

**THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT**

**TANZANIA CITIES TRANSFORMING INFRASTRUCTURE AND
COMPETITIVENESS (TACTIC) PROJECT
IDA CREDIT NO. 7151-TZ**

TERMS OF REFERENCE

FOR

**THE PROVISION OF CONSTRUCTION SUPERVISION CONSULTANCY SERVICES FOR
URBAN INFRASTRUCTURE DEVELOPMENT IN BARIADI TOWN COUNCIL UNDER
THE TACTIC PROJECT**

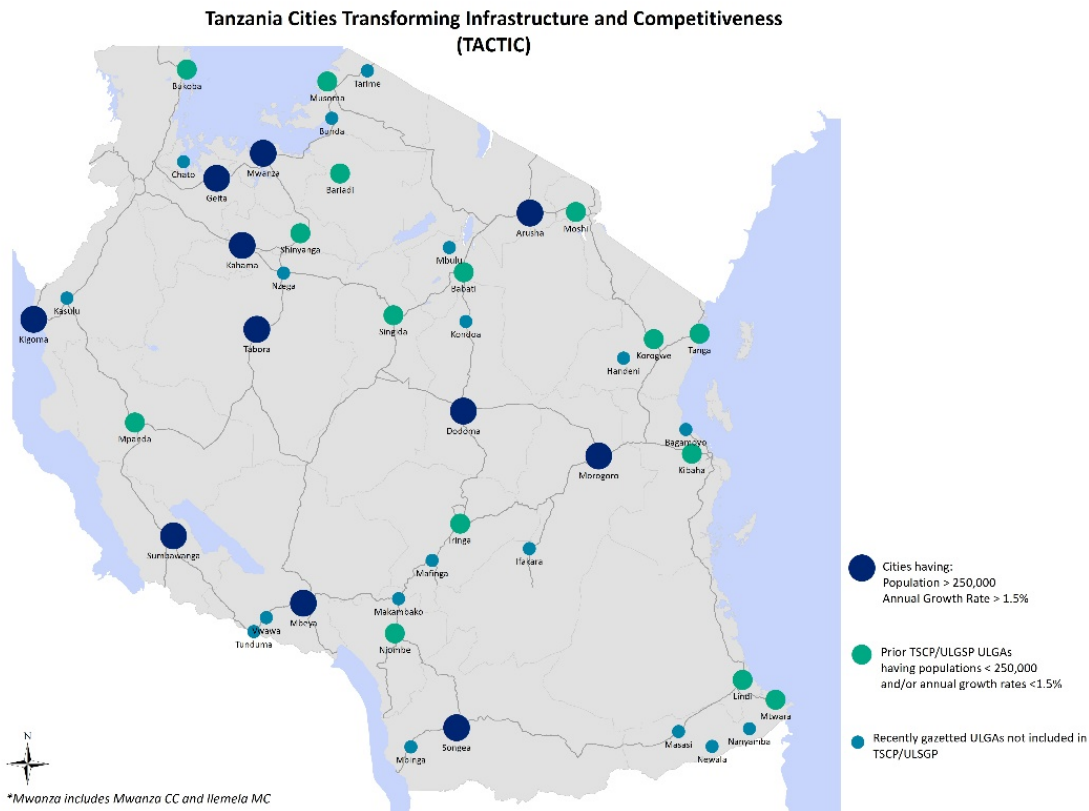
1. BACKGROUND

1.1 Tanzania Cities Transforming Infrastructure and Competitiveness (TACTIC) Project

The Government of the United Republic of Tanzania has received a credit from the International Development Association (IDA) towards the cost of Tanzania Cities Transforming Infrastructure and Competitiveness (TACTIC) Project. It is intended that part of the proceeds of the credit will be used to cover eligible payments under the contracts for the provision of construction supervision consultancy services for Urban Infrastructure Development in Bariadi Town under the TACTIC Project

The Project Development Objective (PDO) is to strengthen urban management performance and deliver improved basic infrastructure and services in participating urban Local Government Authorities (LGAs). This would be achieved through the rehabilitation and expansion of urban infrastructure and institutional strengthening activities aimed at improving the fiscal and management capacities of the participating LGAs. The project targets 45 urban LGAs spread geographically across all regions of Tanzania, ranging in population from 26,402 to 416,442 (2012), divided into three tiers based on population and growth rate. Figure 1 below presents a map of all Cities/Municipalities/Towns included under TACTIC.

Figure 1: Map of TACTIC Cities/Municipalities/Towns



A second tier of 15 medium but fast-growing LGAs are included in the second phase of infrastructure design and implementation (indicated in the medium green dots in Figure 1 above) – a subset of these LGAs is the focus of this Terms of Reference

The Project includes the following Components:

Component 1: Strengthening Urban Management

This component will strengthen the institutional capacity of all participating LGAs in core urban management functions and their capacity for sustainable delivery of urban infrastructure and services through focusing on five areas, namely: (i) urban finance, (ii) urban planning and enforcement, (iii) urban service delivery and operations and maintenance, (iv) urban resilience, and (v) economic competitiveness as summarised below.

Component 2: Productive, Inclusive, and Resilient Urban Infrastructure

This component finances interventions that promote urban productivity, inclusiveness, and climate resilience in participating cities. Urban infrastructure investments under this Component have been prioritized by President’s Office Regional Administration and Local Government (PO-RALG) and local government authorities based on the following criteria and principles: (a) population size and density; (b) vulnerability to natural disasters; (c) income levels; and (d) lack of access to basic infrastructure and services.

Component3– ProjectManagement

This component will finance inter alia incremental operating costs of PORALG, Project Coordination Team (PCT), Project Implementation Teams (PITs) and Tanzania Rural and Urban Roads Agency (TARURA) to support coordination, financial management, procurement, monitoring and evaluation, and environmental and social management, to ensure the project is implemented efficiently, and in accordance with the fiduciary and environmental and social requirements.

