploitation and Abuse

SVTP Shire Valley Transformation Programme

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#### 1.0 Introduction

## 1.1 The Shire Valley Transformation Programme Background

- 1. The programme development objective for the Shire Valley Transformation Programme (SVTP) is to increase agricultural productivity and commercialization for targeted households in the Shire Valley; and to improve the sustainable management and utilization of natural resources. The Project Development Objective (PDO) is to develop irrigated commercial agriculture and strengthen the management of natural resources in the Program area.
- 2. The Program is a 14-year programme (2017-2031) structured around four coordinated pillars: (i) providing reliable, professionally managed, and sustainably financed irrigation service to a number of irrigators in a phased construction of an irrigation and drainage scheme; (ii) supporting farmer organizations within a comprehensive land use plan, and supporting land tenure strengthening and voluntary consolidation; (iii) establishing and investing in smallholder-owned commercial farm enterprises transitioning into commercial agriculture from subsistence farming and integrating them into commercial value chains; and (iv) natural resources management in and around the Program area. These pillars all contribute to the overarching goals of the programme and build on each other in a phased approach. There are three Phases to the SVTP:
  - Phase I (SVTP-1) initiates the process on all pillars, with a major focus on irrigation service provision to the SVIP-I area, land tenure, farmer organization and natural resource management;
  - Phase II (SVTP-2) shifts investment focus to agricultural investment, private sector and value chain support, as well as investments in bulk infrastructure;
  - Phase III (SVTP-3) is the scale-up phase of investments to the SVIP-2 area.

The Program aims at providing irrigation to over 43,000 ha through the phased construction of a new gravity-fed irrigation scheme that will supply surface water to over 27,600 ha of agricultural land presently under rainfed cultivation, creating agricultural development opportunities in the fertile valley, as well as approximately 15,700 ha of existing irrigation areas that currently use electric pumps to abstract water from the Shire River. SVTP-2 has 6 components: Component 1 - Irrigation Infrastructure Development and Service Provision; Component 2 - Land Tenure and Consolidation; Component 3 - Agriculture Development and Commercialization; Component 4 - Strengthening Landscape and Natural Resources Management; Component 5 - Contingent Emergency Response; and Component 6 - Project Management and Coordination. These ToRs are specific to component 4 which has been described below.

# 1.2. Strengthening Landscape and Natural Resources Management in the Lower Shire Valley

The Lower Shire Valley contains some of the most important natural resources in Malawi, which provide global public goods, such as biodiversity, climate stabilization,

and nationally significant ecosystem services. The natural resources in the area play a critical role in contributing to the national economy and resilience of local communities, by providing goods and ecosystem services to the local population, such as freshwater, food, construction material, medicinal products, and wood fuel. Despite their socioeconomic and environmental value, the protected areas, forest reserves and community biological resources face several challenges to their long-term integrity and sustainability and there is a need to strengthen existing management capacity and explore alternative management arrangements. The recent experiences of SVTP-1 have highlighted the significance of improving natural resource management to realize the long-term transformational ambition of the valley and protecting valuable forest ecosystems and biodiversity that will enable the landscape to remain productive for the long-term. SVTP-1 is assisting in the enhancement of management of protected areas, forest reserves, and the Elephant Marsh. SVTP-2 will build on this by encouraging long-term funding for the management of the Lower Shire's natural resource base and biodiversity, which will ensure the sustainability of community livelihoods, the economy at large and the ecosystem services on which they rely.

In phase 2, Component 4 will support strengthening the management of key biodiversity hotspots and protected areas to ensure continued generation of revenue and provision of important ecosystem services to vulnerable communities. Project activities will support the strengthening of management of Lengwe National Park, Mwabvi Wildlife Reserve, the Elephant Marsh (EM), Matandwe and Thambani Forest Reserves (Figure 1), as well as surrounding buffer areas. Investments under this component will improve the conservation and management of key ecosystems in urgent need of additional support and financing, including the important wetlands, forest reserves, and protected areas.

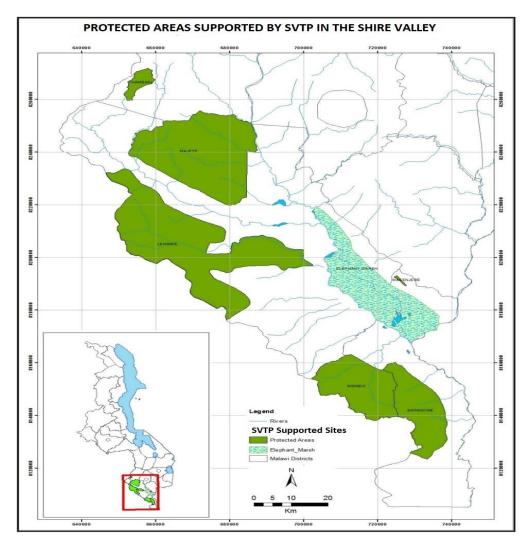


Figure 1: Location of Project Area

#### 2.0 Objectives and Specific Considerations

## 2.1. Objective of the Assignment

These terms of reference are for consultant services to: develop/ review designs of infrastructure; prepare cost estimates; prepare contract documents; develop Environmental and Social Safeguard Instruments; and supervise construction of various infrastructure in Lengwe National Park, Mwabvi Wildlife Reserve, Thambani Forest Reserve, Matandwe Forest Reserve and the Elephant Marsh. The nature of the assignment is in twofold:

- Design and supervision of civil engineering works in this project
- Design and supervision of building engineering works

The outline of the tasks are to:

- 1. Prepare for the approval of the client the concept, detailed architectural and structural designs for new and/or upgraded facilities that conform to the design criteria and achieve high levels of social, economic and environmental sustainability;
- 2. Review existing designs against the design criteria and delivering high levels of social, economic and environmental sustainability, and propose recommendations to the client.
- 3. Prepare Environmental and Social Management Plans and other E&S documentation as necessary to achieve national consents and satisfy the requirements of financiers (including compliance with the ESF for the World Bank)
- 4. Prepare schedule of works, cost estimates and tender documents to select the contractors for the construction works, and provide support to the client during the tender process;
- 5. Provide quality supervision services for construction works.

