

### MARIANO MARCOS TXST K

# Bids and Awards Committee

# INVITATION TO MAKE AN OFFER: Negotiated Procurement

### 2022-013

THE PROJECT: Refurbishment of SIRMATA Office, Student Center Project Location: MMSU Student Center, City of Batac, I.N.

Number of Working Days: 30 calendar days

ABC: P481,021.44

- <u>|--</u> necessary and proper for the implementation of the above Project as per approved designs, plans and drawings. Norte, invites the public to make an offer to furnish all labor, materials, tools and equipment The Mariano Marcos State University (MMSU), with offices at Quiling Sur, City of Batac, Ilocos
- 'n contractors are to submit proposals. Act and Section 53.9 of the Implementing Rules and Regulations where interested and qualified This process is in accordance with Section 53 of R.A. 9184, the Government Procurement reform
- 4 The offer must be in writing submitted at the address below not later than 5 days together with the following documents:
- <u>a</u> The amount of the offer in writing duly signed by the person making the offer, indicated in numbers and figures.
- <u>o</u> The particulars of the offer as to labor, materials, tools, equipment and other work details.
- 0 the offer, which documents shall be confirmed and verified (3 copies). Documents in support of the legal, technical and financial capability of the person making
- Ņ 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.
- O) Electronic Procurement System (PhilGEPS) website address below or downloaded from the MMSU website or from the Philippine Documents for this procurement may be secured from the MMSU BAC Secretariat at the Government
- 7 at the address indicated below. For questions and inquiries, please write or email the University President, thru the BAC Chair

Mariano Marcos State University
Quiling Sur, City of Batac

www.mmsu.edu.ph

May 23, 2022.

NATHANIEL R. ALIBUYOG
BAÇ Chair

| Received: |  |
|-----------|--|
|           |  |
| Received: |  |
|           |  |



Project Title Refurbishment of SIRMATA Office, Student Center

Project Location : MMSU Student Center, City of Batac, Ilocos Norte

### GENERAL INSTRUCTIONS

inspection for them to have an idea on the existing condition of the site. approved for this project. this Project Information Document and other related contract documents prepared and conformity with the designs, plans, drawings and other details, as well as the specifications, needed for the refurbishment of SIRMATA Office. The said project shall be done in strict The project calls for the furnishing of all materials, labor, tools and equipment It is highly recommended that the contractor conduct site

available construction equipment to be utilized during the construction activities. engineer, electrical engineer and mechanical engineer) and shall have adequate and readily undertaking. The and deliver to the satisfaction of the owner the needed services and output required of this expertise to undertake the specific items of work and to enable the contractor to produce It also calls for the employment of manpower with the appropriate skills and contractor shall provide competent project in charge (architect, civil

system needed in the proper execution of the various works for the duration of the contract addition, the contractor shall be required to provide its own water and power supply contractor shall isolate the working area from the other portions The contractor shall ensure that the construction activities must not interfere, obstruct and disturb any on-going operation of the building and other facilities; hence, the of the building. In

for the approval of the end-user. the project. The Contractor shall strictly conforms to the plans and specifications of the project. Contractor shall submit samples of each materials included in the specifications preparation counter with cabinet with materials as indicated in the approved plans of COUNTER TOP WORKS - This scope of works includes fabrication and installation of

### II. ELECTRICAL WORKS

- Works shall be done by a duly accredited electrician (NC II) under the direct supervision of a licensed electrical practitioner, PEE/REE/RME
- Ċ The contractor shall provide 1 (one) licensed electrical practitioner PEE/REE/RME installation shall be done without the presence of the project supervisor. on the job site as a resident project supervisor for the electrical works. No
- Ü only but not including welding machines. Welding works shall be done outside the project site premises or other power supply shall be used by the contractor, are furnished. The provision shall be limited to equipment for drilling and cutting power consumption shall be paid by the contractor to the university after all works Before starting any works, the Contractor must provide its metering equipment whichever is more convenient. (kWHr Meter) for the power consumption throughout the project construction. The
- ά approval of materials by the technical committee of the University. University prior to their installation. No installation shall be made without the submitted for approval by the technical Sample of each fixture, wires, wiring devices, circuit breaker panels shall be committee or inspection committee of the

## Project Title Refurbishment of SIRMATA Office, Student Center

**Project Location** : MMSU Student Center, City of Batac, Ilocos Norte

Pipes for the additional convenience outlets must be embedded and finished in a existing. workmanship manner and the affected part to be painted with the same as the

