

**TERMS OF REFERENCE FOR THE
CONSTRUCTION OF RETAINING WALL AND SLOPE PROTECTION IN MARAWI
SHELTER PROJECT PHASE I, DULAY WEST, MARAWI CITY**

1.0 BACKGROUND

The Project, Rebuilding Marawi City through Community-driven Shelter and Livelihood Support, is a joint project of the Social Housing Finance Corporation (SHFC) and the UN Habitat for the 1,500 homepartners/beneficiaries affected during the Marawi siege. It aims to provide the target beneficiaries a sustainable and livable community, thru the following:

- Security on land tenure with 1500 core shelters built;
- Developed project site with roads and drainage and with basic facilities provided such as power, electricity, and other infrastructure facilities (ie. Multipurpose center);
- Livelihood and community development support extended to beneficiaries;
- Structures for sustainable peace and development strengthened; and
- GIS-based map of tenurial rights of partner communities

The SHFC has initiated the acquisition and development of properties for the Marawi and Shelter Project. On October, 2019, the development of the property with an area of 18,234.47 sqm located in Brgy. Dulay West, Marawi City commenced with FIAT Construction Services as the contractor. The environmental hazards which was identified by SHFC and UN-Habitat Technical Staff is the soil erosion on the boundary of the property along the creek and on the elevated portion of the northern boundary of the project site. This prompted the need to construct a retaining wall and provide slope protection on the property to ensure the safety of the relocatees in the area.

The SHFC Board of Directors approved in its meeting on December 19, 2019 the construction of a retaining wall and provision of a slope protection on the property of Marawi Shelter Project Phase I in Brgy. Dulay West, Marawi City.

2.0 OBJECTIVES OF THE TERMS OF REFERENCE

- 2.1 To provide a background information regarding the preparation and submission plans, work schedule and cost estimates of the proposed project by a Contractor;
- 2.2 To outline the "Work" of the Contractor that will be performed under the terms of its contract with the SHFC; and
- 2.3 To impose penalties in case of breach of of contract / obligations by the Contractor.

3.0 GENERAL DEVELOPMENT GOALS

To design and build / construct a Grouted riprap retaining wall of the property along Dulay Creek and slope protection using coconut fiber net (Coconet) to support the peripheral boundary of the project site. Also, to mitigate the velocity of runoff of the river / creek to lower the potential of water infiltration/inundation.

Approximate Length Grouted riprap Retaining Wall 523 meters (one side)
Slope protection using coconut fiber net (Coconet) – 110 meters



4.0 PROJECT SITE

On a property identified as Lot 254, Dansalan Cadastre Survey No. Q-124 located in Dulay, Marawi City> It is covered by TCT No. RT-210 (17)(19) issued in the name of Matua Ampuan married to Diamilan Oabar Matua. The estimated length of Grouted riprap Retaining Wall is 523 meters (one side) and a Slope protection using coconut fiber net (Coconet) of about 110 meters.

5.0 PROJECT DELIVERABLES



The following shall be the output/deliverables of the Contractor:

- 5.1 Grouted riprap Retaining Wall Plan with detailed architectural and engineering drawings including costing and technical specifications.
- 5.2 Constructed Grouted riprap Retaining Wall (length of 523 meters @ one side) and Slope protection using coconut fiber net (Coconet) – 110 meters in the Marawi Shelter Project Phase I, Dulay West, Marawi City



6.0 PROJECT PRINCIPLES

The site plan should conform with the SHFC Guidelines on the Marawi Shelter Project and follow the principles of sustainable human settlements and the UN Habitat Environmental and Social Safeguards System and Pinheiro principles to minimize the local social and environmental impact:

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- 6.1 Sustainable human settlements:
 - 6.1.1 Sustainable land use
 - 6.1.2 Productive and socially integrated community
 - 6.1.3 Environmentally sustainable, healthy and livable;
 - 6.1.4 Sustainable energy use;
 - 6.1.5 Respect and rehabilitation of historical and cultural heritage;
 - 6.1.6 Improving and sustainable human economies
 - 6.2 UN Habitat Environmental and Social Safeguards System and Pinheiro principles:
 - 6.2.1 Community health and safety and working conditions
 - 6.2.2 Pollution prevention and resource efficiency
 - 6.2.3 Biodiversity conservation and sustainable resource management
 - 6.2.4 Displacement and resettlement – minimize displacement
 - 6.2.5 Indigenous people – minimize impact on lifestyle and culture
 - 6.2.6 Cultural heritage - minimize impact on heritage
 - 6.2.7 Gender equality – participation for all
 - 6.2.8 Non-discrimination of marginalized
 - 6.2.9 Consultation and participation
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7.0 GENERAL CODES AND STANDARDS