Component 4 – Contingent Emergency Response, CERC

This component enables rapid response to eligible emergencies and disasters caused by natural and man-made events by providing contingent financing. Many TACTIC cities face increasing disaster risks associated with climate change impacts and rapid unplanned urbanization, with flooding during the rainy seasons being the most common recurring disaster. Several cities are in seismically active zones. This component will allow the Government of Tanzania to access project funds to support immediate disaster response, rehabilitation, and reconstruction needs. The CERC will initially have no funding allocation, but upon its activation uncommitted funds from other project components will be reallocated to serve the eligible needs.

2. SCOPE OF THE REQUIRED SERVICES

2.1 Supervision Consultancy Objectives

The Consultant's Engineer/Project Manager shall perform and fulfil the following objectives: -

- Carry out design review and prepare design review report and revised set of contract documents for construction
- Carry out any required redesign and design of any new additional scope in relation to this assignment
- Act as Project Manager for supervision of at least two construction contracts
- Supervise ESMP implementation and ensure compliance with Occupational Health and Safety (OHS) measures
- Prepare substantial completion certificates and review/validate as-built drawings
- Monitor Defects Liability Period (DLP)
- Contract completion and handover
- Knowledge transfer to strengthen engineering and technical capacity of the TACTIC Project Implementation Team (PIT)
- Review and develop O&M manuals to reflect the updated features during the implementation
- Any other tasks assigned by the client in relation to this assignment.

2.2 Scope of Required Supervision Services

The Client (Bariadi Town Council) now wishes to employ the Consultant (firm) who shall act as the Project Manager, to be responsible for supervising the execution of the construction works and administering the Contractor's Contract on behalf of the Employer. Under the contract for supervision services, the Consultant will provide direct on-site supervision of the construction works under the TACTIC Project and after their completion and provide part-time supervision of the defect liability period. The supervision services are to be preceded by a comprehensive review of the contract documents (detailing of designs and production of required information/data for sub-projects). Furthermore, the consultant will provide similar technical services/assistance or advice on any other tasks assigned by the Client in relation to this assignment. The following are the main works to be supervised under the TACTIC Project in Bariadi Town:

Works Package	Description	Approx. Scope
Package 1	Upgrading of Central Business District (CBD) Roads and Construction of Bariadi Main Market in Bariadi Town.	<ul style="list-style-type: none">• Roads = 7Km• Market =14,030M2

The supervision services to be provided by the contracted consultant will be guided by these Terms of Reference (TOR).

2.3 Procurement Method, Type of Contract and Defects Liability Period

The following are the details for the method used for procurement of contractors, type of contract and DLP for work packages:

Procurement method for works contractors: National Competitive Bidding (NCB) procedures as described in the *World Bank's "Procurement Regulations for IPF Borrowers" Fifth Edition, September 2023 ("Procurement Regulations")*.

Form of Works Contract: Contract for Small Works as given in the World Bank's Standard Procurement Document: Request for Bids - Small Works (One-Envelope Bidding Process), dated October 1, 2018, updated March 2021.

Defect Liability Period: 12 months after the Intended Completion Date for the Works.

2.4 Scope of the Consultancy Services

The Consultant will undertake works supervision and his obligations shall include, but not be limited to the following:

2.4.1 Contract Documents Review and Redesign

1. Review contract documents for the works including designs, briefs and concepts, technical surveys, detailed design, landscape, architectural and engineering drawings, Bills of Quantities (BoQ), technical specifications, Environmental and Social Management Plan (ESMP), Occupational Health and Safety (OHS) measures etc. so that deficiencies (if any) are identified in time and adjustments are made before starting construction work. Timely bring to the attention of the Client/Employer and PO-RALG any issues that are inconsistent or require decision making or clarification(s) and ensure they are resolved.
2. Where necessary, carry out: redesign, revision of drawings, identification/suggestion of suitable alternative design concepts, routes or construction methodology for the works, sources of construction materials, material testing/quality control, environmental mitigation measures, OHS measures, and any other professional activities that will control cost and time as well as enhance the quality of outputs, completeness, use and effectiveness of completed sub-projects/facilities. This may also include additional technical survey works (geo-technical, topographical, hydrological, etc.). The design review should also verify any changes to the affected land, structures or other elements identified in the Resettlement Action Plan (RAP).
3. Stand-alone design review report will be prepared and submitted for the Package 1.

2.4.2 General Supervision of Works

1. Identify and mark all utilities with the help of competent authorities and assist the Client /Employer in effecting the removal/relocation as it may require, of all utilities within the construction area, and allow the Contractor to plan for their relocation.
2. Review and appraise drawings showing the construction details, methodology, and proposals for execution of the works as submitted by the Contractors and make improvements as necessary.
3. Provide support to LGA to ensure that all sites are cleared of any resettlement issues before contractors' mobilization in accordance with Resettlement Action Plan (RAP) for the works, and grievance procedures are effectively administered, and continue to be functional throughout the project construction period.
4. Check the adequacy of the Contractor's temporary works and the safety of the Contractor's working methods
5. Establish schedules and flow charts for all activities, including mitigation measures for adverse environmental and social impacts, taking into consideration the work programme submitted by the Contractors.
6. Check and ensure that Contractors adequately mobilize key staff, on-site construction personnel teams and supply all equipment and plant as per the requirements of the works contracts and ensure that all such items/personnel remain on site until no longer required.
7. Ensure that the Contractor whose contract requires the supply of selected laboratory equipment for the LGA supply, deliver, install and commission the equipment as specified while also ensuring that the laboratory equipment units supplied by the contractor are calibrated by the Tanzania Bureau of Standards (TBS) for proper determination of the accuracy during operation of equipment for testing; and that the

laboratory building is constructed or refurbished with all the stated furnishings/facilities as specified in the contract documents, the laboratory is made ready for use in a timely manner and it is effectively functional. Similarly, ensure the same is done by the Contractor in case of the supply of survey equipment or any other equipment specified in the contract

