QUEZON CITY DISASTER RISK REDUCTION AND MANAGEMENT OFFICE
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TERMS OF REFERENCE

(TOR)

SUPPLY, DELIVERY, AND INSTALLATION OF ANALOG HAZARD MARKERS AND SIGNAGES

I. RATIONALE AND BRIEF BACKGROUND

The Republic Act No. 10121 known as the Philippine Disaster Risk Reduction and Management Act of 2010 defines Early Warning System as the set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

A people-centered early warning system necessarily comprises four (4) key elements: knowledge of the risks; monitoring, analysis and forecasting of the hazards; communication or dissemination of alerts and warnings; and local capabilities to respond to the warnings received. The expression "end-to-end warning system" is also used to emphasize that warning systems need to span all steps from hazard detection to community response.

Given that Quezon City is highly susceptible to evolving disaster risks due to multiple hazards, it is therefore a must to continuously improve on this matter and invest on modern technologies that will promote knowledge building, awareness raising, and disaster preparedness not just for the CDRRMO but to the citizens of Quezon City.

II. PROJECT DESCRIPTION

The concept of the project is to enhance public safety and disaster preparedness in Quezon City by installing analog hazard markers and signages in strategic locations. These markers and signages will provide clear, visible warnings and guidance in areas prone to hydrometeorological and earthquake hazards, ensuring that residents and visitors are well-informed about potential risks.

Since the markers and signages are essential for safety and must withstand various environmental conditions, the CDRRMO recommends outsourcing the installation to a qualified contractor with proven experience in signage projects. The signages should adhere to national safety standards, ensuring durability, visibility, and readability. Additionally, the project will involve coordination with the Department of Engineering (QCDE), Department of Building Official (DBO), Barangay and Community Relations Department (BCRD) and other relevant offices for proper placement and monitoring.

III. PROJECT SCOPE OF WORK

The CDRRMO plans to install five hundred thirty-one (531) analog hazard markers and signages within the city as identified by the CDRRMO.

Technical Specifications

Lot	Description	Delivery Time

1 Lot	**THIRTEEN (13) EARTHQUAKE STONE MARKERS**
	• 0.1 m x 0.5 – 0.8 m (Diameter x Height)
	• Cement material
	• Mold with the proposed design
	
	TWENTY (20) EARTHQUAKE BOUNDARY MARKERS
	• 0.15 m x 0.1 m (Diameter x Height)
	• Cement material
	• Mold with the proposed design
	
	SIX (6) EVACUATION AREA METAL SIGNAGES
	• Aluminum bar
	  • 0.1 m x 2.1 m (Diameter x Height)
	• Aluminum signage
	  • 1 m x 0.6 m (Length x Width)
	• Iconography and text in reflective sticker
	
	FOUR HUNDRED NINETY-TWO (492) WATER LEVEL (FLOOD) MARKERS
	• 0.8 m x 3 m (Width x Height)
	• Material
		Sixty (60) Calendar Days

	SIGNAGE MAINTENANCE • Quarterly checking of signage • Replacement of signage **Emergency Repair and Maintenance** • 24/7 Availability of Personnel	
	SENSOR INSTALLATION • Five Hundred Thirty-One (531) Locations • Site Survey • Installation • Engineering Works	

IV. AREA OF COVERAGE

The outsourced installation will cover four hundred ninety-two (492) flood markers, twenty (20) earthquake steel-markers, thirteen (13) earthquake stone markers, and six (6) evacuation center signages to a total of five hundred thirty-one (531) locations within Quezon City and will be identified by the Emergency Operations Center (EOC) during the start of implementation.

V. PROJECT STANDARDS AND REQUIREMENTS

Bidders should have completed a single contract that is similar to this Project or related to Installation of signages, equivalent to at least fifty percent (50%) of the ABC three (3) years from the date of submission and receipt of bids or a contract similar to the project.

VI. PROJECT DURATION

The delivery period of the Project shall be within **sixty (60) calendar days** upon the issuance of the Notice to Proceed.

VII. APPROVED BUDGET FOR THE CONTRACT

The approved budget for the contract amounts to **Five Million Pesos Only (P5,000,000.00).**

ITEM	BUDGET (PHP)
1. THIRTEEN (13) EARTHQUAKE STONE MARKERS	102,000.00
2. TWENTY (20) EARTHQUAKE BOUNDARY MARKERS	158,000.00
3. SIX (6) EVACUATION AREA METAL SIGNAGES	90,000.00
4. FOUR HUNDRED NINETY-TWO (492) WATER LEVEL FLOOD MARKERS	3,900,000.00
5. ANALOG HAZARD MARKERS AND SIGNAGES INSTALLATION	250,000.00
6. HAZARD MARKERS MAINTENANCE - Physical Repairs and Upkeep - Site Cleaning and Accessibility - Periodic Inspections (Half – yearly)	465,000.00
7. ORIENTATION - Maintenance Awareness and Reporting - Interpretation of Signage Information - Materials used for Signage and Markers	35,000.00
TOTAL	**5,000,000.00**

VIII. BASIS OF PAYMENT

Below are the deliverables that will be used as the basis for full payment.

Item	Deliverables	Payment Percentage
Layout and Design Approval and Preparations	Procurement of raw materials, Initial design and production layouts, Mobilization of workforce and equipment, Delivery Scheduling	15%
Installation of Five Hundred Thirty-One (531) Analog Hazard Markers and Signages	Complete Delivery and proper installation, Field Testing to verify correct placement, Turnover of completed markers, Project Acceptance Document; Receipt, Inventory	75%

Maintenance and Orientation	Maintenance Schedule, Documentation; Feedback Forms, and Service Agreements	10%

IX. PENALTIES FOR BREACH OF CONTRACT

Incomplete and delayed delivery will result in penalties based on standard Government implementing rules and regulations.

Likewise, failure to carry out emergency repair or maintenance works upon the documented and written request of the end-user shall result in penalties based on the standard government implementing rules and regulations or may serve as grounds for incomplete delivery of services.

X. CANCELLATION FOR OR TERMINATION OF CONTRACT

Incomplete and delayed delivery and non-performance of services will result in penalties and termination of contract based on standard Government implementing rules and regulations.

Prepared and recommended by:

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