#### 2.2. Specific Considerations

All the works for construction and rehabilitation of the proposed facilities shall be carried out in protected areas. All works shall be carried out to high standards that are aesthetically attractive and in keeping with local social and environmental conditions within the protected areas. They shall incorporate green design features that are practical and maximize environmental sustainability (for example by incorporating renewable energy supply, rainwater collection, ambient cooling). The Consultant shall therefore advise on best practice sustainability measures for consideration for each facility type, and agree with the client which measures should be incorporated into the designs based on practicality and availability. In this regard, all designing and construction works shall:

a) Minimise land take to biodiversity and important areas of flora and fauna for temporary and permanent works;

- b) Carefully select siting and minimize the need to remove trees or big stones but use them accordingly in the build;
- harmonize with the surrounding landscape and fitting into the natural scenery, with natural external colours and with ground tones that match with the site and make the facilities blend into the surroundings;
  - d) minimise light and sound pollution, by restricting lighting spread through use of shades and directional lighting, and incorporating noise reducing features into the design buildings, orientation and arrangements; and
- e) Ensure efficiency in water and energy use, favouring sustainable energy and water supplies
- f) Ensure environmentally-sustainable waste disposal facilities, for solid and liquid wastes.
- g) Ensure safety in operation and construction: each design should be subject to specialist safety and health review, and as necessary to be improved to ensure safety during construction and operation.
- h) Accord with the relevant environmental and safety measures described in the World Bank Environmental Health and Safety Guidelines (2007- World Bank Document and as required by the World Bank Environmental and Social Framework (2016- Environmental and Social Framework (ESF) (worldbank.org)) The following ESSs are particularly relevant: ESS 1 (Assessment and Management of Environmental and Social Risks and Impacts); ESS 2 (Labour and Working Conditions); ESS 3 (Resource Efficiency and Pollution Prevention and Management); ESS 4 (Community Health and Safety); and ESS 6 (Biodiversity Conservation and Sustainable Use of Living Natural Resources)

The consultant shall consult and coordinate closely with project partners (Department of National Parks and Wildlife, Department of Forestry, and Department of Fisheries and Environmental Affairs Department in order to reach consensus on appropriate designs, cost estimates, construction schedules and implementation arrangements. The consultant will have to abide by Standard Operating Procedures (SOPs) of these departments. These SOPs will be provided as an Annex to the contract. The Departments of Forestry, Fisheries, National Parks and Wildlife developed specifications for infrastructure works. These will also be annexed.

#### 3.0 Scope of Work

SVTP is seeking an experienced architectural / engineering consultancy firm consisting of the required personnel to help realize the objectives outlined in section 2 above. The works will be carried out in 3 phases, for a period of 3,3 and 12 months for phases 1,2 and 3 respectively. The firm will be required to perform the following tasks: :

# 3.1 Phase 1; Inception and design

# A. Site investigation studies

 Carry out and submit reports of topographic, geotechnical, hydrological, hydraulic studies and environmental impact assessments for all sites. All surveys should tally with national requirements e.g national trig pillars, geological maps.

#### B. Review of existing designs

- Review existing architectural/structural designs developed under SVTP-I (refer to table 1);
- Review Bidding documents produced during SVTP-1 (refer to table 1)

## C. Detailed designing of new infrastructure

 Production of detailed architectural / structural designs (Nkombezi bridge, office blocks, tourist camps, semi-detached houses, fire towers, eco-tourism centres, operation rooms, guard houses, game viewing heights and visitor's information parks)

#### D. Production of bidding documents

 Review and production of contract documents which will include, BoQs, cost estimates, specifications, drawings and lot allocation.

#### E. Preparation of ESMPs

Produce ESMPS where they do not exist. (refer to table 1);
 Review ESMPS developed during SVTP-1(refer to table 1)

Table 1 Proposed infrastructure investments and actions to be undertaken by consultant

