



MINISTRY OF LOCAL GOVERNMENT AND RURAL DEVELOPMENT (MLGRD)

GREATER ACCRA RESILIENT AND INTEGRATED DEVELOPMENT PROJECT (GARID)

TERMS OF REFERENCE

FOR

**OPERATION AND MAINTENANCE OF MUNICIPAL FLOODWATER DRAINAGE
SYSTEMS**

UPDATED DECEMBER, 2020

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1. BACKGROUND

The Government of Ghana has received a credit from the International Development Association of the World Bank towards the Greater Accra Resilient and Integrated Development (GARID) Project.

The overall Development Objective of GARID is to improve the flood risk management and Solid Waste Management in the Greater Accra Region (GAR), improve access to basic infrastructure and services in targeted communities and enhance planning and coordination of such interventions across multiple local governments. The project consists of five (5) main parts namely:

- Climate-resilient drainage and flood mitigation measures, involving structural measures to mitigate flood impacts in the Odaw River Basin and non-structural measures to improve flood warning and preparedness.
- Solid waste management capacity improvements, involving community-based solid waste management interventions and community campaigns, waste transfer stations, materials recovery facility and center of excellence for solid waste management, capping of old dump sites, and extending final disposal capacity for the Greater Accra Region;
- Participatory upgrading of targeted flood prone low-income communities and local government support, involving participatory community upgrading, community engagement and technical advisory services, and metropolitan governance and operation and maintenance improvement.
- Project management; and
- Contingency emergency response, for an immediate response to an eligible crisis or emergency, as needed.

Flooding within the GAMA is a frequent annual occurrence attributed to poor land use planning, inadequate drainage systems, and poor maintenance of the existing drainage systems. Recent severe flooding occurred in 1986, 1994, 1995, 1997, 2001, 2010, 2013 and 2015. The most severe flood in recent times, occurring on 3rd June, 2015, was assessed to have been aggravated by the blockage of drains by solid waste materials. The flood and subsequent fire in a petrol station resulted in the loss of an estimated 150 lives and affected about 53,000 people. If the status quo continues, with the impact of climate change flood incidents could increase in Greater Accra Area

Previous attempts to address the persistent flooding including the transfer of Operation and Maintenance (O&M) responsibilities to local authorities have not achieved the desired result. The O&M issues are generally overlooked due to the lack of clarity on responsible institutions, lacking sufficient resources, and low administrative capacity.

The Ministry of Local Government and Rural Development is seeking the services of a Consultant firm (hereafter consultant) to support the development of Operation and Maintenance systems, Plans, manuals and procedures. This assignment is funded by the GARID Project under Component 3.3 (Metropolitan Governance, Operations and Maintenance) for Metropolitan and Municipal Assemblies to guide the maintenance of all floodwater drainage assets, including GARID post-project assets.

The Component 3.3 of the GARID supports the following activities:

- (a) Establishing and institutionalizing inter-jurisdictional coordination among local governments, starting with the local governments in the Odaw River Basin, including the development of a joint Odaw River Basin flood management plan, the rollout of storm water regulation and flood zoning, and integrating floodwater management into the participating local government's annual capital investment plans and annual operating budgets;
- (b) Assessing and improving O&M of drainage infrastructure at the local level and coordination with parent ministries/departments for activities such as development of a standardized local O&M plan (template), support for improving local budgeting and revenue generation capacity, and creation of a geospatial asset management system; and
- (c) Providing annual local capacity support grants as incentives to the participating local governments who meet eligibility conditions, which will be set up based on the O&M assessment in Year 1 (such as utilization of O&M budget).

This consultancy assignment is specifically concerned with (b) and (c) action areas of the Component 3.3.

2. OBJECTIVES OF THE ASSIGNMENT

2.1 Overarching objective

The overarching objective of the assignment is to improve flood risk management, reduce exposure of people and properties to flood damages and waterborne diseases, protect the natural and built environment, improve water quality, and reduce health hazard.

2.2 Specific objectives

The specific objectives of this assignment is to help municipal assemblies in the GAR region improving flood mitigation by institutionalizing operation and maintenance of rainwater drainage

systems, adopt annual development and O&M plans with dedicated funds, assign and train adequate number and skill mix of staff, and ensure adherence to plans, manuals, and procedures.