- $\rightarrow$ Airconditioning units must be tapped to the existing circuit breakers provided for indicated in the Electrical Plans.
- άđ stranded, except for the feeder lines, transformer wirings, ecb wirings, THW must be used or approved brand by the technical committee of the University. ONLY ONE (1) All wires shall be copper 99%, plastic insulated for 600V type THHN, lead free, BRAND OF WIRE SHALL BE USED.
- $\Box$ Conduit/cable tray shall be supported for permanent connection following the latest PEC and/or refer the approved plans.
- H. No termination of wires shall be done inside the conduits
- <u>..</u>. (yellow), Line C (blue), and Ground (green). Color coding of wires shall be observed following the latest PEC: Line A (red), Line B
- ᅎ in 15 amperes respectively. Convenience outlet shall be in 3 wire grounding type All switches and convenience outlets shall be the wide series type and shall be rated
- The mounting heights of wiring devices shall be as follows:
- Convenience outlets 0.30 m above finished floor line or as required
- as required A/C outlet, outlets for motors – not less than  $0.40~\mathrm{m}$  above fin. Floor line or
- Ħ Grounding system - All exposed non-current-carrying metallic parts of electrical service equipment and shall be made to the driven rods on the exterior of the wiring system shall be grounded. The ground connection shall be made at the main equipment, metallic raceway system, grounding conductor and neutral conductor or
- ŗ. new electrical system is ready to be energized. Existing electrical system shall remain functional and normal operation until the
- 0 wiring system is free of short-circuit, accidental grounding or other defects prior to All wirings shall be tested for circuit continuity and shall be tested to assure that the normal system operation.
- ά conductor and ground shall be measured. volts. Reading shall be taken after the voltage has been applied continuously for one minute. The insulation resistance between the conductors and between each measuring accurately the resistance involved and having a voltage rating of 500 connected ready for use. Tests shall be made with an instrument capable of attachment of the fixtures and equipment and again after fixture and equipment are Tests shall be performed after all wiring is completed and connected ready for the
- مِ five times. All tests shall be performed in the presence of the university inspection or technical committee. All test results shall be submitted in three copies Tests shall be done for each item of control equipment will function not less than

**Project Location Project Title** . . MMSU Student Center, City of Batac, Ilocos Norte Refurbishment of SIRMATA Office, Student Center

- $\exists$ contract documents, prior to final inspection. normal power source and confirm that the system is operational as required by the systems are free of faults, the contractor shall energize the system from their Energize the system. After the contractor has assured himself that the wiring
- Ś end-used, and PPDO for proper resolution of the said conflict. procedure and in the plans and drawings as In case that a conflict arises in specification and quality of materials, installation before and during the implementation stage, the same should be referred to the well as in the contract documents

### III. MECHANICAL WORKS

appurtenances such as drain lines, refrigerant piping and supports. This include the supply and installation of Split Type Air Conditioning Unit and its

- A. Quality and Features of Air-conditioning Unit
- 1. The Air-conditioning Unit or ACU shall be a Split Type Vapor Compression Unit
- 2. The cooling capacity is specified in the Technical Specification Sheet
- 3. The ACU shall be fast cooling type with energy saving features
- The ACU shall be equipped with Auto Cleaning and Allergy Filter
- 5. The ACU shall be low noise level
- The ACU shall be constructed with a durable material with a 10 years warranty
- B. Quality and Features of Air-conditioning Unit
- supplier and technicians. 7. Mechanical Works shall be done by a duly licensed air-conditioning specialist,
- plan provide by MMSU PPDO 8. Installation of the Split Type ACU shall be in accordance with the mechanical
- obstruction of air flow of at keast 300mm at both sides. 9. The Fan Coil Unit (FCU) or Indoor Unit shall be installed where there S. no
- 500mm above the ground. Air-Cooled Condensing Unit (ACCU) or Outdoor Unit shall ь́е at least
- 300mm from the wall 11. The ACCU shall be properly ventilated and installed with a clearance of at least
- insulation and a white film vapor barrier. 12. The refrigerant piping shall be copper material, properly installed with 1" thick
- be sealed with fire retardant material after installation of refrigerant piping 13. Provide pipe sleeves for all piping penetrating wall. The penetrating wall shall