Site	Location	<b>Description</b> of proposed	Design Action to be undertaken:	Cost Estimate Action	ESMP Action to be
		infrastructure		to be undertaken	undertaken
Lengwe	Kanzimbi	Six semidetached Ranger House	Review existing structural design	Review existing BoQs	Review existing ESMP
National			and construction schedule		
Park,	Kanzimbi	Kanzimbi office and meeting room	Review existing structural Design	Review Existing BoQs	Review Existing ESMP
Chikwawa			and construction schedule		
	Mkombezi Bridge	Bridge over Mkombezi Wa Fodya River	Review existing structural structural	Review Existing BoQs	Review Existing ESMP
			Design and construction schedule		
	Therere	Three semidetached Ranger Houses with	Review existing Design and	Prepare BoQs and	Prepare ESMP
		rainwater harvesting system and solar	construction schedule	bidding documents	
		powered water supply			
	Mandrade	Three semidetached Ranger Houses with	Review existing structural Design	Prepare BoQs	An ESMP required
		rainwater harvesting system and solar	and construction schedule		
		powered water supply			
	Main Office	Operations room	Prepare structural design	BoQs to be prepared	No need of ESMP
	Main Office	Rehabilitation of office block	Prepare a schedule of works to be	BoQs to be prepared	No need of ESMP
			undertaken		
	Main Office Entrance	Visitor information Room	Prepare structural design and	BoQs to be prepared	No need of ESMP
			construction schedule		
	Youth Hostel	Rehabilitation works	Prepare a schedule of works to be undertaken	BoQs to be prepared	No need of ESMP
	Game Viewing Hides	Rehabilitation Works	Prepare a schedule of works to be	BoQs to be prepared	No need of ESMP
	Game Viewing Trides	Remainment Works	undertaken	Boos to be prepared	TWO RECU OF ESTAT
	Game Viewing Hide	Construction of one new hide	prepare a schedule of works to be	BoQ to be prepared	No need of ESMP
			undertaken		
Mwabvi	Mwabvi Head Office	An office complex	Review existing structural design	BoQs prepared	ESMPs available
Wildlife			and construction schedule		
Reserve,	Migudu Tourist Camp	A tourist camp with basic tourism	Review existing structural design	BoQs prepared	ESMPs available
		facilities such as bathroom, toilet	and construction schedule		

Nsanje		facilities, cooking and heating area,			
District		water supply,			
	Madziabango	Three semidetached Ranger Houses with rainwater harvesting system and solar powered water supply	Review existing structural design and construction schedule	BoQs not available to be prepared	An ESMP required
	Njati Flying Camp	Rehabilitation of the Njati Tourist Camp into a Flying Camp for law enforcement and tourism	Review existing structural design and construction schedule	BoQs as above	
Matandwe Forest Reserve	Ranger House Location 1	Three semidetached Ranger Houses with rainwater harvesting system and solar powered water supply	Review existing structural design and construction schedule	BoQs as above	An ESMP required
Nsanje District	Ranger House Location 2	Three semidetached Ranger Houses with rainwater harvesting system and solar powered water supply	Review existing structural design and construction schedule	BoQs as above	
	Guard Houses	Construction of new four Guard/Gate Houses	Prepare structural design and construction schedule	BoQs to be prepared	
	Fire towers	Construction of three fire towers	Review existing structural design and construction schedule	BoQs to be prepared	
	Khuluvi Ecotourism Centre	Construction of an ecotourism visitor at Khuluvi Shrine	Review existing design and construction schedule	BoQ to be prepared	
Thambani, Mwanza	Location 1	Three semidetached Ranger Houses with rainwater harvesting system and solar powered water supply	Review existing structural design and construction schedule	BoQ based on Therere	An ESMP required
	Location 2	Three semidetached Ranger Houses with rainwater harvesting system and solar powered water supply	Review existing structural design and construction schedule	BoQ based on Therere	
	Guard Houses	Four guard/gate houses which can accommodate at least three people with a simple desk, chair and three stools at each entrance	Prepare schedule of works	BoQs to be prepared	
	Fire towers	Construction of three fire towers	Review existing structural Design and construction schedule	BoQs to be prepared	
	Thambani Office	Rehabilitate Thambani Office Block	Prepare schedule of works	BoQs to be prepared	No ESMP Required

Elephant	Bangula Office Block	Rehabilitation of one office block at	Prepare schedule of works	BoQs to be prepared	No ESMP Required
Marsh –		Bangula			
Nsanje	Bangula Staff Houses	Rehabilitation of four staff houses at	Prepare schedule of works	BoQs to be prepared	
District		Bangula			
	Kasinthula Office Block,	Rehabilitation of one office block at	Prepare schedule of works	BoQs to be prepared	
	Chikwawa	Kasinthula			
	Kasinthula staff houses,	Rehabilitation of three staff houses at	Prepare schedule of works	BoQs to be prepared	
	Chikwawa	Kasinthula			
	Mbenje CCA Ecotourism	Construction of an ecotourism centre	Prepare schedule of works	BoQs to be prepared	
	Centre				

#### 3.2 Phase 2; Facilitate tendering process

In consultation with SVTP PMT and Procurement, support the tender process for the rehabilitation and construction works of the above infrastructure.

- a) Provide relevant tender documents that comply with national and donor requirements (World Bank environmental and social requirements and minimum World Bank KGGTF General Induction for Construction Workers)
- b) Assist the client in issuances of responses to tender quires arising from site visits and tendering period.
- c) Assist in the process of the bid's screening. Procurement shall remain the responsibility of the Client;

The team leader of the firm will be required to provide assistance during the tendering process.

#### 3.3 Phase 3; Supervision of construction works

The services expected are mainly the supervision of the construction works whose details are outlined below:

#### 3.3.1 Consultant's Representative on Site

- a) The Consultant shall undertake full time contract administration during construction and shall appoint a Team leader acceptable to the Client for the continuous on-site construction supervision of the project; and
- b) The Team leader shall be the consultant's Representative and will act as directed by and under the supervision of the Consultant. The Consultant shall notify in writing to the Client and the Contractor the duties and limitation of authority delegated to the Team Leader.

#### 3.3.2 Contract Preliminaries and General

- a) The Consultant shall review the qualifications of the proposed key personnel of the Contractor and make appropriate recommendations to the Client;
- b) The Consultant shall receive from the Contractor, check for compliance with Contract requirements, approve and forward to the Client all performance bonds, insurance certificates and policies and guarantees relating to the Contract before submitting to the Client for acceptance; and
- c) The Consultant shall monitor the contractor's progress in the mobilization of all personnel, equipment and site establishment against proposed mobilization schedules.