8. Assign the necessary field staff to perform such field operations as required and be responsible for all administrative work related to project supervision requirements, including proper conduct, attendance and performance of duties of its staff, and ensure that they properly record all equipment, materials, etc. supplied under the contracts.
9. Establish supervision survey teams, review design levels, profiles etc. and carry out initial markings to be able to assess correctly the extent of construction works to be undertaken by the Contractors, supervise and modify as necessary and ensure they are progressively attained to completion as required.
10. Take records of purpose made drawings the actual level and nature of foundations, the strata encountered during excavation and full details of any deviations from the working drawings.
11. Establish works inspection teams to undertake on-site supervision of construction works that will be able to check/assess correctly the quality, quantities and extent of construction works to be undertaken by the Contractors and ensure that they are progressively achieved up to the completion of the works as per the requirements of the contract. Works inspection teams should include the presence and consultation of the Resident Engineer at the onset of critical phases of construction at their discretion, which may include for example mixing of concrete, preparation of foundations, concrete reinforcement interventions and so forth.
12. Ensure quality testing laboratories are established and fully equipped as per the works contract requirements and check regularly the calibration of testing equipment as well as the availability or identification of a well-equipped and quality laboratory capable of handling testing and specifications requirements for all materials and finished works to confirm compliance to the contract standards. Timely carry out such tests in accordance with test standards specified in the specifications and document these regularly in the progress reports.
13. Supervise work to ensure that it is executed to the correct line and level and that the materials, plant and workmanship comply with the specifications
14. Liaise with the Materials Engineer over all testing requirements and monitoring of test results
15. Check all manufactures' test certificates submitted by the Contractor and keep records of all inspections, variations, tests (including load and pressure test) and points of contention.
16. Supervise fully, in a participatory and collaborative manner with the LGA Team under the TACTIC Project Coordinator; the construction of works with due diligence and efficiency in accordance with sound technical, administrative and financial practices. Specifically, take special attention to the drainage works by ensuring that any surface run-off water or flood water is safely disposed of into a natural drainage channel, river or lake without causing harm to the surrounding communities or residents of the area; otherwise make adjustments to the works or re-routing the water to safe final disposal

facilities where necessary. Perform all duties associated with such tasks in line with the current "state of the art". Fully ensure compliance with the designs and specifications and making improvements and modifications as will, in the consultant's opinion, result in economy without sacrificing quality of the finished works.

17. Take measurements, calculate and record quantities by acceptable method, prepare monthly interim payment certificates, final accounts and final payment certificates and assist the Client/Employer in the taking over of the completed works at the final inspection and prepare a completion report on the works contracts. Submission of the mentioned documents will be to the Municipal Director with copies to the PO-RALG.
18. Ensure enquiries/queries/claims by contractors are promptly reviewed and resolved and similarly, payment certificates are reviewed and cleared timely, submitted to the Employer and follow-ups are made for them to be paid within the period provided contractually.
19. Review and approve Contractors' work programs. The work programme should include resource aggregation such as manpower, equipment and materials for each activity of works for ease of tracking production of works as well as progress of works; and conduct monthly site meetings, also deal with matters raised in accordance with the early warning procedures indicated in the Works contract and review plans for the remaining work. Minutes of these meetings will be included in the monthly progress reports.
20. Ensure that the Contractor fulfills its (his) obligation of giving Early Warning at the earliest opportunity to the Project Manager and Employer in accordance with the General Conditions of Contract (GCC) with regard to specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works.
21. Monitor progress against the Contractor's programme (including the resources required) and advise the Client of potential delays.
22. Review requests from Contractors or any situations that may lead into variations in BoQ work items or issuance of instructions to omit, add or increase in quantities of work items in the contract BoQ, adding/omitting a sub-project originally in the contract, a section of road, a facility, etc. and their implication(s) in terms of time for execution, resources, environmental and social impacts, quality of work, usability/effectiveness of the completed facility/ sub-project, related costs and the overall contract price, advise the Employer/Client accordingly and seek approvals of Employer/Client and (PO-RALG) prior to any issuance of the variation orders.
23. Keep all records updated including reports, work diaries, correspondences, instructions given to contractor(s), test records, measurement and quality calculations, payment records and all other relevant documents pertaining to the works operations and supervision contracts.
24. Study and acquire skills on the use and application of the developed project supervision tool, train PO-RALG, LGA, TARURA District Offices and Contractors' staff on its application and assist collection of required data, cleaning, organize and submit them to Client.
25. Prepare and enter construction progress data in the project remote supervision IT tool.
26. Maintain a site diary and record all daily works carried out, plant, equipment, materials

and personnel assigned to various activities, keep a daily diary to record important events at the site including progress, weather conditions, accidents and communications with the Contractor with the contents and format to be agreed with the Client.

27. Carry out financial control by monthly assessment and projection of anticipated final cost for the contract, identify any possible savings for utilization on other essential work activities or cost overruns in time for making necessary adjustments to remain within the same contract price; and prepare/submit to the Client the final cost of executed works
28. Take geo-referenced progress photographs and maintain thorough photographic documentation of conditions before, during upgrading/rehabilitation or construction and after completion of the sub-projects. Progress photographs to be part of monthly progress reports as indicated in paragraph 6(b) below.
29. Ensure that the Contractors observe Tanzania labour laws in the employment of permanent and casual labour force for the execution of the works.
30. Investigate and report with recommendations any unusual circumstances which may arise during construction.
31. Give the necessary instructions to the Contractors and deal with contractual claims and settlement of disputes which may arise between the Employer and the Contractors, provide timely advice on suitable and effective resolutions and assist to resolve them.
32. Provide technical assistance to LGA Team headed by the TACTIC Coordinators (Council and) TARURA) so as to enable it to effectively monitor and supervise implementation of the works.
33. Organize/conduct monthly meetings during the construction period to update the Council Management Team (CMT) on the progress of the works, highlight and bring to the attention of the Management Team issues that need to be addressed/resolved or those needing decisions/follow-ups as well as getting feedback from the Council/communities/beneficiaries and addressing any concerns that may arise. Minutes of the meeting will be included in the relevant monthly report
34. Prepare and submit to the Municipal Director with copies to the (PO-RALG), an Inception Report, Monthly Reports and a Final Report in a manner, contents and timing as detailed under paragraph 6 of the TOR namely, "Reporting".
35. Assist in the preparation of dissemination materials/information on project activities for the public, Municipal Council and PO-RALG when required.
36. Participate in the TACTIC Project Technical Review Meetings and IDA's implementation support missions or review missions and prepare respective reports on behalf of the Municipal Council to PO-RALG, Technical Committee and the IDA as and when required.
37. Review Contractors' requests (if any) for extension(s) of time and the implication(s), advise the Employer/Client accordingly and seek approvals of Employer/Client and PO-RALG.
38. Receive from works Contractors, review and submit to the Municipal Director complete set of reproducible, as-built engineering drawings of the completed works.
39. Monitor the defects liability period in collaboration with Municipal Council to its