**Project Title** : Refurbishment of SIRMATA Office, Student Center

Project Location : MMSU Student Center, City of Batac, Ilocos Norte

directly routed toward outside the building for proper disposal of condensate and to avoid flooding inside the building. 14. Condensate drain line shall be 3/4" Polyvinyl Chloride (PVC) pipe shall be

# IV. MODULAR PARTITION AND FURNITURE

the approval of the end-user Contractor shall submit samples of each materials included in the specifications for Contractor shall strictly conforms to the plans and specifications of the project. include the supply and installation modular partition and furniture. The

### **Supplementary Provisions**

mentioned as "to be provided by others" the contractor shall likewise furnish all materials, indicated labor and equipment necessary to complete the work. All other items or scope of works not mentioned in this document but show/or in the plans, drawings and specifications, except where it is specifically

end-user and PPDO Project-in-Charge in proper resolution of the said conflicts. documents before and during the implementation stage, the same should be referred to the installation procedure and in the plans and drawings as well as in the other contract In case of conflicts that will arise among the specifications and quality of materials,

debris, temporary structures, facilities and utilities used during the construction period in the prosecution of the project shall be cleaned and cleared of all excess materials and After all the works have been completed, the surrounding immediate areas affected

- $\Rightarrow$ 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 fully completed within **30 calendar days** from receipt of the Notice to Proceed.
- Ä security in accordance with the following schedule as prescribe in Section 62.2.3.3 Before final acceptance by the end-user, the Contractor shall post a warranty of RA 9184

| issue such security. | rtified by the Insurance mmission as authorized to |      | c) Surety bond callable upon | _                 | antee confirmed by a                    | foreign bank. | Commercial Bank, if issued by a | authenticated by a Universal or |                   | Bank: Provided, however, that the | by a Universal or Commercial | a) Cash or Letter of Credit issued |                 | Form of Warranty Security         |                             |
|----------------------|--|------|------------------------------|-------------------|---|---------------|---------------------------------|---------------------------------|-------------------|-----------------------------------|------------------------------|------------------------------------|-----------------|-----------------------------------|-----------------------------|
| TARREST .            | Thirty percent (30%)                               | 700/ |                              | len percent (10%) | 년 - · · · · · · · · · · · · · · · · · · |               |                                 |                                 | Five percent (5%) |                                   |                              |                                    | Contract Price) | (Equal to percentage of the Total | Amount of Warranty Security |

**Project Title** : Refurbishment of SIRMATA Office, Student Center : MMSU Student Center, City of Batac, Ilocos Norte

Project Location

to cover warranty against structural defects to cover the following periods accordance with Section 62.2.3.2 as follows

- Permanent Structures (15 years) Semi-Permanent Structures (5 years)
- Other Structures (2 years)

C. The Approved Budget for the Project to be bid is Four Hundred Eighty One Thousand Twenty One and 44/100 Only (Php. 481,021.44)

Prepared by:

JEREMIAH ROCERF. CALUYA

Civil Engineer

LEMUEL JOSHVA P. BAGAYAS
Registered Electrical Engineer

DENNIS CLYDE G. ACANTILADO Mechánical Engineer

Checked by:

AIDA V. CABANG

Chief, Physical Planning Section

Noted by:

ROMEO R MALILIA O

# Republic of the Philippines MARIANO MARCOS STATE UNIVERSITY PHYSICAL PLANNING AND DEVELOPMENT OFFICE City of Batac, 2906, Ilocos Norte

