THE UNITED REPUBLIC OF TANZANIA MINISTRY OF WORKS AND TRANSPORT



DAR ES SALAAM URBAN TRANSPORT IMPROVEMENT PROJECT (DUTP)

TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANT TO SUPPORT THE IMPLEMENTATION OF DUTP AND CAPACITY STRENGTHENING TO TANROADS THROUGH THE ENGAGEMENT OF A HIGHWAY DESIGN ENGINEER

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1.0 BACKGROUND

The Government of the United Republic of Tanzania has received a credit from the World Bank towards the cost of the Dar es Salaam Urban Transport Improvement Project (DUTP), and intends to apply part of the proceeds of this Credit for eligible payments under the contract for Consultancy Services to Support Implementation of DUTP and capacity strengthening to TANROADS through recruitment of a Highway Design Engineer, who will be working with TANROADS BRT Project Implementation Unit under the Directorate of Projects to manage issues related to road designs and monitoring the implementation of BRT Projects.

2.0 PROJECT DESCRIPTION

The principal objective of the DUTP (BRT) Project is to improve urban mobility and accessibility in the city of Dar es Salaam through the provision of enhanced transport facilities that are reliable and cost-effective, thereby supporting the economic and social development of the city and the country as a whole.

In order to manage properly the implementation of the DUTP, TANROADS wishes to engage a dynamic, motivated, creative and open-minded Individual Consultant to support management of the BRT Project in the capacity of a Highway Design Engineer of which, this Terms of Reference refers.

In order to ensure sustainable adherence to conditions of contracts (design, road surveys and construction of pavement and associated drainage structures) and standard procedures for Measurements of Road Works, by Consultants and Contractors in the implementation of BRT Infrastructure Projects, TANROADS needs to recruit a Highway Design Engineer to match with the available workload to address design issues during design and construction of BRT Infrastructure. TANROADS also requires professional expertise in road design to build its capacity in that aspect and therefore needs the services of a Highway Design Expert in order to assist in the management of design and construction of BRT Projects efficiently and effectively.

3.0 OBJECTIVES OF ASSIGNMENT

The objective of the assignment is to monitor (peer review with emphasis on design) the adherence to Design Standards, Contract Specifications and Contract Provisions (design, road surveys and construction of pavement and associated drainage structures) and ensure adherence to standard procedures for Measurements of Road Works by the works supervising Consultant and Contractors to enable completion of the BRT infrastructure within the agreed time frame, cost and quality.

4.0 SCOPE OF SERVICES

The Highway Design Engineer shall be responsible for assessing the road designs of BRT Infrastructure and monitoring the construction of the same for compliance with the Contract specifications and adherence to Contracts provisions. The Highway Design Engineer shall also be monitoring standard procedures specified in the Contract Documents and ensuring that only best practices and standard methods of construction practice are observed in the construction of the BRT Infrastructure and attending to all issues concerning roadwork that will require TANROADS' attention.

The Highway Design Engineer will review designs and assist in addressing the road design deficiencies and checking whether standards and road safety issues are addressed adequately in the road designs. The Highway Design Engineer, during the construction of BRT infrastructure, will support TANROADS in managing design issues through the provision of expert opinion to Contractors' and Consultants' staff attached to BRT Projects.

In particular, the Highway Design Engineer will be required to undertake inter alia the following tasks:

- (i) Participate in reviewing the design of works and audit whether construction is in conformance with design provisions.
- (ii) Assess and ensure that survey, setting out and construction of earthworks, pavement works, drainage and appurtenant structures are carried out according to the design and conform to the contract provisions.
- (iii) Advise the Employer on project designs.
- (iv) Make sure that works quality assurance system is fully followed and implemented.
- (v) Assess and monitor measurements of Road Approved Works items on site for compliance with Standard Procedures for Measurements prior to certification of the same for payment.
- (vi) Assess Contractor's Work methodology in line with Contract specifications and bring up shortfalls that may result in poor quality of works for timely intervention pursuant to the Contract provisions.
- (vii) Conduct site visits and inspect the works for conformity with Contract provisions and identify problem areas and report the same to the Project Manager / Employer with advice on remedial measures.
- (viii) Attend regular site meetings and ensure that the proceedings are adequately recorded.
- (ix) Ensure that design review of Road Works including take off-sheets is done and submitted as scheduled.

