

Terms of Reference for Material Engineer, Sheikh – Berbera Road Rehabilitation Project, Ministry of Transport and Roads Development

1. Background

The Somaliland Development Fund – Phase 2 is an inclusive economic development program and supports the Government of Somaliland in delivering infrastructure that is relevant for inclusive economic development. It focuses on sustainable investments that spur job creation and fast growth, while at the same time laying the foundation for long-term resilience and development, leading to a more stable and peaceful Somaliland. SDF support is fully aligned with government priorities as defined in the National Development Plan 2 (NDP2) 2017-2021 and reflect the priorities set out in Somaliland Vision 2030. The current SDF2 phase covers the period September 2018 - March 2024.

The SDF Joint Steering Committee allocated and approved one-year extension from 1 April 2024 – 31 March 2025 to the Ministry of Transport and Roads Development (MoTRD) for rehabilitation of the Sheikh-Berbera Road Rehabilitation Project including Burao roundabout/bypass. The SDF Secretariat has divided the works under the project into four lots:

- Lot 1: Rehabilitation of road section between Sheikh to Geelokor Town which starts from the Shiekh check point KM62+550 km to 89+920Km.
- Lot 2: Rehabilitation of road section between Geelokor to Berbera which starts from Gelokor Bridge at km 90+000 – km 131+537.5 (41.6km)
- Lot 3: Reconstruction of 3 Reinforced Concrete Culvert Box and rehabilitation of Burao town roundabout/bypass.
- Lot 4: Restoration of existing drainage structures, protection works and road furniture from Berbera to Burao.

2. The position

The Materials Engineer (ME) will be responsible for overall material quality including materials submittals, approvals, testing, sampling among others. He will participate in the quality control of materials at the laboratory and field testing, acceptance of used materials, checking and accepting all remedial and corrective measures. He will supervise and manage the work of the laboratory staff and technicians (Materials) assigned for this project. The ME will report to the Project Manager and will work under technical guidance of the Resident Engineer, Technical Advisor and SDF Sector Specialist. The Material Engineer will be assisted by Laboratory technicians and assistant Site Engineers assigned to each of the above Lots.

3. Key Tasks

The ME is expected to conduct the following tasks:

- Develop and implement quality control processes and procedures for Sheikh - Berbera Road rehabilitation projects.
- Conduct regular inspections and audits to identify areas for improvement and ensure compliance with standard code and regulations.
- Collaborate with Project Manager, RE, TA and other stakeholders to address quality issues and develop effective solutions.
- Create and maintain documentation related to quality assurance and control activities, including reports, test plans, and inspection records.
- Provide training and guidance to construction teams to promote a culture of quality and continuous improvement.
- Participate in design reviews and provide input to ensure that quality requirements are integrated into project plans and specifications.

- Review and approve (make recommendation for approval by the (RE) of all submitted materials by the contractor.
- Ensure compliance of used materials with the project's specifications.
- Lead the construction quality control team and manage laboratory technicians.
- Monitor and maintain the work quality standards and help ensure that the successful coordination and satisfaction of client inspections.
- Develop and establish testing plans, performance tests and commissioning plans in accordance with the technical specifications and conditions stipulated in the contract documents for all the mechanical plant envisaged.
- Supervise, participate, and direct sampling and testing of all materials according to the contract and the specifications.
- Analyse the test results in a timely manner and recommend action to the Resident Engineers/contracting authority.
- Maintain records of test results and all taken corrective actions.
- Track and review the site testing and certificates of compliance for material.
- Ensure very close and clear coordination of the team activities with the other construction supervision staff.
- Follow up and verify implementation of corrective actions.
- Coordinate the review and approval of specialty and other high-profile materials with SDF/PMT and other stakeholders as directed by the RE/TA.
- Ensure inspection and checking of all delivered materials to site for conformance to the project requirements and approval, as directed by the Resident Engineer.
- Check the quality of installed and built materials and installed items of plant and propose the way forward for the Resident Engineer.
- Coordinate and carry out field and laboratory reviews of construction works.
- Ensure inspection and checking of all delivered materials to site for conformance to the specifications.
- Supervise, participate, and direct sampling and testing of all materials according to the contract and the specifications.
- Review all material submittals of the Contractor and propose the recommendation to the Resident Engineer for approval.
- Prepare monthly and quarterly material report.

4. Duration and Locations

The assignment will be expected to last 8 months from the commencement of the contract.

5. Reporting Arrangements

The ME will work under the overall supervision of the PM and on a day-to-day report to RE and the TA. The ME will also refer to the SDF Secretariat Sector Specialist.

6. Expected deliverables

The ME will prepare and submit to the client the following reports, including soft copies in editable formats (in Word, Excel, etc.). Submission shall be in draft form and final copy upon approval of the draft reports.

Deliverable	Timing
Mobilization report	As allowed in the contract document
Quality Assurance Manual	Once at the beginning of the contract and follow up on the progress
Monthly Material Report	Monthly
Quarterly Material Report	Quarterly
Draft Final Material report	Within one month of the commencement of the DLP

7. Required Qualifications, Skills, and Experience

Qualifications and skills

- At least a bachelor's degree in civil engineering with major in Roads or Highway Engineering.
- Registration with relevant recognised professional body.
- Demonstrated excellent command of spoken and written English.
- Proficiency in use of basic computer software such as MS Project, Microsoft Office, AutoCAD Civil 3D.

General professional experience

- Minimum of 12 years' experience as Material Engineer in road construction or rehabilitation projects.
- Minimum of 3 years' experience in countries with road conditions similar to Somaliland.

Specific professional experience

- Minimum of 7 years' experience in roads design activities, specifically pavement rehabilitation, highway design, and construction.
- Minimum of 5 years' experience as Material Engineer in road construction project with at least one similar project in the last 5 years.
- Minimum of 5 years' experience in contract management and dealing with contractors / implementing partners.

8. Equipment

No equipment is to be purchased on behalf of the Client/Contracting Authority as part of this service contract or transferred to the Contracting Authority or local counterparts at the end of this contract. The Expert is expected to either rent or bring his/her equipment to complete the consultancy assignment with all the necessary software installed.

9. Fees and Allowances

- The successful candidate will be offered competitive daily fees.
- Fees will be paid on monthly basis against submission of agreed reports and approval of timesheets and invoice.
- Final payment will be made after the completion and approval of the final report.
- The SDF Secretariat shall organise and pay for the Expert's accommodation, travel within Somaliland, and DSA as per SDF guidelines.

10. Duty of care

- The Expert will work under the overall SDF Secretariat Health, Safety and Security protocols.
- The Expert will be expected to provide own insurance for health care (which must include Medevac provision which caters for COVID-19 related evacuation), accidents, and other risks associated to the assignment. The SDF Secretariat shall be free from any liabilities arising from the same.

11. Other provisions

- Accountability: The Expert will be accountable to the SDF Secretariat Team Leader or his designate. However, the Expert will technically report to the Sector Specialist at the SDF Secretariat and will work on a day-to-day basis with the Project Management Team at MoTRD, specifically the Project Manager, Technical Advisor and Senior Engineer.
- Duty post: The workstation is the project site with site office in Berbera or Sheikh.
- The SDF Secretariat will arrange all transport by road or air as needed.
- The SDF Secretariat will arrange accommodation.