completion. This will be done periodically as well as on occurrence of defects on the completed works, issue necessary instructions to Contractor(s) for taking remedial measures as per the works contract.

40. Assist the Municipal Council in procurement processes that may arise during the period of the Consultant's assignment including giving advice or participating in the processes as may be requested by the Client.
41. Ensure that the Contractor delivers its ES obligations under its contract. This includes, but is not limited to the following:
 - i. Review the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions at frequencies specified in the Contractor's contract (normally not less than once every 6 months);
 - ii. Review all other applicable contractor's documents related to ES aspects including the health and safety manual, security management plan and SEA prevention and response action plan;
 - iii. Review and consider the ES risks and impacts of any design change proposals and advise if there are implications for compliance with ESIA, ESMP, consent/permits and other relevant project requirements;
 - iv. 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 ES requirements (including relevant requirements on SEA/SH);
 - v. Undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other ES related documentation, as necessary, to confirm the Contractor's compliance with ES requirements (including relevant requirements on SEA/SH);
 - vi. Determine remedial action/s and their time-frame for implementation in the event of a noncompliance with the Contractor's ES obligations.
 - vii. Ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with ES obligations;
 - viii. Ensure that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;
 - ix. Review and critique, in a timely manner, the Contractor's ES documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation;
 - x. Undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ES issues;
 - xi. 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.

42. Environmental and Social (ES) Reporting

The Consultant shall;

- i. Immediately notify the Client of any failure by the Contractor to comply with its SEA and SH obligations;
- ii. Immediately notify the Client of any allegation, incident or accident, 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 time-frame agreed with the Client.
- iii. Immediately inform and share with the Client notifications on ES incidents or accidents provided to the Consultant by the Contractor, and as required of the Contractor as part of the Progress Reporting;
- iv. Share with the Client in a timely manner the Contractor's ES metrics, as required of the Contractor as part of the Progress Reports.
- v. The above ES requirements shall also apply during the Defects Liability Period (DLP)

2.4.3 Environmental and Social Implementation and Monitoring

1. The Consultant will ensure that the Contractor delivers its environmental and social obligations under its contract in line with the Environmental and Social Impact Assessment (ESIA) Report, Environmental and Social Management Plans (ESMPs), Resettlement Action Plans (RAPs) and any other environmental and social safeguards instruments prepared for the project.
2. The Consultant is generally responsible for monitoring the implementation of environmental and social impacts and mitigative measures during the construction of the works in consultation with National Environmental Management Council (NEMC). This will include daily supervision as part of the Consultant's overall supervision obligations. This includes, but is not limited to the following:
 - (i) Review the Contractors' Environment and Social Management Plans (C-ESMP), including all updates and revisions at frequencies specified in the Contractor's contract (normally not less than once every 6 months);
 - (ii) Review all other applicable contractor's documents related to environmental and social aspects including the health and safety manual, security management plan and sexual exploitation and abuse prevention and response action plan;
 - (iii) Closely supervising execution of environmental and social safeguards on a daily basis.

- (iv) The Contractor will supervise negotiations of the associated costs of environmental and social measures, as most measures are generally accommodated in the BoQ as a provisional sum and will need close supervision.
- (v) Review and consider the environmental and social risks and impacts of any design change proposals and advise if there are implications for compliance with ESIA, ESMP, RAP/RPF, consent/permits and other relevant project requirements;
- (vi) 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 environmental and social requirements (including relevant requirements on sexual exploitation and abuse/sexual harassment);
- (vii) Undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other environmental and social related documentation, as necessary, to confirm the Contractor's compliance with environmental and social requirements (including relevant requirements on sexual exploitation and abuse/sexual harassment);
- (viii) Determine remedial action/s and their time-frame for implementation in the event of a noncompliance with the Contractor's environmental and social obligations;
- (ix) Ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree on appropriate actions to ensure compliance with environmental and social obligations.
- (x) Ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with environmental and social obligations;
- (xi) Ensure that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;
- (xii) Review and critique, in a timely manner, the Contractor's environmental and social documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation;
- (xiii) Undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential environmental and social issues;
- (xiv) Establish and maintain sub-project level Grievance Redress Mechanism (GRM - in line with the overall project GRM) including types of grievances to be recorded and how to protect confidentiality e.g. of those reporting allegations of sexual exploitation and abuse and/or sexual harassment. The GRM should function to quickly address complaints, engage with stakeholders, and maintain a positive working environment in communities and with sub-project beneficiaries;
- (xv) Document any accidental damages to properties or assets caused by the contractor and ensure that due compensation and/or remedial actions are taken in line with the project Resettlement Policy Framework (RPF). In the case of design modifications that might result in impacts to land, assets, or livelihoods, ensure that the RPF procedures are followed; and
- (xvi) Any other tasks related to this assignment.

2.4.4 Quality Management System

The Quality Assurance/Quality Control (QA/QC) should be prepared based on best practices required to implement total quality management system through ISO 9000 series which gives requirements on how to prepare quality management system. Construction industry will be based on ISO 9001. Therefore, consultants should be based on ISO 9000 series to prepare quality management system to be adhering during construction.