# 3.3.3 Work Programme

The Consultant shall:

a) Review the programme submitted by the Contractor for the execution of the Works to establish whether the methods, arrangements, order and timing of

- the activities are realistic and coherent in relation to the conditions pertaining on Site.
- b) Identify from the approved programme the information needed by the Contractor for the execution of the works and ensure that such information is made available to the Contractor in a timely manner. The requirement for detailed drawings and any other relevant information related to the works should be given adequate consideration.

# 3.3.4 Contractor's Quality Control Plan

The Consultant shall:

- a) Review the Contractor's quality control plan on its first submission and ensure that it is (i) compliant with the contractual requirements and (ii) sufficient for quality assurance;
  - b) Ensure that the contractor's quality control plan includes provision for proper staff awareness in workmanship and safety; and
  - c) Monitor the Contractor's implementation of his quality control plan and ensure that quality management and assurance is in accordance with the contractual requirements at all times.

#### 3.3.5 Health and Safety

The Consultant shall:

- a) Ensure that the contractor complies with all national health and safety rules and all health and safety requirements of the contract documents;
- b) Ensure that all contractor's staff and any personnel visiting the site are properly equipped with personal protective equipment;
- c) Ensure that the contractor carries sufficient training of his personnel to ensure a safe working environment;
- d) Ensure that any accidents are properly reported and investigated and that preventative measures are put in place to prevent recurrence;
- e) Monitor the contractor's implementation of his traffic accommodation to ensure safety of road users including pedestrians and non-motorized traffic during the rehabilitation works;
- f) Ensure that the contractor has appointed all safety personnel required by the contract documents, trained them and set up systems to allow them to function properly; and
- g) Conduct regular safety meetings with the Contractor's nominated health and safety officers.

#### 3.3.6 Surveying, Setting Out and Measurements

- a) Indicate to the contractor the location of all survey control points established during the design stage and where necessary reestablish any points that have been lost or disturbed;
- b) Check all alignment and elevation control points provided to the Contractor;

- c) Check all setting out of the works undertaken by the Contractor;
- d) compile necessary field measurements and calculate quantities of materials incorporated in the interim payment certificates; and
- e) Check the setting out of the alignment and elevations and maintain the corresponding documentation.

## 3.3.7 Review of Work, Rejection of Defective Work and Tests

The Consultant shall:

- a) Conduct on-site observation of the work in progress to determine if the work is proceeding in accordance with the contract schedule, and that the completed work conforms to the contract specifications;
- b) Carry out quality control of construction materials through testing on site or in the laboratory, for compliance with the relevant clauses in the technical specifications. Soil and other construction materials testing records shall be kept on site, with comments in the monthly report. The onus for all testing and control rests entirely on the Contractor. The Materials Engineer with the assistance of the Materials Technicians shall supervise all testing procedures to ensure correct testing results;
- c) Verify that selection and use of materials is in accordance with the specifications. Establish procedures, criteria, and testing methods to verify the quality of the materials;
- d) inform the Contractor when work is to be corrected or rejected or to be uncovered for observation, or special testing, inspection or approval in a timely manner; and
- e) suggest or review and approve substitute materials when necessary. Estimate the cost of such materials and make appropriate adjustments in the specifications in consultation with the Client.

#### 3.3.8 Records

- a) maintain at the project site orderly files for correspondence, interim payment certificates, site instructions, reports, minutes of meetings, product and material submissions, additional drawings issued subsequent to the execution of the Contract, as well as Consultant's clarifications and interpretations of the documents, progress reports and other related documents;
- b) keep a diary or log book, recording Contractor's staff hours on job site, equipment availability/ operation, weather conditions, data relative to questions of extras or deductions, list of visiting officials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and
- c) maintain a set of drawings (As-built drawings) recording all details of the work as actually executed.

# 3.3.9 Interpretation of Construction Contract Documents

The Consultant shall:

- a) Issue in good time additional details and drawings necessary for the proper execution of the contract;
- b) Render interpretations necessary for the proper execution and progress of work, with reasonable promptness and in accordance with agreed time limits; and
- c) Render written recommendations within a reasonable time, on all claims, disputes and other matters in question relating to the execution or progress of work or the interpretation of the contract documents.

#### 3.3.10 Modifications

The Consultant shall:

- a) Consider and evaluate the Contractor's suggestions for modifications in drawing or specifications and report them to the Client with recommendations;
- b) Examine Contractor's proposals for changes in construction and provide recommendations to the Client for approval before the changes which affect cost and quality are implemented. Changes, which do not affect cost or quality may be approved on-site and recorded in the monthly progress reports. Such changes shall be effected by written orders issued by the Consultant; and
- c) Prepare any further design and drawings necessary for the information of the Contractor to enable him to carry out the Works. In particular, the Consultant shall issue all instructions related to the works for which the Contract contains only provisional items and shall be subject to approval by the Client

#### 3.3.11 Measurement

The Consultant shall:

- a) Carry out measurement of the works done on site together with the Surveyors of the contractor to be used in checking contractor's payment and progress claims; and
- b) Keep an up-to-date record of measured works on site.