3. SCOPE OF THE ASSIGNMENT

This assignment requires the consultant to carry out a baseline assessment of the legal, regulatory, and institutional system that governs the rainwater drainage O&M activities. The assignment also requires extensive fieldwork to complete a detailed field assessment to explore and assess the local rainwater O&M capacities and practices in the jurisdictions of the 17 GAR municipal assemblies.

The assignment requires consultants' capacity and expertise in developing rainwater O&M plans, manual, and respective templates and training materials.

The assignment requires consultant to advise the World Bank project team in developing an incentive grant system to support capacity building, implementing the O&M manuals, and visible quick improvements of the rainwater O&M in participating municipal assemblies.

The consultant will need to liaise with Ministry of Works and Housing (MWH), Hydrological Services Department (HSD), G-Met, NADMO, Ministry of Sanitation and Water Resources (MSWR), Ministry of Inner City and Zongo Development and Ministry of Local Government and Rural Development (MLGRD) to prepare O&M schedules with accompanying budget for the respective physical facilities and systems to serve as a maintenance guide that would be carried out by the GARID MMAs.

The consultant will work under the guidance of the GARID team of the Ministry of Local Government and Rural Development, but also will be supervised by the World Bank project team and specialists.

The MLGRD will provide to the consultant the following documents:

- a) Provide all the required documents to the consultant including but not limited to, related policy and regulations, Regional Spatial Development Framework (RSDF), Integrated Urban Sanitation and Drainage Master Plan (IUSDMP), Rapid O&M assessment methodology and results, *Metropolitan Management Study Option* and *Ghana Urbanization Review II*, *GARID PAD AND PIM*, *DPAT Operational Manual*, *Local Governance Act 2016, (ACT936)*, *National Development Planning System, (ACT 480)*, *LGCSPPAD&PIM*, *World Bank O&M Study under UESP*, *MA's financial and institutional data*
- b) *The LGCSPP Asset Management Manual*
- c) Will officially introduce and link the consultant to the MMAs, and any other institutions required
- d) Will host all the sensitization and validation workshops required in the deliverables

4. TASKS

The consultant shall undertake the several interlinked tasks to support developing the rainwater O&M systems, organizational, technical, and financial capacities; detailed subtasks are explained below.

4.1. Task 1 Baseline assessment

The baseline assessment aims to inform policy makers about the current situation of rainwater drainage O&M in the GAR region and provide information for developing a reliable O&M framework, system, procedures, templates, and manuals, and train the staff. Specific subtasks include:

- a) **Carry out a desktop review and assess the existing institutional, legal, and regulatory frameworks tools** that governs the development, operation and maintenance of the rainwater drainage systems, networks, structures, and equipment. The institutional and regulatory framework includes both national and municipal level elements that may or may not found in full harmony with each other.
- b) **Quick review of all available respective documents**, inter alia, laws, orders, rules, those related to policy and regulations, GARID Project Appraisal Document (PAD), Project Implementation Manual (PIM), Regional Spatial Development Framework (RSDF), District Assembly Performance Assessment Tool, Integrated Urban Sanitation and Drainage Master Plan (IUSDMP), Rapid O&M assessment methodology and results, the Asset Management Manual including a review of previous studies on (and previous attempts at) inter-jurisdictional coordination etc. This review will provide a solid background information and the methodology for carrying out the assignment.
- a) **Assess the existing municipal drainage infrastructure O&M management systems and practices**, including review MA's O&M plans, drainage design documents, historical inspection and maintenance records and photos (if any), drainage O&M implementation documents/reports, planned and actual budgets, drainage infrastructure inventory with maps (if any), data bases, and information technology tools. Conduct a review of the current municipal drainage infrastructure O&M systems and practices applied to existing facilities of MAs infrastructure.
- c) **Human resource capacity assessment.** Carry out a gap analysis of existing capacities of staff of the participating Assemblies to identify the required skills set needed in implementing the GARID project especially on the O&M and develop a Capacity Building Plan in addressing the identified gap. The Ministry in collaboration with the Greater Accra Regional Coordinating Council (GAR CC) will facilitate the implementation of the recommendations in the Capacity Building Plan to ensure beneficiary Assemblies capacities are built adequately.
- d) **Baseline assessment report.** Based on the results of subtasks a) and b), and c) assess the O&M capacities and performances in each participating MMA, identify constraints, advise ministry with overall strategy for improving the O&M systems and practices. Prepare a

summary baseline report with section of general findings and recommendations and specific findings for each participating MMAs