The design and specifications shall conform to, but not limited to the following standards:

- 7.1 DPWH prescribing Guidelines on the Design of Slope Protection works
- 7.2 National Building Code
- 7.3 Water Code of the Philippines
- 7.4 Local Government Code of the Philippines




8.0 SCOPE OF WORK

The Contractor is required to perform the following scope of works:



8.1 Review of existing information

Review the basic design parameters and detailed scope of works. The contractor shall ensure that it has all the data and information they need, which will be used to define the project design criteria and will serve as basis for any changed conditions and establish project cost estimates. Should there be data or information which are unavailable with SHFC and landowners, the contractor shall carry out the needed testing/investigation to complete the needed design data.



8.2 Field survey and site inspection

The contractor shall conduct the appropriate site survey including staking, establishment of horizontal and vertical control points, benchmarks and topographic surveys, should the contractor deem necessary.

The contractor shall inspect the site and its surroundings and orient themselves on the following:

- 8.2.1 Location and nature of work;
- 8.2.2 Climatic condition;
- 8.2.3 Nature and condition of the terrain;
- 8.2.4 Geologic conditions at the site;
- 8.2.5 Transportation and communication facilities;
- 8.2.6 Availability of construction materials, labor, water services, electric and power supply;
- 8.2.7 Location and extent of aggregate sources; and
- 8.2.8 Other factors/risks that may affect the cost, duration and execution of work.


8.3 Complete set of Grouted riprap Retaining Wall & Slope protection using coconut fiber net (Coconet) detailed plan in accordance with Item 6.0 and Item 7.0

8.4 Permits

The contractor shall conduct the appropriate site survey including staking, establishment of horizontal and vertical control points, benchmarks and topographic surveys, should the contractor deem necessary.

8.4.1 The contractor shall pay for all expenses necessary to secure the following:

- 8.4.1.1 Permit to Construct (PTC) riprap and slope protection measure;
- 8.4.1.2 Other statutory permits as required by the City Government




8.4.2 The contractor shall, upon authorization by the City Government, make representation with the government agencies to expedite the release of the same.

8.5 Construction Works

The contractor shall perform the following construction activities but is not limited to the following:

8.5.1 Mobilization

The contractor shall mobilize and bring out into the job all personnel, plant and equipment in accordance with the approved construction program, equipment moving and utilization and manpower schedule, from its regular place of business to the site to undertake the contract.




Mobilization shall include obtaining and transporting to the jobsite of equipment, materials, tools, personnel and all necessary items for the execution and completion of the project and shall also include the setting up and inspection of all equipment and instruments until it is rendered operable.

The contractor shall conduct the appropriate site survey including staking, establishment of horizontal and vertical control points, benchmarks and topographic surveys, should the contractor deem necessary.

8.5.2 Site Clearing and Proper Waste Disposal


General site clearing operations include the removal of demolished materials and objectionable matter, protection of existing structures/facilities left functional and clearing to allow for new construction.

8.5.3 Retaining Wall and Slope Protection Works



The design and quality of structural materials to be used shall be in conformity to the governing laws and to acceptable engineering practices.


9.0 DESIGN AND CONSTRUCTION SCHEDULE



The contract period of undertaking the services set out in this Terms of Reference shall be within the duration of ten (10) working days for the preparation and submission of Detailed Engineering Design plans including permit to construct riprap and slope protection measure approved by Marawi project management office and project implementation period / phase of fifty (50) working days or a total aggregate contract period of sixty (60) working days reckoned from the release of Mobilization Fee.

10.0 SELECTION OF DESIGN AND BUILD DESIGNER-BUILDER

The procurement and implementation of the project using the "Design and Build" scheme shall be in accordance with the provisions of RA9184, specifically its Annex G – *Guidelines for the Procurement and Implementation of Contract for Design and Build Infrastructure Projects*.



Negotiated procurement shall be conducted by the Bids and Awards Committee constituted. The Technical Working Group (TWG) shall likewise assist the Bids and Awards Committee in the evaluation of technical proposals in accordance with the SHFC GUIDELINES on the Marawi City Shelter Project.