#### 3.3.12 Payment Certificates

- a) The Consultant shall review monthly interim payment applications submitted by the Contractor in accordance with the conditions of contract and upon approval forward five copies of the approved payment certificates plus all supporting measurements sheets and supporting documentation of receipt from the Contractor with recommendations regarding payment to the Client for payment.
- b) Certificate shall detail the actual quantities of work items completed to date compared with the total billed quantity for each item together with the

contract unit rates for each work item, materials on site, details of dayworks, any other payments to which the Contractor may be entitled to under the contract, and deductions for retentions and advance repayments.

#### 3.3.13 Financial Progress Monitoring

The consultant shall:

- a) Ensure that the contractor provides regular cash flow updates in accordance with the requirements of the works contract;
- b) Monitor actual cash flows against programme; and
- c) Maintain a 'Final Cost Estimate' which shall be published at least once per quarter and shall contain the best estimate of the final project cost taking into account changes in quantities, variation orders, claims etc.

#### 3.3.14 Claims Control

The consultant shall:

- a) Conduct regular meetings with the Contractor to identify issues of design, technical and non-technical and commercial challenges that may give rise to delays or claims. Ensure that measures are put in place to address these;
- b) Ensure that the Client is kept fully informed of all issues that the consultant believes may result in claims;
- c) Identify any correspondence from the Contractor that may be construed as early warning of a claim and ensure proper record keeping is in place to monitor the issue; and
- d) Review the Contractor's 'early warnings' submissions and claim submissions and make recommendations in accordance with the requirements of the Contract.

# 3.3.15 Technical and progress meetings

The Consultant shall:

- a) Arrange a schedule of progress and technical meetings, site inspections and other job conferences as required and notify those expected to attend. In arranging these meetings, he is expected to maintain and circulate minutes thereof; and in advance.
- b) Maintain liaison with the Contractor principally through the Contractor's Contract Manager, and assist them in understanding the construction contract drawings and documents.

#### 3.3.16 Liaison with Local Government and Community

- a) Through the offices of the Client in the project area ensure that the project and the contractor is properly introduced to local officials and community leaders;
- b) Establish communication channels with local officials and community leaders;
- c) Monitor the contractor's relations with the local community and ensure that the Client's local offices are aware of any community relations problems or issues; and
- d) Assist the Client's local representatives in briefing local community leaders and government officers on the progress of the project.

#### 3.3.17 Environmental and Social Management

- a) review any Contractor's Method Statements/Implementation Plans (MSIPs) prepared prior to the preparation of the C-ESMP to ensure that they provide appropriate and effective controls to ensure compliance with ESHS requirements during works;
  - 1. Advise (and otherwise assist) the contractors prepare detailed CESMPs that describe the methods and equipment the contractors will use to meet contract requirements, and approve these documents prior to the commencement of works.
  - 2. Regularly review the Contractor's Environment and Social Management Plan (C-ESMP) for relevance to the works as construction activities proceed, at frequencies specified in the Contractor's contract (normally not less than once every 6 months), and work with the contractor to update as needed;
  - 3. review the Contractor's Health and Safety Manual and other health and safety documents and information, including all updates and revisions, at frequencies specified in the Contractor's Contract (normally not less than once every 6 months) and work with the contractor to update as needed;
  - 4. review and attend from time to time the Contractor's induction training, tool box talks, and other health and safety trainings and confirm that they are appropriate for the tasks being undertaken and reflect good international industry practice;
  - 5. monitor the frequency and attendance at the Contractor's health and safety trainings, and ensure that the training program is aligned with the works program, so that workers have had training/refresher training prior to each work stage;
  - 6. review all other applicable contractor's documents related to ESHS aspects including security management plan and SEA prevention and response action plan;
  - 7. review and consider the ESHS risks and impacts of any design change proposals and advise if there are implications for: compliance with ESIA, ESMP, consent/permits, regulation, and other relevant project requirements; construction or operational safety; worker or community health;
  - 8. undertake, as required, audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities under its contract, to verify the Contractor's compliance with ESHS requirements (including, its SEA and SH prevention and response obligations);
  - 9. undertake, as required, audits, supervisions and/or inspections of any vehicles, machinery, or equipment that the Contractor is using under its contract, to verify that it is in a safe and suitable condition for undertaking the task in compliance with ESHS requirements;
  - 10. review and inspect safety arrangements at all worksites, and especially during temporary suspensions of works, to ensure that the works do not present a hazard to workers or the public;
  - 11. undertake audits and inspections of Contractor's accident/incident logs, community liaison records, monitoring findings and other ES related documentation, as necessary, to confirm the Contractor's compliance with ESHS requirements;

- 12. determine remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor's ESHS obligations;
- 13. ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with ESHS obligations;
- 14. ensure that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;
- 15. review and critique, in a timely manner, the Contractor's ESHS documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation:
- 16. undertake liaison, from time to time and as necessary, with project stakeholders, including regulatory authority for Health and Safety, to identify and discuss any actual or potential ESHS issues;
- 17. establish and maintain a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g. of those reporting allegations of SEA and/or SH.
  - a. The consultant shall also be required to Immediately notify the Client of any failure by the Contractor to comply with its SEA and SH obligations;
  - b. Immediately notify the Client of any allegation, incident or accident (including any fatality or serious (lost time) injury), which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Client's Personnel, Contractor's Personnel or Experts. In case of SEA and/or SH, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information. The Consultant shall provide full details of such incidents or accidents to the Client within the timeframe agreed with the Client.
  - c. Immediately inform and share with the Client notifications on ESHS incidents or accidents provided to the Consultant by the Contractor, and as required of the Contractor as part of the Progress Reporting;
  - d. Share with the Client in a timely manner the Contractor's ESHS metrics, as required of the Contractor as part of the Progress Reports.

