LUSAKA WATER SUPPLY, SANITATION AND DRAINAGE PROJECT

Drainage & Municipal Waste Management Technical Assistance for Lusaka City Council

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Presentation Outline

• Objective

• Quick Introduction to;
  – MCC Environmental Guidelines & IFC Performance Standards,
  – MCA Zambia Environmental, Social & Community Engagement Policy,

• Implementation Framework & Responsibilities

• Technical Assistance Scope of work

• End/Questions
The objective is to ensure that you the bidders prepare and submit responsive bids.
MCC Environmental Guidelines

- **MCC Environmental Principle**: support projects that are environmentally sound – are not likely to cause a significant environmental, health, or safety hazard.

- **MCC Environmental Guidelines** state that Projects will be “developed and implemented in a manner consistent with the (IFC) Performance Standards”.

- The Guidelines also ensure that the Program complies with all national environmental laws and regulations, licenses and permits,…
IFC Performance Standards: There are 8 IFC Performance Standards (PS) covering environment, social, health and safety issues;

1. PS1: Assessment & Management of Environmental & Social Risks and Impacts,
2. PS2: Labour and Working Conditions,
3. PS3: Resource Efficiency & Pollution Prevention,
   - Environmental, Health and Safety (EHS) General Guidelines
4. PS4: Community Health, Safety & Security,
5. PS5: Land Acquisition & Involuntary Resettlement,
6. PS6: Biodiversity Conservation & Sustainable Management of Living Natural Resources,
7. PS7: Indigenous Peoples,
8. PS8: Cultural Heritage

www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_environmental_and_social_performance_standards
MCA - Zambia Environmental, Social & Community Engagement Policy

• Prioritize health and safety in all of our work

• Based on the identification of risks, impacts and opportunities, develop and implement mitigation plans and proactive measures that enhance benefits and opportunities, as well as avoid or minimize negative impacts to staff, affected communities and the natural and built environment.

• Comply with environmental and social standards of the Compact, and all applicable Zambian laws and regulations.

Link: www.mcaz.gov.zm
Background Information

1. Drainage system currently managed by LCC

2. Poor storm-water infrastructure and solid waste management system (SWMS) cause flash floods in the city;
   - Poor design approach (currently addressing this through a drainage project)
   - Poor management of solid waste (this Technical Assistance to address this)
     - The lack of SWMS contributes dumping of solid waste and disposal of sewage into the drains
Objective of the Assignment

1. To enable LCC to effectively and efficiently manage current & future drainage infrastructure
2. To ensure effective collection, transportation and appropriate disposal of municipal solid waste
3. To minimize the accumulation of debris in the drainage channels and thus prevent the obstruction and reduction in storm-water conveyance capabilities,
4. To institute best practice business & engineering processes, structures and framework that will enable LCC to sustainably manage storm-water within the City of Lusaka.
Technical Assistance
Scope of Work

Assignment Divided in Base & Optional Tasks

Task #1
Institutional Evaluation, Situation Assessment and Options Analysis for Strategic Solid Waste & Drainage Operations & Maintenance Management

Base Task (Fixed Price)

Task #2
Technical Assistance (Implementing the preferred option from Task #1)

Option Task (Person Month Rate as per LoE)

Task #3
Storm-water Management Master Plan

Option Task (Fixed Cost for Task)
Assignment Divided in Base & Optional Tasks

- Tasks #2 and #3 shall be awarded at the sole discretion of the Client
- Consultant is expected to present an approach on how it intends to execute the tasks as described in the ToR, which should include:
  - Actions to complete each activity/subtask
  - Proposed schedule based on NTP
  - Staffing mixes required to accomplish each task
Task #1a: Institutional Evaluation & Situational Analysis

Main Objective:
To evaluate current organizational capacity of various government organizations to manage the Lusaka drainage system and municipal waste both from an operations and maintenance and a capital improvement perspective so as to establish a situational baseline commonly understood by principal stakeholders;

At a minimum, this sub task will cover the following;

- Assessment of the physical infrastructure, such as, storm-water conveyance systems, etc.
- Business processes and roles and responsibilities, and;
- Financial analysis of solid waste management & drainage maintenance systems

Produce Institutional Evaluation and Situational Analysis Assessment Report
Task #1b: Options Analysis for Solid Waste & Drainage

**Main Objective:**
Consultant to generate a range of plausible strategies for addressing sustainability of MCAZ’s storm-water & solid waste management investments;

The Options Analysis will define plausible alternatives and evaluate each against a number of possible metrics including but not limited to:

- Policy, Legal and Regulatory Issues
- Institutional Changes and Change Management
- Plant, Financial, Human Resource Requirements

Finally, Consultant produces an Options Analysis Report for Strategic Drainage Operations & Maintenance and Municipal Waste Mgmt.
Task #2: Technical Assistance (Implementing Preferred Option)

- Technical Assistance may be provided based on decisions made during the Options Analysis (Task #1b),

- Outputs from the needs assessment will define the actual content and scheduling of Task #2,

- If requested, the Consultant shall propose a strategy to implement a Technical Assistance based on the unit rates presented in their FP & the actual required LoE by the Consultant’s staff.
Task #2: Technical Assistance (Implementing Preferred Option)

The outputs for Task #2 shall include but will not be limited to;

✓ Drainage Maintenance Plan
✓ Stakeholder Engagement Framework
✓ Financing Mechanism
✓ Human Resource Plan
✓ An Information Management Plan
✓ Environmental Management Plan
✓ Maintenance Manual Detail
✓ Maintenance Policy
Task #3: Storm water Management Plan

Main Objective:
To develop a storm-water Management Master plan with a 25 year planning horizon;

Brief Background
- Bombay outfall identified as one of the six outfalls stipulated in the Compact feasibility and due diligence reports
- Bombay outfall has since been into design and tendering under the Compact
- Hydraulic and hydrological model was developed as well as the designs and structural elements now passed on to contractor,
- All outputs on the Bombay outfall drain shall be incorporated in the Storm-water Management Master Plan
Task #3: Storm-water Management Master plan

The Master plan must cover all drainage outfall system as described in the drainage feasibility study of 2011/2012 for MCAZ.

The Consultant must conduct various activities to develop the master plan, which include the following;

- Review of existing documents of the catchments
- Develop hydrological and hydraulic storm-water models to determine drain capacity limitations and area of flooding
- Determine types of storm-water management solutions that best suit the drainage challenges of Lusaka.
- Using SWMS solutions above, develop solution alternatives for each drain that maximizes desired level of service developed in Task #1
- Develop detailed SoW for G/W study to better determine g/w surface elevation response to pumping
- Determine base construction costs 4 the implementation of the engineering solutions as determined through stakeholder engagement
Task #3: Storm-water Management Master plan

The Consultant should produce a Storm-water Master Plan that will encompass all issues identified through;

a. Investigations
b. Interviews
c. Document reviews
d. Stakeholder engagements
e. Efforts made in the regional benchmarking exercise
Technical Assistance
Scope of Work

Period of Contract

Period of Contract – 96 weeks

Task #1 (24wks)

32 wks

MCAZ (8wks)

Task #2 (60wks)

22 wks

Task 3 (48wks)

End (4wks)
Q & A

THANK YOU