



MARIANO MARCOS STATE UNIVERSITY

Bids and Awards Committee

INVITATION TO MAKE AN OFFER: Negotiated Procurement

20-05

September 16, 2020

THE PROJECT: Electrical Works for Generator Housing, MMSU-Hostel, City of Batac

Number of Working Days: 12 calendar days
ABC: P250,221.56

1. The Mariano Marcos State University (MMSU), with offices at Quiling Sur, City of Batac, Ilocos Norte, invites the public to make an offer to furnish all labor, materials, tools and equipment necessary and proper for the implementation of the above Project as per approved designs, plans and drawings.
2. This process is in accordance with Section 53 of R.A. 9184, the Government Procurement Reform Act and Section 53.9 of the Implementing Rules and Regulations where interested and qualified contractors are to submit proposals.
4. The offer must be in writing submitted at the address below on or before **September 21, 2020** together with the following documents:
 - a) The amount of the offer in writing duly signed by the person making the offer, indicated in numbers and figures.
 - b) The particulars of the offer as to labor, materials, tools, equipment and other work details.
 - c) Documents in support of the legal, technical and financial capability of the person making the offer, which documents shall be confirmed and verified.
5. It is understood that any offer may be accepted or rejected, or the process invalidated, at any time prior to contract award, without liability to anyone.
6. Documents for this procurement may be secured from the MMSU BAC Secretariat at the address below or downloaded from the MMSU website or from the Philippine Government Electronic Procurement System (PhilGEPS) website.
7. For questions and inquiries, please write or email the University President, thru the BAC Chair, at the address indicated below.

Mariano Marcos State University
Quiling Sur, City of Batac
www.mmsu.edu.ph


AMI RUTH R. COCSON
Chair

Received: _____
Received: _____
Received: _____



Republic of the Philippines
MARIANO MARCOS STATE UNIVERSITY
City of Batac, Ilocos Norte 2906

PROJECT INFORMATION DOCUMENT

Project Title : Electrical Works for Generator Housing, MMSU-Hostel
Project Location : MMSU-Hostel, City of Batac, Ilocos Norte

The project calls for the furnishing of all required materials, labor, tools and equipment needed for the implementation of the Electrical Works needed for the Generator Housing, MMSU-Hostel, City of Batac, Ilocos Norte. The said project shall be done in accordance with the plans, designs, drawings and other details, as well as the specifications and this Project Information Document prepared and approved for this project.

It also calls for the employment of men power with the appropriate skills and expertise to undertake the specific items of works and to enable the contractor to produce and deliver to the satisfaction of the owner the needed services and output required of this undertaking. In addition, the contractor shall have adequate and readily available construction tools and equipment to be utilized during the period. It is also a must as it is necessary that the contractor shall have regularly at the site a qualified project engineer to administer strictly the implementation of the project, including maintaining a log book of construction activities, as well as receiving and briefing, if requested authorized University Officials and Inspectors.

General Instructions

Specifically, the project covers the lay outting and installation of feeder lines of the Generator Set. The contractor shall ensure that the construction activities must not interfere, obstruct and disturb any on-going operations of the said site.

The prospective bidders shall submit, among others, a bid proposal corresponding to the above-mentioned project with the following scope of works:

Scope of Works:

General Scope of Works

- a. Electrical works shall be done by a duly accredited electrician (NC II) under the direct supervision of a licensed electrical practitioner PEE / REE / RME with PCAB license specialized in the electrical installation of electrical equipment.
- b. The contractor shall provide (one) 1 licensed electrical practitioner PEE/REE/RME on the job site as resident project supervisor for the electrical works. No installation shall be done without the presence of the project supervisor.
- c. Sample of each wire, wiring devices, circuit breaker, panel board, and conduits shall be submitted for approval by the technical committee or inspection committee of the University prior to their installation. **No installation shall be made without the approval of materials by the technical committee of the University.**
- d. Pipes should be installed in a workman like manner, **it should be painted the same color as the surface it is installed.**
- e. Panel boards, enclosures, pull boxes, and wire gutters shall be gauge #16 galvanized materials, rust proof powder coated finished. Panel board shall be bolted type, complete tin-plated copper busbar.
- f. All circuit breaker shall be bolt-on type and must have a label. It is a must that the arrangement of circuit breakers and busbars shall conform the panel board diagram provided in the approved plans by the end user to avoid the occurrence of unbalanced loading.