#### 3.3.19 HIV and AIDS Awareness

- a) Ensure that the client has put in place an HIV and AIDS awareness programme in accordance with the requirements of the contract;
- b) Monitor HIV and AIDS awareness activities to ensure that the programme is being implemented; and
- c) Ensure that the Contractor is liaising with local health officials over the implementation of the HIV and AIDS Awareness programme.

#### 3.3.20 COVID 19 and any other Pandemics

The Consultant shall:

Ensure that the contractor is liaising with local health officials over the implementation of COVID 19 and other pandemics prevention and awareness guidelines

#### 3.3.21 Completion of Construction

The Consultant shall:

- a) Inspect the works in the company of representatives of the Client and the Contractor and the Sub-contractor, if any, prior to handing over of any section of the works;
- b) Prepare a final snag list of items to be completed or replaced together with a time schedule for remedying of the same;
- c) Verify that all items on the final snag list have been completed or corrected;
- d) Prior to the commencement of the Defects Liability period for any section, provide written affirmation that the works have been completed in accordance with the requirements of the contract, drawings and technical specifications, and issue a Taking-Over Certificate; and
- e) The Consultant shall maintain and keep updated a set of 'As-Built Drawings' on substantial completion these shall be finalized for submission with the final report.

#### 3.3.22 Defects Liability Period

- a) The consultant will be required to supervise, inspect and approve the works during the Defects Liability Period.
- b) During this period outstanding construction matters will be finalized to the extent possible, and the As-Built drawings completed;

## 3.3.23 Final Completion of Works

a) Defects Liability Certificate

Immediately prior to the expiration of the Defects Liability Period for which a Taking-Over Certificate has been issued, the Consultant shall in the company of the Client and the Contractor inspect and provide written affirmation that the works have been completed and maintained in accordance with the contract, and issue a Certificate of making good defects

#### b) Final Statement

Upon receipt from the Contractor within 56 days or according to contract provisions of the issue of the Defects Liability Certificate, the Consultant shall prepare in cooperation with the Contractor the Final Account for the contract.

#### 3.3.24 Construction Supervision Deliverables

#### **3.3.24.1 Reports**

The Client will provide, where available, standard formats for all reports listed in this section. Where such standards are provided the Consultant shall follow them and only alter the standard format with the prior approval of the Client.

#### **Monthly Reports**

The Monthly Reports shall be submitted by the 20<sup>th</sup> of each month for the duration of the works and up to and including 2 months after the issuance of the Taking Over Certificate. Each shall contain as a minimum:

- 1. Progress Report, making use of a tracking Gant chart and with description of key events/ milestones in the applicable month, delays etc. The report shall include an assessment of the impact of accumulated delays, if any, and a projected date for completion of the project. In the event that the projected date is later than a revised date, which will result from approved time extensions, the report shall include an evaluation of a Contractor's proposed plan for corrective measures to be implemented to increase the rate of progress and complete the project on time.
- 2. Financial Report including certified amounts, state of payments etc. A chart of programmed vs. actual cash flow shall be included.
- 3. Quality Report summarizing quality control testing and approvals issued or withheld with summaries of test results and any remedial measures.
- 4. Contractual Report outlining all contractual issues and disputes as well as potential areas for dispute and status of any dispute resolutions or Engineer's adjudications.
- 5. Health, Safety and Environmental Report (HSE) summarizing state of compliance with the environmental management plan and environmental clauses of the specification and any site safety issues and violations.
- 6. Consultancy Report. Status of the consultancy contract, state of mobilization of consultant's personnel during the month of reporting, status of invoices and payments and status of contractual issues regarding the consultancy contract including extensions of time, claims for additional cost and requests to change staff.
- 7. Progress photos covering key works shall be included.

The report submission shall include:

- 1. Two (2) hard copies of the complete report including any appendices
- 2. One **e-mailed** soft copy of the report containing one complete copy of the report and all appendices contained in a single PDF file per volume. This shall be copied to a list of e-mail addresses that will be provided and occasionally modified by the Client's Representative.

#### **Final Report**

Within 28 days of the issuance of the Taking Over Certificate, the Consultant shall prepare a Final Report, which shall highlight all major points of interest that arose

during the Contract. The report will also include the summary of the type, quality, quantities and sources of materials used on the project; Contractor's plant and personnel; problems encountered and solutions employed; changes in design and specifications and the reasons therefore; a breakdown of the final cost item by item; a summary of variation orders and expenditures of provisional sums and contingency sums.

The Final Report shall include the as built drawings.

In general, the final report shall follow the same format as the Monthly Reports.

The report submission shall include:

#### **Draft Submission**

- 1. Five (5) hard copies of the complete report including any appendices
- 2. Five (5) A3 size hard copies of the as built drawings
- 3. One **e-mailed** soft copy of the report containing one complete copy of the report and all appendices contained in a single PDF file per volume. This shall be copied to a list of e-mail addresses that will be provided and occasionally modified by the Client's Representative.

# **Final Submission**

Within one month of receipt of the Draft Report the Client shall issue his comments to the Consultant who shall then finalize the report. The final report shall be submitted no later than 28 days following the receipt of the Client's comments. Submission shall be as follows:

- 1. Two (2) hard copies of the complete report including any appendices
- 2. Two (2) A3 Size hard copies of the as built drawings
- 3. Two (2) flash drive soft copies of the report containing:
  - a. Copies of all word, excel, AutoCAD or other similar files used in compiling the report and as built drawings
  - b. One complete copy of the report and all appendices contained in a single PDF file per volume.