10.1 Eligibility Requirements

10.1.1 The eligibility requirements for Design and Build infrastructure projects shall comply with the applicable provisions as set forth in RA 9184


10.1.2 A modified set of requirements integrating the eligibility documents and criteria for design and build infrastructure projects shall be adopted as follows:

10.1.2.1 Class A documents (legal, technical and financial documents)

10.1.2.2 Class B documents:


10.1.2.2.1 Relevant statements of all on-going, completed, awarded but not yet started design and build related contracts, curriculum vitae of key staff, partners or principal officers; and

10.1.2.2.2 Valid licenses issued by the Professional Regulations Commission (PRC) for design professionals.



10.2 Eligibility Criteria


10.2.1 The eligibility of designer-builder shall be based on the legal, technical and financial requirements. In the technical requirements, the designer-builder should be able to comply with the experience requirements under the IRR of RA9184, where one of the parties (in a joint venture/consortia) should have at least one similar project, both in design and construction, with at least 50% of the cost of the Approved Budget for the Contract (ABC).




10.2.2 The relevant provisions stipulated in the IRR of RA9184 on eligibility requirements shall be observed.

10.3 Submission and Receipt of Bids

The Technical Proposal shall be comprised of all the required documents for infrastructure projects under Section 25.2 of the IRR of RA9184 and the following additional documents:



10.3.1 Complete Set of Retaining Wall and Slope Protection Work Plans and Technical Specifications These documents/plans shall be scaled presentation drawings comprising, but not limited to, site development plans, elevations, sections and other necessary drawings to illustrate the size and character of the project. Also included in the presentation drawings is the proposed unique structural and construction system for consideration. They shall be submitted on 20" x 30" tracing papers using the appropriate scale. The document shall also include a preliminary geotechnical and slope stability assessment, if necessary, to be able to have an initial concept of the need for slope stabilization measures or to apply the minimum amount of slope protection needed for the site. Similarly, it should also include a PERT-




CPM, an outline of specifications, illustrating the size and character of the project, and showing the kinds of materials to be used, the structural concept and type, the types of electrical utility system to be installed, including other items of work that are indicated in the Terms of Reference. This shall be submitted, printed and ring-bound on A4-sized sheets.

10.3.2 Design and Construction Methods. Emphasis shall be made on the construction methods that best fits the cost and duration of the project.

10.3.3 List of design and construction personnel, to be assigned to the contract to be bid, with their complete qualifications and experiences

10.4 Staff Requirement




The contractor shall provide adequate and qualified staff to perform the services required herein. The key professionals shall include but not limited to the following:

10.4.1 Project Manager

10.4.2 Project Engineer

10.4.3 Safety Officer

The contractor may, as needed and at its own expense, add additional professionals and/or support personnel for the optimal performance of all Construction Services, as stipulated in these Terms of Reference, for the Project. Prospective bidders shall attach each individual's resume, PRC license of the professional staff, certificates of training and all other pertinent documents proving the said professional's expertise.



The Safety Officer must be an accredited safety practitioner by the Department of Labor and Employment (DOLE).


11.0 AWARD OF CONTRACT

A Notice of Award shall be issued by SHFC to the qualified contractor upon approval by the Head of the Procuring Entity (HOPE). The Notice to Proceed and the Mobilization Fee shall be released upon submission of the Performance Bond corresponding to 15% of the Total Project Cost.

12.0 SUBMITTALS, STAGES AND DELIVERY

The following submittals and accomplished documents shall be duly completed and turned-over by the approved contractor for the project:

12.1 For the Design Phase



12.1.1 Retaining Wall and Slope Protection Work Plans, which includes Architectural, Civil signed and sealed by the proper and appropriate professionals.

12.1.2 Technical Specification.

12.1.3 Work Scheduled/drawdown schedule detailed cost estimated and;

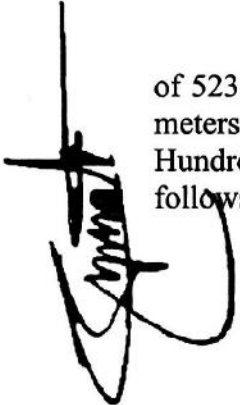
12.1.4 Bill of quantities.