4.2. Development of municipal drainage infrastructure O&M framework, system and procedures

The consultant should propose reliable rainwater drainage O&M frameworks, systems, and procedures for the 17 participating MMAs based on the results of the baseline assessment. This would require detailed consultation with respective ministries and ideally a workshop for all participating entities to discuss the results of the baseline assessment. Specific subtasks include:

- a) Undertake consultations with all seventeen (17) MMAs along the Odaw River Basin, other selected MMDAs and stakeholders to solicit inputs in the development of the municipal drainage infrastructure operations and maintenance manual.
- b) Propose reliable rainwater drainage O&M frameworks, systems, and procedures for the 17 participating MMAs. This would require developing and testing with one MMA a model framework with responsible entities, organigram, staff requirement, standard operations procedures, and financial planning and budgeting and respective training plans. These tested models can be rolled out with minor adjustments to other participating MMAs.
- c) Obtain approval from respective ministries for rolling out of the proposed enhanced O&M framework, system, and procedures in all participating MMAs.
- d) Prepare for the GARID program a 2-3-year Implementation/roll-out Plan and performance measures for the proposed O&M systems and capacity buildings.
- e) Prepare O&M schedules with accompanying budget for the respective physical facilities and systems to serve as a maintenance guide that would be carried out by the GARID MMAs that should be coordinated with respective ministers mentioned in point 3.

4.3. Rainwater Drainage System Operation and Maintenance Manual

An O&M manual is required to provide unified guidance for each participating MMA and each entity within MMAs that are responsible for performing O&M some tasks in managing the rainwater drainage systems.

- a) Develop the municipal drainage infrastructure Operations and Maintenance Manual that should include the proposed O&M framework, systems, and specific procedures and a template annual plan for municipal drainage infrastructure O&M, including a section to report deferred maintenance actions.
- b) Share the draft manual with key stakeholders and Conduct a one-day Validation Workshop with all 17 MMAs including selected MMDAs and other stakeholders to solicit comments on the draft Manual. This activity will be facilitated by the Ministry.
- c) Prepare a final Rainwater Drainage System Operation and Maintenance Manual, based on workshop results and feedbacks from various stakeholders.

4.4. Financing options for Rainwater drainage systems O&M

Sustainable O&M of the rainwater drainage system requires stable financial planning and allocation of adequate funds annually. This also implies that the expenditures should be properly classified to ensure clear account of costs spent on drainage O&M. The consultant needs to assess the current situation, planning, and accounting practices and propose corrective measures. Specific subtasks include:

- a) Assess MMAs' planning and funding practices and capacities currently applied for financing O&M of rainwater drainage networks, structures, and equipment. Compare standard financial ratios with international benchmarks to assess level of funding, actual/plan variations, and sustainability of rainwater drainage systems.
- b) Identify sustainable financing options for MMAs to fund the rainwater drainage development and O&M systems, networks, structures, and equipment.
- c) Assess the current and future required O&M budget, that may include target grants from national government.
- d) Assess sources of finance for operational budgets and evaluate the possible participation of the private sector, and possibility to charge private owners or possessors of land for O&M services the MMAs perform for their particular benefits.

Based on the study outcomes, subsequent measures will be supported to improve local budgeting and revenue generation capacity, as well as setting up local O&M capacity support grant for participating MMAs.

4.5. O&M Grant manual and performance indicators

The GARID program will support participating MMAs with a target grant to help implementation of reform measures to enhance their O&M systems and capacities, and finance urgent quick improvement of their drainage systems. The consultant should guide GARID team by proposing a GARID O&M Grant Manual with specific measurements, rules, indicators, and allocation procedures. Specific subtasks include:

- a) Identify risk factors associated with the rainwater O&M part of the GARID project and recommend risk mitigation measures.
- b) Update the GARID O&M Grant Manual and develop Implementation Guidelines for delivery of O&M Grants to GARID Mas, including performance indicators, targets, means of verification, and grant allocation formula.