2.4.5 Occupational Health and Safety (OHS) Supervision

The Consultant will inspect the health, safety, and security aspects of construction and temporary works to ensure that every reasonable measure has been taken to protect life and property of workers and communities. Per the project environmental and social management framework and/or stand alone health and safety framework, the consultant will be responsible for activities including but not limited to:

- (i) Ensure that the “Certificate of Registration” issued by OSHA-Tanzania is available with contractor.
- (ii) Ensuring that a site-specific Occupational Health and Safety (OHS) manual is developed and implemented by contractor in accordance with legal and contractual requirements related to OHS. Such manual shall be available before the start of work and be reviewed and approved by the Consultant.
- (iii) Ensuring the contractor always has a designated qualified person (per OSHA requirements) on site as a health and safety focal point.
- (iv) Establishing a programme of OHS training for the contractors and PIT.
- (v) Enforcing permit-to-work systems (e.g. for confined space work, working from height, pipe lifting/shifting activities) and ensuring that no activity takes place at site without an approved Safe Work Method Statement.
- (vi) Ensuring the contractor carries out toolbox talks to brief workers on safety issues for the day’s work, and supplementing with training where there are notable gaps in the contractor’s capacity.
- (vii) Ensuring that all tools, equipment, machines and vehicles used by contractor are maintained in safe condition.
- (viii) Maintaining an up-to-date accident/incident register and alerting the PIT immediately of any accidents, fatalities, or major safety lapses by the contractor.
- (ix) Ensuring consistent use of adequate PPE by labourers depending on the work being undertaken.
- (x) Ensuring adequate barricading, shoring, etc for any excavation work based on sound engineering practices.
- (xi) Ensuring adequate measures including fencing, barricades and signage are in place for community protection.
- (xii) Stopping works and issuing corrective actions to the contractor in the event of safety lapses.

- (xiii) Review the OHS performance on Contractor at frequency described in contract (normally every 6 months) through audits.
- (xiv) Conducting review meetings with Contractor on its OHS performance at frequency described in contract (normally every 6 months).
- (xv) Summarize each contractor's performance in OHS compliance and performance in the Consultant's monthly progress reports, including any incidents and/or corrective actions issued.
- (xvi) Closely supervising execution of health and safety and negotiations of the associated costs as this is generally accommodated in the BoQ as a provisional sum and needs close supervision.

2.5 Transfer of Knowledge (Training) Program

The main objective of skills transfer is to strengthen engineering and technical capacity of the TACTIC Project Team and LGA competence in general and to assist the Team in developing engineering skills and competency in project administration throughout on-job training program and one-week technical excursion for exposure to best implementation practices of well-developed infrastructure projects within the Southern African region, up to fifteen personnel. This should cover civil, geo-technical, social/resettlement and environmental fields of expertise. The Team will need technical strengthening in the following main areas/topics:

- (a) Review of designs and contractor submissions;
- (b) International design codes and standards;
- (c) Project scheduling, control, and quality assurance program for client/employer;
- (d) As-built drawing review, design and checking;
- (e) Construction supervision and contracts management (World Bank & FIDIC);
- (f) Field testing, use of materials laboratory equipment and interpretation of test results;
- (g) Preparation of progress and construction management reports;
- (h) Contract start-up and finishing/commissioning procedures;
- (i) Environmental Management; and Resettlement Action Plans (RAP);
- (j) Health and Safety Control Measures appropriate for Construction Sites;
- (k) Contract accounting, financial management and preparation of final accounts;
- (l) Computerized project management, starting with a GANTT chart using off the shelf software such as Microsoft Project, as an example;
- (m) World Bank procurement and safeguard documents;
- (n) FIDIC and other Conditions of Contract;
- (o) Engineer's duties in Construction Supervision;
- (p) O&M planning, budgeting and implementation for infrastructure facilities, etc.
- (q) Any other technical areas/fields in relation to the assignment.

Prepare suitable training programme and conduct periodic on the job-training sessions to build capacity and transfer skills to technical counterpart staff made available by LGA in the field of construction supervision of infrastructure projects, contract management, material testing, results interpretation and general use of the laboratory

and its equipment.

The cost of the Consultant in relation to implementation of capacity building and transfer of knowledge should be included in the financial proposal.

3. CONSULTANT'S INPUTS

3.1 Separate Consultant's Team for each LGA

Procurement of this consultancy services for supervision of construction works in Bariadi Town are being advertised at the same time together with the other fourteen (14) tenders for supervision of works in Babati, Bukoba, Iringa, Kibaha, Korogwe, Lindi, Moshi, Mpanda, Mtwara, Musoma, Njombe, Singida, Shinyanga and Tanga Cities/Municipalities/Town and some of the consultants might be shortlisted in more than one tender.

Consultants shortlisted in more than one tender are encouraged to submit proposals for all the tenders in which they have been shortlisted to take advantage of economies of scale, if they deem themselves to have the required capacity.

However, if so, they are required to propose a complete separate technical team of key staff (other than short-term staff) for each tender (for LGA) since construction works in each LGA will be carried out concurrently in all LGAs. The following 15 construction supervision consultancy (CSC) contracts will therefore be signed separately:

S/No.	Cities/Municipality/Town	S/No.	Cities /Municipality/Town
1.	Babati	9.	Mpanda
2.	Bariadi	10.	Mtwara
3.	Bukoba	11.	Musoma
4.	Iringa	12.	Njombe
5.	Kibaha	13.	Singida
6.	Korogwe	14.	Shinyanga
7.	Lindi	15.	Tanga
8.	Moshi		

3.2 Consultant's Experience

The Consulting firm should have general experience in the development/implementation of infrastructure projects. The firm should have at least 10 years of experience in design and construction supervision of infrastructure development/investments that include urban roads, urban public services, buildings, drainage, open space, environmental and social management plans as well as having successfully supervised at least 2 similar projects (by size and complexity) in the last 5 years in an urban or peri-urban environment in Developing Countries under the World Bank/Donor financing.