- g. All wires shall be copper 99%, plastic insulated for 600V type THW/THHN or as specified in the approved plans and specifications, lead free, stranded, or approved equal brand by the end-user. ONLY ONE (1) BRAND OF WIRE SHALL BE USED.
- h. Conduit/cable tray shall be supported for permanent connection following the latest PEC and/or refer to approved plans.
- i. No termination of wires inside a manhole and conduits shall be done.
- j. Color coding of wires shall be observed following the latest PEC: Line A (red), Line B (yellow), Line C (blue), and Ground (green).
- k. Grounding system. Provide grounding terminal lugs of all gutters and panel boards. All exposed non-current-carrying metallic parts of electrical equipment, metallic raceway system, grounding conductor and neutral conductor or wiring system shall be grounded. The ground connection shall be made at the main service equipment and shall be made to the driven rods on the exterior of the building.
- l. Existing electrical system shall remain functional and normal operation until the new electrical system is ready to be energized.
- m. All wiring shall be tested for circuit continuity and shall be tested to assure that the wiring system is free from short-circuit, accidental grounding or other defects prior to normal system operation.
- n. Tests shall be performed after all wiring is completed and connected ready for the attachment of the fixtures and equipment and again after fixture and equipment is connected ready for use. Test shall be made with an instrument capable of measuring accurately the resistance involved and having a voltage rating of 500 volts. Reading shall be taken after the voltage has been applied continuously for one minute. The insulation resistance between the conductors and between each conductor and ground shall be measured.
- o. Tests shall be done for each item of control equipment will function not less than five times. All tests shall be performed in the presence of the university inspection or technical committee. All tests results shall be submitted in three copies.
- p. Energize the systems. After the contractor has assured himself that the wiring systems are free of faults, the Contractor shall energize the systems from their normal power sources and confirm that all systems are operational as required by the contract documents, prior to final inspection.
- q. In case that a conflict arises in specifications and quality of materials, installation procedure and in the plans and drawings as well as in the other contract documents before and during the implementation stage, the same should be referred to the end-user for proper resolution of the said conflict.

A. SUPPLEMENTARY PROVISIONS

1. In case of conflicts arising among specifications and quality of materials, installation procedure and in the plans and drawings as well as in the other contract documents before and during the implementation stage, the same should be referred to the end-user for proper resolution of the said conflicts.
2. All other items or scope of works not mentioned or not shown and/or indicated in the plans, drawings and specifications and needed for the proper functioning of the system, the Contractor shall likewise furnish all materials, labor and equipment necessary to complete the same.
3. Where the above-mentioned items or scope of works require the approval of the quality and design of the materials to be used or their testing before they are installed,

embedded in concrete or enclosed with specified covering materials, the Contractor shall secure from the University clearance or permission related hereto.

4. After all the works have been completed, the surrounding immediate areas affected in the prosecution of the project shall be cleaned and cleared of all excess materials and debris, temporary structures, facilities and utilities used during the construction period.
- A. Time is a very important factor in the implementation of this project and as such, all works indicated in the plans, specifications and in this document shall be completed within **Twelve (12) calendar days** from receipt of the Notice to Proceed;
- B. Each bid shall be submitted in two (2) separate sealed envelopes with the name of the bidder in capital letters addressed to the BAC Chairman:
- C. The Approved Budget for the Project to be bid is **Two Hundred Fifty Thousand Two Hundred Twenty One and 56/100 Pesos (Php. 250,221.56)**.
- D. All bids must be submitted to the BAC Chairman, MMSU-Batac, Ilocos Norte not later than _____.

Prepared by:

LEMUEL JOSUA P. BAGAYAS
Electrical Engineer

Checked by:


FREDDIE M. S. BALANAY
Chief, Electrical Section

Recommended by:


ROMEO R. BULDULAO
Director, PPDO



DETAILED ESTIMATES

Item No.	Description	Quantity	Unit	Unit Price	Sub-Total
	Electrical Works				
		Quantity:	Unit	1	lot
	I. Panelboards, Enclosures (Rustproof)				
	ECB				
	Three phase, 3-Wire, 240 Volts with ground in NEMA 3R, wall mounted enclosure				
	Main: 125AT, 3-Pole, 240 Volts; 32 KAIC, Bolt-on Type				
	MDP / MTS MAIN				
	Three phase, 3-Wire, 240 Volts with ground in Nema 1, wall mounted enclosure; Bolt-on Type Busbars Copper with Grounding Lugs				
	Main: 150AT, 3-pole, 32KAIC @ 240V, CB, Bolt-on				
	Branches:				
	1-100AT, 3-pole, 25KAIC @ 240V, CB, Bolt-on				
	1-60AT, 3-pole, 25KAIC @ 240V, CB, Bolt-on				
	NEW PB				
	Three phase, 3-Wire, 240 Volts with ground in Nema 3R, wall mounted enclosure, Bolt-on Type Busbars				
	Main: 60AT, 3-pole, 32KAIC @ 240V CB, Bolt-on				
	Branches:				
	4 - 15AT, 2-pole, 22KAIC @ 240V, CB, Bolt-on				
	3 - 20AT, 2-pole, 22KAIC @ 240V, CB, Bolt-on				
	3 - SPARE				
	SUB TOTAL I. (Panelboards, Enclosures)				
	II. Pipes, Conduits and Fittings (Rust Proof)				
	Locknut & Bushing.				
	40 mm Ø, PVC				
	Pipe				
	32 mm Ø, PVC				
	40 mm Ø, PVC				
	Elbow				
	40 mm Ø, Long				
	Metal Clamp, Snap on				
	40 mm Ø, RSC				
	III. Supports & Others				
	Wire Gutter, 4X12"				
	Solderless Wire Connector, for 38 mm. ²				
	U-Bolt, for 40mm. pipe				
	Angle Bare, 1.5" X 1.5" X 20'				
	Tox with screw, 6mm.				
	Welding Rod				
	Hacksaw Blade				
	Metal Drill bit, 1/4"				
	Masonry Drill bit, 1/4"				
	Pullbox, 6mm: X 6mm: X 8mm.				
	Terminal Lugs, Claming Type, for 50 mm ²				
	SUB TOTAL III. (Supports & Others)				