- (x) Monitor and guide CAD Engineers/operators;
- (xi) Ensure that as-built drawings for Road Works are done continuously throughout the construction time.
- (xii) Review Works progress reports and other ad hoc reports submitted by Consultants and Contractors.
- (xiii) Coordinate with other project technical experts to ensure that all issues are addressed effectively for the successful completion of the project.
- (xiv)Advising the Project Manager in all issues under the highway engineer's area of expertise
- (xv) Capacity building of TANROADS highway engineering experts linked to the project.

5.0 Qualifications and Experience

a) Education:

- (i) The Highway Design Engineer must be a professionally registered Civil Engineer with a degree in Civil/ Highway Engineering.
- (ii) Master's Degree in Civil/ Highway Engineering will be an added advantage.

b) Professional Experience:

- (i) She/he must have a minimum of fifteen (15) years of progressively responsible experience in designing large multi-disciplinary highways and urban roads projects.
- (ii) She/he must demonstrate profound knowledge of internationally recognized highway design standards with good knowledge of AutoCAD or other applicable computer-based design packages.
- (iii) She/he must have served as Highway Design Engineer in at least two (2) of similar nature over the last 10 years.

c) Language and Regional Experience:

- (i) Must have a working experience of at least three (3) years in Africa/ developing countries; and
- (ii) Proficiency in written and spoken English is mandatory.

6.0 FACILITIES TO BE PROVIDED BY TANROADS

- 6.1. Shared office accommodation including office furniture and equipment;
- 6.2. Work-related transport to and from project sites;
- 6.3. Relevant information and documents necessary for the proper execution of the assignment;

7.0 DURATION OF SERVICES

7.1. Duration

The duration of the assignment will be 12 Months, may be renewed based on performance and project needs.

7.2. Performance Review

Notwithstanding Sub-Section 7.1 above, a succession of the Services from one year (12 months) to another will be subject to the satisfactory performance of the Consultant.

7.3. Termination

Notwithstanding Sub-Section 7.2 above, the Contract may be terminated before the expiry of the duration of the assignment, in accordance with provisions of Employment and Labour Law Act No. 6 of 2004 of the United Republic of Tanzania.

8.0 RESPONSIBILITIES OF THE CONSULTANT

The Consultant shall be responsible for the following:

- 8.1. All information, data and reports obtained from TANROADS shall be treated as confidential.
- 8.2. All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultant for TANROADS under this Contract shall become and remain the property of TANROADS, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to TANROADS.
- 8.3. Arranging and paying for his/her own accommodation, own insurance, and local transport at his duty station.

9.0 REPORTING REQUIREMENTS

- 9.1. The Highway Design Engineer will report to the Project Manager responsible for the BRT Project under the Director of Projects.
- 9.2. The Highway Design Engineer will be required to provide inputs on the progress of the works and all technical issues, to regular and ad hoc reports prepared by TANROADS.
- 9.3. The Highway Design Engineer will prepare a brief report each month, summarizing activities performed by him/her on daily basis; the report shall be in a format to be agreed upon by the Project Manager.

10.0 LEAVE AND WORKING HOURS

10.1. Leave

10.1.1. The Highway Design Engineer will be entitled to twenty-eight (28) days of paid annual leave during the assignment.

10.2. Working Hours

- 10.2.1. Ordinary working period starts from 8:00 AM to 4:30 PM commencing Monday to Friday excluding public holidays.
- 10.2.2. The Consultant will be expected to work on reasonable extra time when the need arises at no additional payment; the Consultant's remuneration shall be deemed to cover for such overtime.

11.0 PAYMENT TERMS

- 11.1. The Consultant's salary is negotiable but will not be more than the estimated value per month. A monthly lump sum amount of remuneration per month will include all his overheads, social charges and other associated costs including local transportation within Dar s Salaam and insurance premium costs.
- 11.2. The Consultant shall be responsible for all taxes and duties applicable as per the Government of Tanzania rules and regulations.
- 11.3. The monthly remuneration shall be deducted Pay as You Earn (PAYE) tax.
- 11.4. In case of travel requirements outside TANROADS HQ and within Tanzania for project-related assignments, the Consultant shall be paid travel expenses in line with the Government rules and procedures.
- 11.5. Payment to the expert in respect of remuneration will not be adjusted for inflation for the duration of assignment.

12.0 DUTY STATION

Dar es Salaam (TANROADS HQ offices), Tanzania with field visit as per requirement. There is a possibility of TANROADS HQ Offices to move to Dodoma mid-way the Contract.