3.3 Staff required for the assignment

(a) Key Staff

- (1) Resident Engineer
- (2) Architect
- (3) Highway/Road Engineer
- (4) Materials Engineer
- (5) Land Surveyor
- (6) Environmental Expert
- (7) Sociologist/Resettlement Expert

(b) Short-Term Experts

In addition, short term interventions are required to fully meet the tasks described above. The composition of short-term experts and duration of their involvement is at the discretion of the Consultant but is expected to include but not be limited to: (a) Drainage/Structural Engineer, (b) Quantity Surveyor (c) Service Engineers (d) Electrical Engineer (e) Occupational Health and Safety (OHS) Expert (f) Landscape Designer (g) Botanist and (h) Geotechnical Engineer

Similarly, technical support teams (e.g., civil engineering technicians, materials technicians, road technicians, health and safety inspectors, land surveying technicians etc.) will be required to provide on-site supervision and quality control of contractor's works to completion. They must be clearly identified in the technical proposal; their numbers and positions mentioned and shown (demonstrated) to be adequate in accordance with the scope of the works to be supervised in Para 2.2 above so as to enable proper and successful execution of the supervision assignment.

3.4 Qualification and Experience of Key Staff

(a) Resident Engineer

The candidate for the position must be qualified in BSc degree in civil engineering or equivalent and registered with the relevant professional bodies; post-graduate qualifications in highway/civil engineering will be of added advantage. She/he must have experience of a minimum of ten (10) years related to road design/construction supervision. She/he must have served as a Resident Engineer or Project Manager in at least three (3) road construction projects of similar nature for the last ten (10) years. Experience in contract administration under FIDIC conditions of contract is a must. She/he must have a working experience of at least three (3) years in developing countries.

(b) Architect

The candidate for the position must have professional qualifications in BA or BSc degree in architecture or equivalent fields and registered with the relevant professional bodies and should demonstrate high level of experience in design and supervision of large public buildings, recreational parks and related external works including drainage, landscaping, greenery, spatial facilities, etc. She/he must have experience of a minimum of eight (8) years post-qualification working experience in relevant field and at least five years of experience as an architect for building projects. She/he should have worked as an architect in-charge for at least two projects similar to the projects to be supervised under this assignment, in the last five years. She/he should possess oral and written communication skills in English and must have a working experience of at least three (3) years in developing countries.

The candidate will be responsible for the design revision and supervision of the sub-projects for buildings, drainage, public services spaces, landscaping, greenery, external works, etc. In addition, the Architect should be able to competently perform the roles/responsibilities of the Resident Engineer in his/her absence, and this shall have to be formally notified to the Client.

(c) Highway/Road Engineer

The candidate for the position must be qualified in BSc degree in civil engineering or equivalent and registered with the relevant professional bodies; post-graduate qualifications in highway/civil engineering will be essential. She/he must have proven experience of a minimum of ten (10) years related to road design/construction supervision. She/he must have successfully served as a Highway/Road Engineer in at least two (2) road construction projects of similar nature in the last ten (10) years. She/he must have a working experience of at least three (3) years in developing countries.

(d) Materials Engineer

The candidate for the position must be a qualified engineer and should demonstrate high level of experience in road/infrastructure works as a materials/geo-technical engineer. He/she should possess oral and written communication skills. Specifically, she/he should have BSc degree in civil/geo-technical engineering or equivalent and registered with the relevant professional bodies; post-graduate qualifications in geo-technical/highway/civil engineering will be of added advantage. She/he must have minimum of eight (8) years post-qualification working experience in relevant field and at least five years of proven experience as a materials engineer for infrastructure projects. She/he should have worked as a materials engineer in at least two projects of similar nature in the last five years and possess oral and written communication skills in English and must have a working experience of at least three (3) years in developing countries.

(e) Land Surveyor

The candidate for the position must be a qualified land surveyor and should demonstrate high level of experience in surveying for road/infrastructure works. He/she should possess oral and written communication skills. Specifically, She/he should have

First degree in land surveying or equivalent and registered with the relevant professional bodies; post-graduate qualifications in land surveying will be of added advantage. She/he must have minimum of eight (8) years post-qualification working experience in relevant field and at least five years of experience as a land surveyor for infrastructure projects. She/he should have worked as a land surveyor in at least two infrastructure projects of similar nature in the last five years and possess oral and written communication skills in English and must have a working experience of at least three (3) years in developing countries.

(f) Environmental Expert

The candidate for the position must have professional qualifications in environmental engineering, environmental science or public health engineering and should demonstrate high level of experience in designs, drafting, implementing and monitoring of Environmental and Social Management Plans for infrastructure projects. Familiarity with Tanzania construction and environmental codes and standards as well as internationally acceptable environmental and social management practices is necessary. He/she should possess oral and written communication skills in English. Specifically, she/he should have BSc degree in Environmental Engineering, Environmental Science or Public Health Engineering and registered with the relevant professional bodies. She/he must have minimum of eight (8) years post-qualification working experience in relevant field and at least five years of proven experience as an environmental expert on infrastructure development projects with knowledge of handling social/resettlement related issues. She/he should have worked as an environmental expert in at least two projects of similar nature funded by the World Bank in the last five years and possess oral and written communication skills in English and must have a working experience of at least three (3) years in developing countries.

(g) Sociologist/Resettlement Expert

The candidate for the position must have professional qualifications in social sciences, social/community development, land use planning or equivalent field and should demonstrate high level of experience in designs, drafting, implementing and monitoring of Social Management and Resettlement Action Plans for infrastructure projects. Familiarity with Tanzania and other international construction social and environmental standards is necessary. Specifically, she/he should have at least a BA degree in Social Sciences or related discipline. She/he must have a minimum of five (5) years of full-time relevant operational experience in social development with a focus on the management of social risks, resettlement and community participation issues. She/he should have strong knowledge and experience with World Bank social safeguards (social risks assessment and mitigation & involuntary resettlement) or other International Financial institutions is highly desirable and able to prepare communications materials and engage with the public/communities. She/he should possess oral and written communication skills in Swahili and English and must have a working experience of at least three (3) years in developing countries.