#### **Accident Reports**

A report of the circumstances of any significant accidents occurring on the site shall be forwarded to the Client promptly. Submission shall be as follows:

- 1. One **e-mailed** soft copy of the report containing one complete copy of the report and all appendices contained in a single PDF file per volume. This shall be copied to a list of e-mail addresses that will be provided and occasionally modified by the Client's Representative.
- 2. One (1) hard copy of the complete report including any appendices submitted not later than 7 days following the e-mail delivery.

3.

#### 3.3.24.2 Claims and Extension of Time Reports

A report detailing the consultant's assessment of all claims notified by the Contractor shall be prepared and submitted to the Client. Submission shall be as follows:

- 1. Five (5) hard copies of the complete report including any appendices
- 2. One **e-mailed** soft copy of the report containing one complete copy of the report and all appendices contained in a single PDF file per volume. This shall be copied to a list of e-mail addresses that will be provided and occasionally modified by the Client's Representative.

#### 3.3.24.3Minutes of Meetings

The Consultant shall be responsible for preparing minutes for all progress meetings and other formal meetings with the Contractor. These shall be delivered to all meeting participants as soon as possible after the meeting and never more than 7 days following the meeting. Submission shall be as follows:

- One e-mailed soft copy of the minutes in word and PDF format. This shall be copied to a list of e-mail addresses that will be provided and occasionally modified by the Client's Representative;
- 2. Three (3) hard copies of the signed minutes.

#### 3.3.25 Interim Payment Certificates

The Consultant shall be responsible for certifying interim payment certificates in accordance with the requirements of the Works Contract.

- One e-mailed soft copy of the payment certificate in MS-EXCEL and PDF format.
   This shall be copied to a list of e-mail addresses that will be provided and occasionally modified by the Client's Representative; and
- 2. Five (5) hard copies of the payment certificate.

#### 3.3.26 Final Payment Certificate

The Consultant shall be responsible for certifying the final payment certificate in accordance with the requirements of the works contract.

- 1. One **e-mailed** soft copy of the payment certificate in MS-EXCEL and PDF format. This shall be copied to a list of e-mail addresses that will be provided and occasionally modified by the Client's Representative.
- 2. Five (5) hard copies of the final payment certificate.

#### 3.3.27 Timing of the Supervision Assignment

The assignment is expected to be a executed in 12 months construction period followed by a 12 month defects liability period.

#### 4 Qualification Criteria

#### 4.1 The consultancy firm

The required firm should have with following expertise:

- Shall have at least 10 years of relevant experience in sustainable infrastructure and buildings, design and construction;
- Shall have knowledge and experience in preparing Environmental and Social Management Plans and frameworks using both national and World Bank safeguards; and.
- Experience in working within National Parks and Wildlife Reserves is an added advantage

#### 4.2 Qualification for personnel

#### 4.2.1 Phase 1 and 2

The Consultant shall provide sufficient resources to carry-out all the services required under this assignment and the input together with minimum requirements for the key professional staff are as indicated below. All the key professional staff should have graduate/first degrees as a minimum and the first three experts must be registered with professional bodies within their fields of expertise. The Consultant will be required to apportion the key professionals' contingent and inputs to the technical proposal.

#### Design / Review Period (3 months)

Table 2 Phase 1 and 2 required personnel

Item	Description	N0	Man-Month
A	Team leader	1	3
В	Bridge engineer	1	3
С	Architect	1	3
D	Environmental and Social Expert	1	3
Е	Quantity Surveyor	2	3
F	Electrical / Mechanical Engineer	1	1
G	Land Surveyor	1	1

#### 4.2.2Phase 3

The Consultant shall provide sufficient resources to carry-out all the services required under this assignment and the input together with minimum requirements for the key professional staff are as indicated below. All the key professional staff should have graduate/first degrees as a minimum and the first three experts must be registered with professional bodies within their fields of expertise. The Consultant will be required to apportion the key professionals' contingent and inputs to the technical proposal.

# Construction Period (12 months)

Table 3: Construction supervision required personnel

Item	Description	N0	Man-Month
A	Team leader	1	6
В	Bridge engineer	1	3
С	Architect	1	3
D	Environmental and Social Expert	1	5
Е	Quantity Surveyor	2	3
F	Electrical / Mechanical Engineer	1	2
G	Land Surveyor	1	1
Н	Clerk of Works	3	6
I	Materials Technician	1	2

Defects liability period (12 months)

Table 4: Defects liability period required personnel

Item	Description	Man-Month
1	Team Leader	1
2	Clerk of Works	1

The Consultant's personnel, nominated for this project, shall be suitably qualified and experienced. As a guide, the following is an indication of the minimum level of training and experience expected of the key members of the supervision team:

- (a) Team Leader with a minimum qualification of B.Sc. in Architectural Studies and registered with the relevant professional body, and must have at least 10 years of working experience and at least 2 projects as a Team Leader in the last 10 years.
- (b) Bridge Engineer with a minimum qualification of BSc. in Civil Engineering or Geotechnical Engineering, and registered with the relevant professional body, and must have at least 10 years of working experience in civil works, and should have undertaken 2 bridge projects in the last 5 years.
- (c) Architect with a minimum qualification of BSc. in Architectural Studies, and registered with the relevant professional body, and must have at least 8 years of