MATERIALS COST

EQUIPMENT COST	IV. Conductors, Lead Free							
	50 mm ² THHN - 2							
	38 mm ² THHN - 2							
	14 mm ² THHN - 2							
	3.5 mm ² THHN - 2							
SUB TOTAL IV. (Conductors)								
EQUIPMENT COST	Total Materials Cost				Sub-Total	Unit Cost	Unit Price	Sub-Total
	Description				Quantity	Unit		
	Welding machine 1@500/day							
	Electric drill 2@350/day							
	Total Equipment Cost				Sub-Total	Unit Cost	Unit Price	Sub-Total
LABOR COST	Description				Quantity	Unit	Unit Price	Sub-Total
	REER/ME/PEE 1@650/day							
	Electrician 3@450/day							
	Electrical helper 2@350/day							
	Total Labor Cost				Sub-Total	Unit Cost	Unit Price	Sub-Total

DIRECT COST:
DIRECT UNIT COST:

Plus Indirect Cost:
15% OCM
10% CP
5% VAT

Indirect Unit Cost:

Total Direct and Indirect Cost:



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 City of Batac, 2906, Ilocos Norte

SPECIFICATION

ITEM NO.	DESCRIPTION
I.	<p>Panelboards, Enclosures, Pull Boxes, and Wire Gutters (Rustproof) General Requirements Specifications: Ga. 16 Galvanized Materials Powder Coated Finish, Complete ground lugs Circuit Breaker: All bolt-on type CIRCUIT BREAKERS -copper busbars.</p> <p>Panel Board assembly must be subject to inspection of the end user before installation.</p>
II.	<p>Pipes, Conduits and Fittings It must be painted the same color as the surface it is installed.</p>
III.	<p>Supports and Others</p>
IV.	<p>Conductors, Lead Free Use only on brand of wires.</p>

Prepared By:

LEMUEL JOSHUA P. BAGAYAS
 Electrical Engineer

Checked by:

FREDIE MICHAEL S. BALANAY
 Chief, Electrical Section

AIDA V. CABANG
 Chief, Physical Planning Section

Recommending Approval:

ROMEO R. DUEBULAO
 Director



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 City of Batac, 2906, Ilocos Norte

BILL OF QUANTITIES

ITEM NO.	DESCRIPTION	Qty	Unit
I.	Panelboards, Enclosures, Pull Boxes, and Wire Gutters (Rustproof) General Requirements Specifications: Ga. 16 Galvanized Materials Powder Coated Finish, Complete ground lugs Circuit Breaker : All bolt-on type CIRCUIT BREAKERS copper busbars.	1	lot
II.	Pipes, Conduits and Fittings	1	lot
III.	Supports and Others	1	lot
IV.	Conductors, Lead Free	1	lot

Prepared By:

LEMUEL JOSHUA P. BAGAYAS
 Electrical Engineer

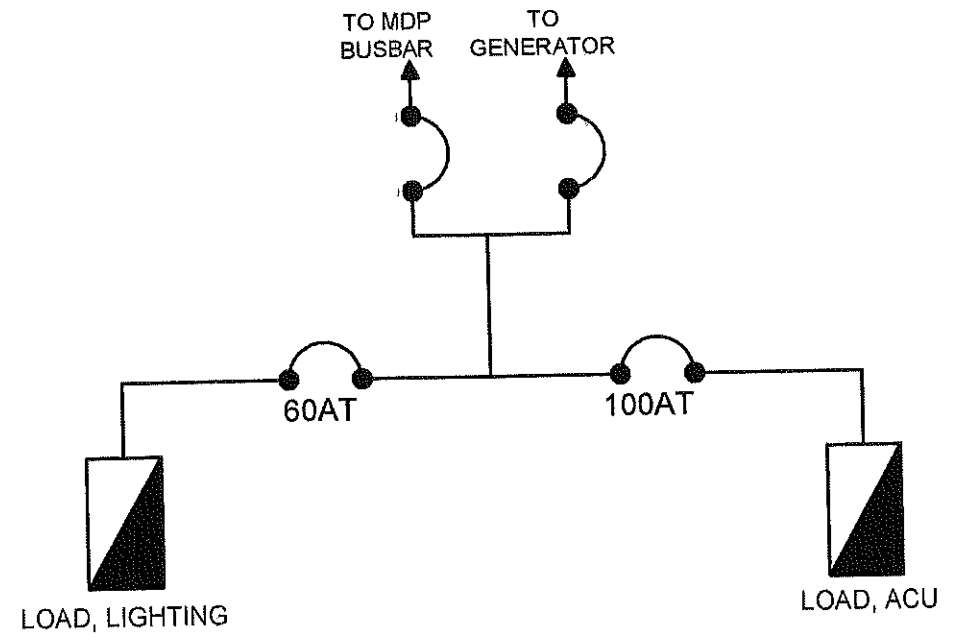
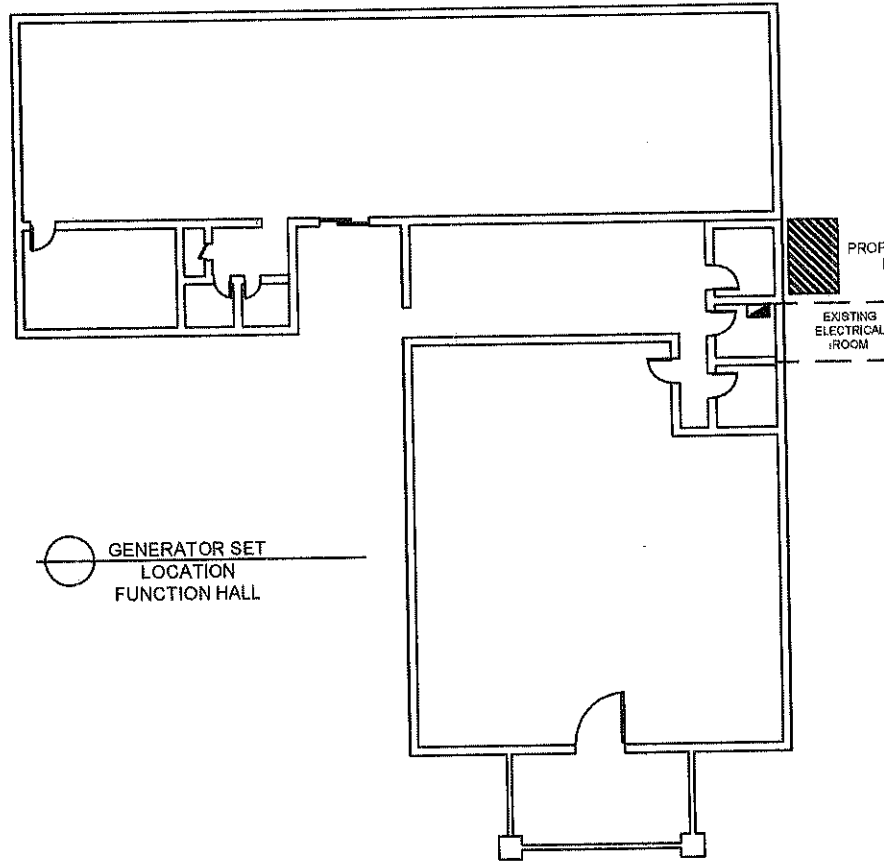
Checked by:

FREDDIE MICHAEL S. BALANAY
 Chief, Electrical Section

AIDA V. CABANG
 Chief, Physical Planning Section

Recommending Approval:

ROMEO R. DUKDULAO
 Director, PPDO



DRAWN BY:

LEMUEL JOSHUA P. BAGAYAS
ENGINEER, EE

PROJECT TITLE:

**ELECTRICAL WORKS FOR GENERATOR HOUSING
MMSU HOSTEL**

Location:

MMSU, Batac City, Ilocos Norte

CHECKED/REVIEWED BY:

Aida V. Cabang
AIDA V. CABANG
ARCHITECT IV / CHIEF INFR.

CONFORME:

Lenie G. Bayangos
LENIE G. BAYANGOS
Director, Business Directorate

RECOMMEND APPROVAL:

Romeo R. Duldulao
ROMEO R. DULDULAO
Director, PPDO

Sheet Contents:

A S S H O W N

APPROVED BY:

Shirley C. Agrupis
SHIRLEY C. AGRUPIS
President

Sheet No.