(g) Short-Term Experts

The short-term experts shall include but not be limited to: -

- (i) Drainage/Structural Engineer
- (ii) Quantity Surveyor
- (iii) Service Engineers and
- (iv) Electrical Engineer.
- (v) OHS Expert
- (vi) Landscape Designer
- (vii) Botanist
- (viii) Geotechnical Engineer

Required Qualifications and Experience

Short-Term Experts should be holders of at least a first degree or equivalent in relevant field, professionally registered with relevant bodies, have at least 10 years of proven working experience in the field relevant to the assignment and a minimum of 5 years of experience in similar projects.

(h) Technicians

Technical support teams (e.g. Civil Engineering Technicians for Civil Works and Public Building Works, Materials Technicians, Road Technicians, Services Technicians - Electrical, Mechanical, Plumbing, ICT, etc., Health and Safety Inspectors, Land Surveying Technicians etc.) that will be required to provide on-site supervision and quality control of Contractors' works to completion should be technically qualified at an officially recognised level of at least a technician (full technician certificate or equivalent) in the relevant field with site experience of not less than 5 years in infrastructure projects implementation.

3.5 Time Input

The Consultant's time input for key staff including short-term professional staff [Para 3.4 (a)–(g)] is estimated to be approximately 52 staff-months for the whole duration of the assignment, but the Consultant may suggest as per its (his) judgment, the level of time input necessary to adequately meet the requirements of these TOR, consistent with its (his) technical proposal. Further, staff input for the Technicians [Para 3.4 (h) above] should separately and adequately be estimated and clearly provided for in the technical and financial proposals respectively so as to ensure proper and successful the supervision of the works described in Para 2.2 above.

Indicative Staff Input

Staff Input	Staff Months (Review)	Staff-Months (During Construction)	Staff-Months (DLP)

	and Redesign)		
Key Staff			
(1) Resident Engineer	1.5	15	1.5
(2) Architect	1.5	6	0.5
(3) Highway/Road Engineer	0.5	4	0.5
(4) Materials Engineer	0.5	2.5	
(5) Land Surveyor	0.5	2	
(6) Environmental Expert	0.5	3	
(7) Sociologist/Resettlement Expert	0.5	4	
Short-Term Experts			
Drainage/Structural Engineer, Quantity Surveyor, Service Engineers, Electrical Engineer, OHS Expert, Landscape Designer Botanist & Geotechnical Engineer	1.5	6	
Estimated Total Staff Input (Staff-Months)		52	

DLP = Defects Liability Period

3.6 Consultant's Transport and Office Space

The Consultant is expected to use own transport during supervision of the works for the first few months of commencing the assignment and in situations necessitating use of own transport during execution of the assignment (approximate total duration of 6 months) without compromising the quality of its (his) services or delaying/hindering the performance of the Contractors under its supervision – appropriate number (units) and type of vehicles provided for this purpose should be stated in the proposal for contractual records (if consultant is successful); however, the transport to be provided should be a minimum of two (2) units of double cabin pick-ups or equivalent. Further, for reason of efficiency and cost effectiveness, the Client through PO-RALG PCT's facilitation including provision of suitable technical specifications, will make available two (2) units of double cabin pick-ups for use by the Consultant in supervision of construction works in the LGA, which at the end will revert to the Client as instructed by the PO-RALG and in accordance with the applicable contract conditions.

Moreover, to enhance collaboration between the Consultant and Council, which needs to be kept close throughout the implementation of the assignment, the Client (Council) will make available some office space to the Consultant for an approximate initial period of at least six (6) months, to be shared with counterpart staff/PIT project staff of the Client, while the Consultant is ensuring expedition of construction to completion and furnishing of the project office to be done by the Contractor for the first works package. During the initial period, the Consultant would then temporarily provide its (his) own suitable furniture, office equipment, stationery, office supplies and secretarial support. The operating costs for Consultant's transport and all facilities for the shared office throughout the implementation of the contract for the supervision assignment should be included in the proposal.

4. DURATION OF THE ASSIGNMENT

The overall duration of the Consultant input in the assignment is twenty-eight (28) months, that includes one and a half (1.5) months at the beginning of the consultant's contract (i.e. 1 month in advance of Package 1 works contract commencement by the Contractor and 0.5 month overlapping within the supervision period for the works contract); a fifteen (15) months period for on-site direct supervision of the works followed by a twelve (12) months defects liability period. The estimated level of effort is 52 professional staff months.

It is intended that the Consultant will spend one(1) month ahead of commencement of Package 1 works contract in establishing its (his) office and doing the necessary preparatory work including review of designs, drawings, BoQs, checking/inspection/verification of work sites/corridor clearance or any necessary changes, environmental and resettlement issues (compensation/resettlement, if applicable), sources of materials, location for contractor's site offices, yard/depots, etc; fifteen (15) months supervising the works contract and two (2) months (staff-months) doing final measurement, final accounts, intermittently handling defects liability period issues and generally assisting the TACTIC Project Team and the Council in closing the sub-projects works contract in the Town; thus making a total of eighteen (18) months of Consultant's input duration.

Note, as stated above, the two (2) months Consultant's input will be part-time supervision by mainly the Resident Engineer & Architect, and occasionally by the other key professional staff of the Consultant as necessary, which is spread within the defect liability period of 12 months for the works contract.

5. REPORTING ARRANGEMENTS

The Consultant will be answerable to the Town Director and the first point of contact will be the TACTIC Project Coordinator and his/her Team in the Town who will be supporting the Town Director's office in the implementation of the sub-projects. The Consultant will work closely with the TACTIC Project Team and the relevant community and civic leaders in carrying out works supervision and submission of physical and financial progress reports. Close liaison should be maintained with the Town Council on matters of land rights, civic and other local issues.