- working experience in design works and should have undertaken at least 2 buildings projects in the last 5 years.
- (d) Environmental and Social Expert- with a BSc Degree in either Environmental Science and Technology or BSc Degree in Social Sciences or its equivalent; and must have 5 years working experience. He must have undertaken at least 2 assignments as an Environmental or Social Expert.
- (e) Quantity Surveyor- with BSc in Quantity Surveying and 10 years of work experience and registered with a relevant professional bodies. He or She must have undertaken at least 3 construction projects as a Quantity Surveyor.
- (f) Electrical / Mechanical Engineer- with a minimum qualification of BSc. in Electrical/Mechanical Engineering, and registered with a relevant professional body; and must have 10 years of work experience. He or She must have undertaken at least 3 construction projects as a Building Services Engineer.
- (g) Land surveyor- with a minimum qualification of BSc. in Land Surveying, and registered with a relevant professional body; and must have 5 years of work experience. He or She must have undertaken at least 2 building / civil projects.
- (h) Clerk of Works with a minimum qualification of Diploma in any of the following: Civil Engineering, Architectural Studies, Construction Technology or an equivalent qualification obtained from Accredited Institutions and must have at least 10 years of working experience in supervision of similar works;
- (i) Materials Technician with a Diploma in Civil Engineering or its equivalent and must have at least 5 years' experience in carrying out field laboratory tests;

#### 5.0 Obligations of the Contracting Agencies

#### **5.1 Obligations of consultant**

The firm will be fully self-sufficient in terms of transport, office space and equipment, accommodation, notwithstanding the above-mentioned facilities. The consultancy firm shall abide, at all times, by the protected areas rules, regulations and instructions (Standard Operating Procedures) regarding safety and environmental sustainability given by the Client.

## **5.2** Assistance to the Consultant by the Contracting Authority

The consultancy firm is expected to be self-sufficient. The Client will ensure that the relevant available documents, data, and information will be provided to the consultant. The Client will ensure timely clearance and feedback on reports. The Client will introduce the consultant team and their assignments to all relevant stakeholders at all levels and facilitate interactions. The Protected Areas Management Team will provide access to and security for the firm's staff within the protected area.

#### **5.2.1** General Assistance during Site Supervision

The Contracting Authority will make available the following information and support to the Consultant: • Introduction letters to facilitate the access of the Consultant's staff to Ministries, Government administrations, public organizations, authorities and agencies, etc, whose activities and role are relevant to the consultancy assignment; and

#### **5.2.2** Contact Person

The Consultant shall liaise on this project with the SVTP PMT.

#### **5.2.3 Payments**

Payment of the services shall be on quarterly basis and shall depend on the actual time inputs of the various staff on site.

For reimbursable claims, the Consultant shall attach expenditure supporting documents including Vehicle log books.

# **6** Expected outputs and Timeframe

# 6.1. Expected outputs

Table 5 indicates the expected outputs of the assignment and the time frames

Table 5: Expected Outputs

STAGE A:	
Deliverable	Timeline from the date of agreement
Inception report	
i. A concise inception report within 2 weeks from the onset of the consultancy work with an appropriate work plan and working methodology	2 weeks
Cost estimates and Architectural Designs:	
Conduct site investigations and produce reports	3 weeks
Produce architectural and structural drawings	5 weeks
Development of bill of quantities	8 weeks
Development of cost estimates and specifications	2 weeks
Development of ESMPs for all new investments	2 Weeks
Preparation of contract documents	2 weeks
Total	12 weeks
Reporting and Supervision Arrangements:	
Regular monthly interim progress reports indicating status, major results achieved, problems encountered, and solutions adopted;	56 weeks
Complete technical documentation for tendering the construction, and installation and rehabilitation works;	
Report of technical analysis of tender offers;	
Full supervision of all the construction works. Clearance of Interim Payment Requests (IPRs) by the Contractor based on physical progress, confirming that construction criteria, quality of materials and standards are fulfilled by the contracted Construction Company;	

A final report within two months of completion showing that the Construction Company has completed all buildings and water installations to the satisfactory standards, including social and environmental standards.	
Total	56 Weeks

The Consultant will provide reports in 6 hard copies of which 3 will be color copies as well as in electronic form (PDF and MS Word formats) in a flash disk no later than 15 days after the scheduled end of the activity, or as indicated for specific cases or in specific terms of reference. For the technical outputs, the Consultant is expected to provide all raw data, calculations and design and as-built drawings in usable digital format for further verification and use. The signed original hardcopy will be the authorized copy from the consultant.

# A) Reporting and Supervision Arrangements

In all formal aspects of this assignment including reporting, the consultant will report to the SVTP Project Coordinator. For day to day functional coordination and guidance, the consultant will work directly with the designated sub-component 4 Coordinator and DNPW, DoFi, and DoF Management.

# 7 Performance Measurement and Payment Schedule

Performance will be measured based on successful completion and acceptance of each of the deliverables. Payment will be done in five instalments and based on completion of deliverables.

Table 6: Performance Measurements and Payments Schedules

Deliverable	% payment
Submission and acceptance of Final Inception Report	5%
Submission, presentation and validation of designs and cost estimates	30%
Submission and Acceptance of Tender Documents	10%
Submission and acceptance of Interim Supervision Report	20%
Submission and Acceptance of Final Supervision Report marking the end of all construction activities	35%
Total	100%

# 8 Application

Prospective firms shall submit an expression of interest (EoI) that should include CVs of key personnel, technical and financial proposals, names and contact details of at least 3 traceable referees to the following address no later than (**date**) to the Procurement Specialist, Shire Valley Transformation Programme, Private Bag 379, Blantyre 3.