5. Duration of the Assignment

The services under this contract are expected to be conducted for a period of Six (6) calendar months. It is estimated that 13 staff-months would be required

6. DELIVERABLES

The Consultant shall produce the outputs described in the table below

Sn	Output	No. of Weeks after contract Commencement date	Requirement
1	<p>Inception Report</p> <p>The Inception Report should include but not limited to the following:</p> <ul style="list-style-type: none"> i. Methodology that will include an understanding of the assignment ii. Expected Outputs Workplan iii. Stakeholder engagement plan iv. Team Composition v. Staff Schedule and their responsibilities vi. Draft Table of Contents of the Final Report 	4	Electronic copies in Ms Word
2	<p>Draft Report on Baseline assessment:</p> <ul style="list-style-type: none"> i. Preliminary Desk Review ii. Existing O&M systems iii. Institutional assessment iv. Financing options 	12	6 Hard copies and Electronic copy in Ms Word
3	Stakeholder Consultation Report which should include the emerging issues identified and key recommendations coming from stakeholders	16	6 Hard copies and Electronic copy in Ms Word
4	Updated Draft Baseline Report by incorporating Stakeholder comments	18	6 Hard copies and Electronic copy in Ms Word
5	Draft Report on proposed Rainwater O&M framework, systems, and procedures.	22	
6	Report on Financing options for Rainwater drainage systems O&M	22	
7	<p>Draft Operation and Maintenance Manual including:</p> <ul style="list-style-type: none"> i. Operations and Maintenance System ii. Operations and Maintenance Manual and indicators, timelines for assessment and formulae for grant disbursement iii. Updated O&M Grant Manual 	26	6 Hard copies and Electronic copy in Ms Word

Sn	Output	No. of Weeks after contract Commencement date	Requirement
	iv. Operations and Maintenance implementation plan v. Financing plan vi. Capacity building plan		
8	GARID Grant manual and performance indicators	26	
9	Stakeholder Validation Report	32	6 Hard copies and Electronic copy in Ms Word
10	Final report that should include: i. final baseline report, ii. Proposed O&M framework, systems, and procedures, iii. Financing options and procedures. iv. Operation and Maintenance Manual. v. Final GARID Grant manual	34	6 Hard copies and Electronic copy in Ms Word

Reporting requirements: The Consultant should note that payment of fees for the services is linked to acceptance of individual deliverables by MLGRD. The Consultant should note that: **all reports will be considered draft until they are reviewed and accepted by MLGRD and MMAs.**

7. PAYMENT TERMS

Payments to the consultant will be released by 6 milestones according to the following performance schedule based on the deliverables.

NO.	DELIVERABLES	SCHEDULE OF PAYMENT
1.	Upon submission and acceptance of inception report	10%
2.	Delivery of Interim Report	15%
3.	Draft final Report – Phase I	15%
1.	Upon approval of the Final Interim Report	30%
2.	Quarterly Progress Report (10 No)	10%
3.	Final Report on Project completion	20%

8. FACILITIES TO BE PROVIDED BY CLIENT

9. QUALIFICATION AND EXPERIENCE OF FIRM AND KEY STAFF

The types of skills required of the Consultant to perform this assignment are as follows:

9.1. Experience of the Firm

- i. The firm should have at least 15 years' experience in local government related activities with particular emphasis on O&M on drainage infrastructure.
- ii. Minimum of 10 years of experiences in providing consultancy services in areas such as O &M Plan development, Civil Engineering, Quantity Surveying, Project Management and Development Planning

9.2. The skills required of key personnel:

The Consulting firm is expected to provide appropriate experts who will bring inputs as per the work program. The proposed team shall consist of at least the following Key experts:

- a. Team Leader
- b. Civil Engineer
- c. Financial Analyst
- d. Human Resource/Capacity Building Expert

9.2.1. Team Leader

1. Master's degree with Project Management Background
2. Member of a recognized professional body
3. At least 10 years' experience in providing services within the Local Government sector, specific to the rainwater drainage O&M issues
4. Experience working in sub-Saharan Africa or other developing countries

9.2.2. Civil Engineer

1. Minimum of Master's degree in Civil Engineering with experience in hydrology or water resources engineering.
2. Member in good standing of a recognized professional body.
3. Minimum of 7 years professional experience relevant to the assignment and specific to the rainwater drainage O&M issues.
4. Experience in providing services in the Local Government Environment.

9.2.3. Financial Expert

1. Minimum of Master's degree in Accounting and finance, economics, etc

2. Must be a member of a recognized Chartered Accounting Body
3. Minimum of 7 years professional experience.

9.2.4. Institutional/Capacity Building Expert

1. Minimum of a Master's degree in Public administration, political science, law, government, or similar field
2. Member of a relevant professional body.
3. Minimum of 7 years professional experience.
4. Experience in providing services in the Local Government Environment.