6. REPORTING REQUIREMENTS

The following reports shall be submitted to the Town Director with copies to PO-RALG, Project Coordination Team (PCT) during the tenure of the supervision contract as indicated below:

(a) Inception Report

Indicating appreciation of the assignment, the structure and type of the Consultant's staffing in the office and in the field, organization and implementation arrangements, status and plans for knowledge transfer that is agreed with the LGA, handling resettlement, environmental and OHS issues, procedures for preparing, transporting

and testing of samples and quality control of the works, format for works interim payment certificates and any other relevant issues of importance.

Number of copies and timing: three (3) copies to be submitted to the Town Director and two (2) copies to PO-RALG, PCT [total five (5) copies], four weeks after commencement of the assignment.

(b) Design Review Reports

The design review reports should comprise comments from contract documents including ESMP and RAP after discussing any issues or areas of improvement, potentially scope of work and gather design feedback for works as per sub section 2.4.1 of this TOR. However, the importance of any changes, and the cost implication for each, should ensure the design is compliant with all the Standards and Guidelines and conforms to the requirements and intent of the design objective and agreed on amendments.

Standalone design review reports will be prepared, for Package 1 works

For each design review report, the number of copies and timing is: Three (3) copies are to be submitted to the Town Director and two (2) copies to PO-RALG, PCT – a total of five (5) copies, two weeks after the completion of the design review.

(c) Revised Design Report

The report should include all agreed comments from design review report, not limited to revised drawings, specifications, and cost.

The number of copies and timing: Three (3) copies are to be submitted to the Town Director and two (2) copies to PO-RALG, PCT – a total of five (5) copies, two weeks after the completion of the design review

(d) Knowledge Transfer Summary Report

The report has to elaborate the objective of skills transfer to strengthen engineering and technical capacity of the TACTIC Project Team. The consultants must prepare summary report appropriate with involvement of training programme and conduct periodic on job-training sessions so as to build capacity and transfer skills to technical counterpart staff in the related field of construction supervision and solid waste management issues.

Number of copies and timing: two (2) copies to be submitted to the Town Director and two (2) copies to PO-RALG, PCT - total four (4) copies, two weeks after the end of each month.

(e) Monthly Supervision Reports

Detailed physical and financial progress reports regarding works contract containing information on: stages of completion of various activities; progress photographs; amount spent; variations to the contract resulting from changes in the design, specifications or quantities; estimates of funds required to complete the project; important visitors to the site; equipment deployment schedule; contractor's labour

strength; quantities of materials delivered at the site; days of inclement weather; technical and administrative problems encountered at the site, constraints, delays, cost overruns and any irregularities at the site. compliance with the contractors' site-specific ESMP, and OHS compliance and any incidents Other essential information to be provided in the monthly reports will include:

Consultant's assessment of the general progress of works; should be provided by the CSCs in agreed format with PIT/PCT to maintain consistence with all CSCs during reporting of the monthly progress of works. Claims made by contractor and requisite actions; payment status; work done or to be done by sub-contractors; relocation and resettlement plans; contractors compliance with labour laws. The Consultant would indicate all problems encountered with recommendations for action to be taken or already taken, and also give detailed assessment of any adverse impact the project may have on the environment and the extent to which mitigation measures are being implemented.

Number of copies and timing: three (3) copies to be submitted to the Municipal Director and two (2) copies to PO-RALG, PCT - total five (5) copies, two weeks after the end of each month. Submission of monthly reports will continue up to the end of substantial completion.

(f) Final ESMP Monitoring Report

The ESMP defines desired social and environmental management outcomes and specify social and environmental indicators, targets, or acceptance (threshold) criteria to track ESMP implementation and effectiveness.

To ensure the social and environmental sustainability of the project and its different components, the final report should reflect all issues occurred during project execution and their compliance with the contractors' site-specific ESMP. Furthermore, include any incidents or other essential information to be shared in the final report.

Number of copies and timing: three (3) copies to be submitted to the Town Director and two (2) copies to PO-RALG, PCT- total five (5) copies, one month after outset of the Defects Liability Period.

(g) Defects Liability Period Reports

Prepare a quarterly report which includes a schedule of defects, listing those defects that have not yet been rectified, and agrees with the contractor on the date by which they will be rectified. The contractor must in any event rectify them within a reasonable time.

Number of copies and timing: three (3) copies to be submitted to the TownDirector and two (2) copies to PO-RALG, PCT- total five (5) copies from start of Defects Liability Period to the end.

(h) Final Completion Report

This final report shall comprise of final account of the works contract, final inspection report, a set of “as built drawings”, a list of items that should revert to the Client, solid waste management technical advisory report and any other relevant issues of importance.

Number of copies and timing: six (6) copies to be submitted to the Town Director and four (4) copies to PO-RALG, PCT- total ten (10) copies, one month after the end of the Defects Liability Period and subsequent issuance of the Certificate of Correction of Defects.

At completion all reports, data and drawings should be submitted to the Client in hard copy as above as well as electronic copy in pdf as well as editable format (Word, Excel, .DWG). **The assignment will not be considered complete without a complete document and data package including the editable files.**

7. PAYMENT TO THE CONSULTANT

The Contract to be entered into between the Client and the successful Consultant for supervision of execution of the physical works is “Time Based”. Payments under the time-based supervision consultancy services contract shall be made monthly based on actual inputs for undertaking the assignments described in these Terms of Reference, to cover fees (remunerations) for approved personnel and items under reimbursable expenses as shall be described in the contract to be entered into.

8. FINAL ACCOUNT

As the work proceeds, quantities of completed works will be measured, and all variations and claims will be recorded; these will be used in preparation of monthly payment certificates upon approval of the Client/Employer and provision of proper documentation. At the completion of works and defect liability period, the works will be re-measured, and a final account prepared as described in the contract for the works.

9. DEFECTS LIABILITY PERIOD

The works shall have twelve calendar months Maintenance Period (Defects Liability Period - DLP) after practical completion with intermittent visits by the Resident Engineer and other key staff team members as will be found necessary during the DLP. It is envisaged that during this period, apart from intermittent visits/inspections as necessary, at least two visits shall be made by the Resident Engineer and Architect, one after six months of works completion and the other for final inspection at the end of the DLP, after which a final report will be prepared.