# Refurbishment of SIRMATA Office, Student Center (MMSU Batac Campus, City of Batac, Ilocos Norte)

|              |               | Widhad, chair with armrest and reslift height adjustment with tilt mechanism:   |
|--------------|---------------|---|
|              | 3.00          | Mobile Pedestal with 3 drawers in powder coated metal body gauge 20; beige color  |
| sets<br>sets | 3.00<br>3.00  | Worktop Table – Woodgrain laminated top 25mm thick with flat edging; with powder coated metal bracket  Dimension:  90Wx45D cm (side table)          |
| sets         | 4.00          | Mid Post 150H Powder Coated Metal Post Beige Color  |
| sets         | 8.00          | End Post 150H Powder Coated Metal Post Beige Color  |
| sets         | 3.00          | 2D Post 150H Powder Coated Metal Post Beige Color   |
| sets         | 6.00          | Mid Post 180H Powder Coated Metal Post Beige Color  |
| sets         | 3.00          | 2D Post 180H Powder Coated Metal Post Beige Color   |
|              | 1             | STAFF/HEAD PANEL PARTITION  |
| sets         | 1.00          | Door with complete accessories 100W x 180H cm   |
| sets         | 3.00          | 70Wx150H cm   |
| sets         | 8.00          | 70Wx180H cm   |
| sets         | 7.00          |   |
|              |               | Laminate with stripes "frosted" glass panel partition 6cm thick; powder coated metal trims and stripsin beige color                                 |
|              |               | STAFF/HEAD PANEL PARTITION  |
| lot          | 1.00          | PART D MODULAR PARTITION AND FURNITURE  |
|              |               | Plasmater, NANUex   |
| sets         | 2.00          | condensate drain line, caulking sealant for wall penetration (Supply, Installation, and Delivery) with ff. features: Air Filter PM 1.0, Plasmaquad, |
|              | <b>,</b>      | mounting (see plan details), including 3/4" PVC pipe with pvc elbow for   |
|              |               | Split Type Wall Mounted Air Converter - Super Inverter Cooling Capacity = 19 738 Rm /hr / 20 820 kl/hr or higher, complete with all accessories and |
|              |               |   |
| lot          | 1.00          | PART C MECHANICAL   |
| sets         | 5.00          | Duplex Convenience Outlet with Cover Plate, Grounding Type, Wide Series   |
| pcs.         | 5.00          | Utility Box, 2"x4"  |
| meters       | 14.00         | Conductors, Lead Free, 2.0 mm <sup>2</sup> THHN   |
| meters       | 28.00         | Conductors, Lead Free, 3.5 mm <sup>2</sup> THHN   |
| pcs.         | 6.00<br>To:00 | Pine Thick wall 20mmØ PVC 2.2mm thick   |
| lot          | 1,00          | PART B ELECTRICAL WORKS   |
|              |               | Clear wood rieservanve with rame brush  |
| liter        | 1.00          | Wood Glue   |
| kgs          | 0.50          | 1 1/2" Finishing Nail   |
| kgs          | 0.50          | 1" Finishing Nail   |
| pcs          | 4.00          | Aluminum Cabinet Door Handle  |
|              | 8.00          | Concealed Hinges  |
| pes          | 2.00          | 1"x2"x10' Good Lumber   |
| pcs          | 2.00          | 3/4" Laminated Plywood  |
| set          | 1.00          | Granite Adhesive  |
| sq.m.        | 0.96          | PAKI A COUNIER FOR WORKS  |
| lot          | 1 00          |   |
| _            |               |   |

# Republic of the Philippines MARIANO MARCOS STATE UNIVERSITY PHYSICAL PLANNING AND DEVELOPMENT OFFICE City of Batac, 2906, Ilocos Norte

# Refurbishment of SIRMATA Office, Student Center MMSU Batac Campus, City of Batac, Ilocos Norte

| or leatherette upholstery  |  |
|--|--|
| Midback chair with armrest and gaslift height adjustment with tilt mechanism; black starbase; fabric   |  |
| Mobile Pedestal with 3 drawers in powder coated metal body gauge 20; beige color   |  |
| Worktop Table – Woodgrain laminated top 25mm thick with flat edging; with powder coated metal bracket Dimension:  140Wx60D cm (main table) 90Wx45D cm (side table)   | Furniture  |
| Mid Post 150H Powder Coated Metal Post Beige Color   |  |
| End Post 150H Powder Coated Metal Post Beige Color   |  |
| 2D Post 150H Powder Coated Metal Post Beige Color  |  |
| Mid Post 180H Powder Coated Metal Post Beige Color   |  |
| End Post 180H Powder Coated Metal Post Beige Color   |  |
| 2D Post 180H Powder Coated Metal Post Beige Color  | Partition Panel Accessories  |
| 90Wx180H cm<br>70Wx180H cm<br>70Wx150H cm<br>70Wx150H cm<br>70Wx150H cm<br>Door with complete accessories 100W x 180H cm   |  |
| Laminate with stripes "frosted" glass panel partition 6cm thick; powder coated metal trims and strips in beige color Dimension:  | Staff/Head Panel Partition  Staff/Head Panel Partition  Laminate with stripes "thick; powder coated m Dimension: |
|  |  |
| Split Type Wall Mounted Air Converter – Super Inverter Cooling Capacity = 19,738 Btu/hr / 20,820 kJ/hr or higher, complete with all accessories and mounting (see plan details), including 34" PVC pipe with pvc elbow for condensate drain line, caulking sealant for wall penetration (Supply, Installation, and Delivery) with ff. features: Air Filter PM 1.0, Plasmaquad, Plasmater, NANOeX | Air conditioning   |
|  | MECHANICAL   |
| It must meet the standard thickness and diameter It must be UL listed brands, lead free, and at least 99% made from copper wire  | Pipes, Conduits, and Fittings<br>Conductors, Lead Free   |
| RICAL  | ELECTRICAL   |
| 3/4" Laminated Plywood   | Cabinet  |
| 20mm thick granite slab  | Counter Top  |
| CTURAL (show sample of material for approval by the end-user)  | ARCHITECTURAL (show s  |
| Specifications   | Building Part / Material   |
| ATIONS   | SNOIL V JIELJEGS   |