12.2 For the Construction Phase

- 12.2.1 As-built plans;
- 12.2.2 All necessary plans/ technical specifications approved by the concerned LGU/agency;
- 12.2.3 Work schedule/ drawdown schedule
- 12.2.4 Shop drawings signed by appropriate registered professional, if applicable;
- 12.2.5 Test results; and
- 12.2.6 Guarantees, warranties and other certificates

13.0 APPROVED BUDGET FOR THE CONTRACT






The approved budget for the construction of Grouted Riprap Retaining Wall with a length of 523 meters and Slope Protection Work using coconut fiber net (Coconet) with a length of 110 meters within Ampuan property located at Dulay Proper, Marawi City is Twelve Million Eight Hundred Forty-four Thousand Four Hundred Fifty Pesos (₱12,844,450.00), with breakdown as follows:

1. Retaining Wall – Twelve Million Seven Hundred Ten Thousand One Hundred Twenty-Four Pesos Only (₱12,710,124.00)
2. Slope Protection Work – One Hundred Thirty-Four Thousand Three Hundred Twenty-Six Pesos Only (₱134,326.00).


This amount shall be inclusive of general and specific requirements, permits, plans & layout, contractor's fee / profit, cost of labor, materials and equipment, overhead, contingencies and miscellaneous costs, and the Twelve percent (12%) Value Added Tax (VAT) and other taxes as imposed by the government.


14.0 TERMS OF PAYMENT

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- 14.1 1st Release: Fifteen percent (15%) of the above cost representing mobilization fund. The contractor shall submit written request after the Notice to Proceed is released to the contractor.
 - 14.2 2nd Release: Percentage accomplishment must be at least 20 %. The contractor shall submit the following:
 - 14.2.1 Statement of work accomplishment (SWA) indicating the percentage of work progress signed by the contractor
 - 14.2.2 Pictures of the project together with color coded plans showing actual progress; and
 - 14.2.3 Billing cost
 - 14.2.4 Updated Work Schedule (target vs accomplishment)
 - 14.3 3rd Release: Percentage accomplishment must be at least 60 %. The contractor shall submit the following:
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- 14.3.1 Statement of work accomplishment (SWA) indicating the percentage of work progress signed by the contractor;
 - 14.3.2 Pictures of the project together with color coded plans showing actual progress;
 - 14.3.3 Billing cost; and
 - 14.3.4 Updated Work Schedule (target vs accomplishment)

14.4 4th Release; Percentage accomplishment must be 100%. The contractor shall submit the following:

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- 14.4.1 Statement of work accomplishment (SWA) indicating the percentage of work progress signed by the contractor;
 - 14.4.2 Pictures of the project together with color coded plans showing actual progress;
 - 14.4.3 Billing cost;
 - 14.4.4 Updated Work Schedule (target vs accomplishment); and
 - 14.4.5 Certification issued by the contractor, stating that the Project has been completed in accordance with the LGU/Agency approved site development plan




4.5 10% Retention Fee: To be deducted from every progress billing until works equivalent to fifty percent (50%) of the value of works, as determined by SHFC, is accomplished. If, after fifty percent (50%) completion, the work is satisfactorily done and on schedule, no additional retention shall be made; otherwise, the ten percent (10%) retention shall continue to be imposed. To be released upon issuance of Certificate of Completion and Acceptance by SHFC and the designated Homeowner's Association (HOA) representative.

The Project shall be supervised by the SHFC Iligan Office which in turn shall submit a monthly Progress Report together with the report of the HOA Subcommittee on Site Development. All reports must be supported by pictures of the project together with color coded plans showing actual progress.

15.0 DEVIATIONS/ CHANGES IN THE PLANS AND CONTRACT

In the event that there will be changes on the approved plans and contract, the contractor shall secure the approval of SHFC prior to revision and implementation. Any revisions on the plans without prior written approval by SHFC Management shall be for the account of the contractor.

16.0 PRE-TERMINATION OF CONTRACT



16.1 The contract may be pre-terminated by SHFC upon notice of any violation of the terms of the contract. In case of pre-termination, the contractor shall be informed by SHFC thirty (30) calendar days prior to such termination.

16.2 In case of pre-termination, the contractor shall be liable to an additional liquidated damages equivalent to five percent (5%) of the contract price as provided by the

Government Accounting and Auditing Manual (GAAM) and forfeiture of the Performance Security.

16.3 SHFC shall have the right to blacklist the contractor in case of pre-termination.



ENGR. JOHN O. LEE, JR.

Head, BAC-TWG for Infrastructure



ENGR. KING IAN AGBUYA

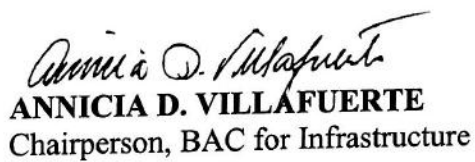
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