### DETAILED ESTIMATES

| Description: Counter top works |        | Item No.: |  |
|--------------------------------|--------|-----------|--|
| C115;                          | l Init | Quantity: |  |

|           |                  | LABOR CO          | ST              | •                    |             |           | EG                   | QUIPMENT COST |             |           |                      | MATERIALS COST  |
|-----------|------------------|-------------------|-----------------|----------------------|-------------|-----------|----------------------|---------------|-------------|-----------|----------------------|---|
|           | Total Labor Cost | Unskilled Laborer | Skilled Laborer | Construction Foreman | Description |           | Total Equipment Cost | Minor Tools   | Description |           | Total Materials Cost | Description  PREPARATION COUNTER  20mm Thick Granite Slab Granite Adhesive 3/4" Laminated Plywood 1"x2"x10' Good Lumber 2"x3"x8' Good Lumber Concealed Hinges Aluminum Cabinet Door Handle 1" Finishing nail 1 1/2" Finishing Nail Wood Glue Clear Wood Preservative with Paint Brush |
|           |                  |                   |                 |                      | Quantity    |           |                      |               | Quantity    |           |                      | Quantity  |
|           |                  | uays              | days            | days                 | Unit        |           |                      |               | Unit        |           |                      | sq.m. set pcs pcs pcs pcs kgs kgs liter   |
| Unit Cost | Sub-Total        |                   |                 |                      | Unit Price  | Unit Cost | Sub-Total            |               | Unit Price  | Unit Cost | Sub-Total            | Ont Price   |
| 1         | -                |                   |                 |                      | Sub-Total   |           |                      |               | Sub-Total   | Į         |                      | OHD-TORM  |

DIRECT COST: DIRECT UNIT COST:

Plus Indirect Cost. OCM

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VAT
INDIRECT COST:
INDIRECT UNIT COST:

Total Direct and Indirect Cost:

### DETAILED ESTIMATES

| Description: Electrical Works | Item No.: II   |  |
|-------------------------------|----------------|--|
| Unit: lot                     | Quantity: 1.00 |  |

|           |                  | LABOR C | cos               | т               |             |           | EG                   | QUIPMENT COST |             |           |                      | MATERIALS COST   |
|-----------|------------------|---------|-------------------|-----------------|-------------|-----------|----------------------|---------------|-------------|-----------|----------------------|--|
|           | Total Labor Cost |         | Electrical Helper | PEE / REE / RME | Description |           | Total Equipment Cost | Minor Tools   | Description |           | Total Materials Cost | Description  Adapter with Locknut / Straight Connector 20mmØ, PVC Pipe, Thick Wall 20mmØ, PVC, 2.2mm thk Conductors, Lead Free, 3.5mm2 THHN Conductors, Lead Free, 2.0mm2 THHN Utility Box, 2"X 4" Duplex Convenience Outlet with Cover Plate, Grounding Type, Wide Series |
|           |                  |         |                   |                 | Quantity    |           |                      |               | Quantity    |           |                      | Quantity   |
|           |                  |         | days              | days<br>days    | Unit        |           |                      |               | Unit        |           |                      | pcs. pcs. meters meters pcs. sets  |
| Unit Cost | Sub-Total        |         |                   |                 | Unit Price  | Unit Cost | Sub-Total            |               | Unit Price  | Unit Cost | Sub-Total            | Unit Price   |
|           | •                |         | ı                 | i f             | Sub-Total   | 1         |                      |               | Sub-Total   | 1         | ı                    | Sub-lotal  |

DIRECT COST:
DIRECT UNIT COST:

Plus Indirect Cost: OCM

CP VAT INDIRECT COST: INDIRECT UNIT COST:

Total Direct and Indirect Cost:

DETAILED ESTIMATES

|        |       | Description modification received |
|--------|-------|-----------------------------------|
| Q      | Unit  | Description: Mechanical Works     |
| 1 4    |       | 1571111611                        |
| y:     | Chaum | Hem No.                           |
| - A DO |       |                                   |
|        |       |                                   |

|           |                  | LABOR COST |             |           | EC                   | QUIPMENT COST |             |           |                      | MATERIALS COST  |
|-----------|------------------|------------|-------------|-----------|----------------------|---------------|-------------|-----------|----------------------|---|
|           | Total Labor Cost |            | Description |           | Total Equipment Cost |               | Description |           | Total Materials Cost | Description  Split Type Wall Mounted Air Converter - Super Inverter Cooling Capacity = 19,738 Btu/hr/ 20,820 KJ/hr or higher, complete with all accessories and mounting (see plan details), including 3/4" PVC pipe with pvc elbow for condensate drain line, caulking sealant for wall penetration (Supply, Installation and Delivery) with ff. features:  Air Filter PM 1.0  Plasmaquad  Plasmaquad  Plasmater  NANOeX |
|           |                  |            | Quantity    |           |                      |               | Quantity    |           |                      | Quantity  |
|           |                  |            | Unit        |           |                      |               | Unit        |           |                      | Set   |
| Unit Cost | Sub-Total        |            | Unit Price  | Unit Cost | Sub-Total            |               | Unit Price  | Unit Cost | Sub-Total            | Ont Price   |
| 1         |                  | t          | Sub-Total   |           | *                    |               | Sub-Total   | 1         | *                    | SUD-TOTAL   |

DIRECT COST:
DIRECT UNIT COST:

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Plus Indirect Cost:

OCM

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VAT
INDIRECT COST:
INDIRECT UNIT COST:

Total Direct and Indirect Cost:

DETAILED ESTIMATES

| L                        | ABOR COST |             | EQL        | IIPMENT COST |             |                      |                                   |  |  | MATE  | RIALS COST  |   |  | DEGUNIT     | TEM NUMBER |
|--------------------------|-----------|-------------|------------|--------------|-------------|----------------------|-----------------------------------|--|--|---|---|---|--|-------------|------------|
|                          |           | DESCRIPTION |            |              | DESCRIPTION | Total Materials Cost | Fabrication, Supply, and Delivery | Midback chair with armrest and gaslift height adjustment with till mechanism; black starbase; fabric or leatherette upholstery | Mobile Pedestal with 3 drawers in powder coated metal body gauge 20; beige color | Worktop Table - woodgrain laminated top 25mm thick with flat edging; with powder coated metal bracket 140W x 60D cm (main table) Dimension: 90W x 45D cm (side table) | PARTITION PANEL ACCESSORIES 2D Post 180H Powder coated metal post beige color End Post 180H Powder coated metal post beige color Mid Post 180H Powder coated metal post beige color 2D Post 150H Powder coated metal post beige color End Post 150H Powder coated metal post beige color Mid Post 150H Powder coated metal post beige color | Dimension: 90W x 180H cm<br>70W x 180H cm<br>70W x 150H cm<br>70W x 150H cm<br>70W x 150H cm<br>Door with complete accessories 100W x 180H cm | STAFF/HEAD PANEL PARTITION  Laminate with stripes "frosted" glass panel partition 6 cm thk;  powder coated metal trims and strips in beide color | DESCRIPTION |            |
|                          |           | QUANTITY    |            |              | QUANTITY    |                      |                                   |  |  |   |   |   |  | QUANTITY    |            |
|                          |           | DAYS        |            |              | DAYS        |                      | ğ                                 | set  | set  | set   | set set   | set set   |  | UNIT        | <u> </u>   |
| Sub-Total:<br>Unit Cost: |           | RATE        | Sub-Total: |              | RATE        | Unit Cost:           | Sub Total:                        |  |  |   |   |   |  | UNIT PRICE  |            |
| 1                        |           | Total Price | 1          |              | Total Price | 1                    |                                   | ŧ  | ŧ  | 1 1   |   |   |  | Total Price | lot        |

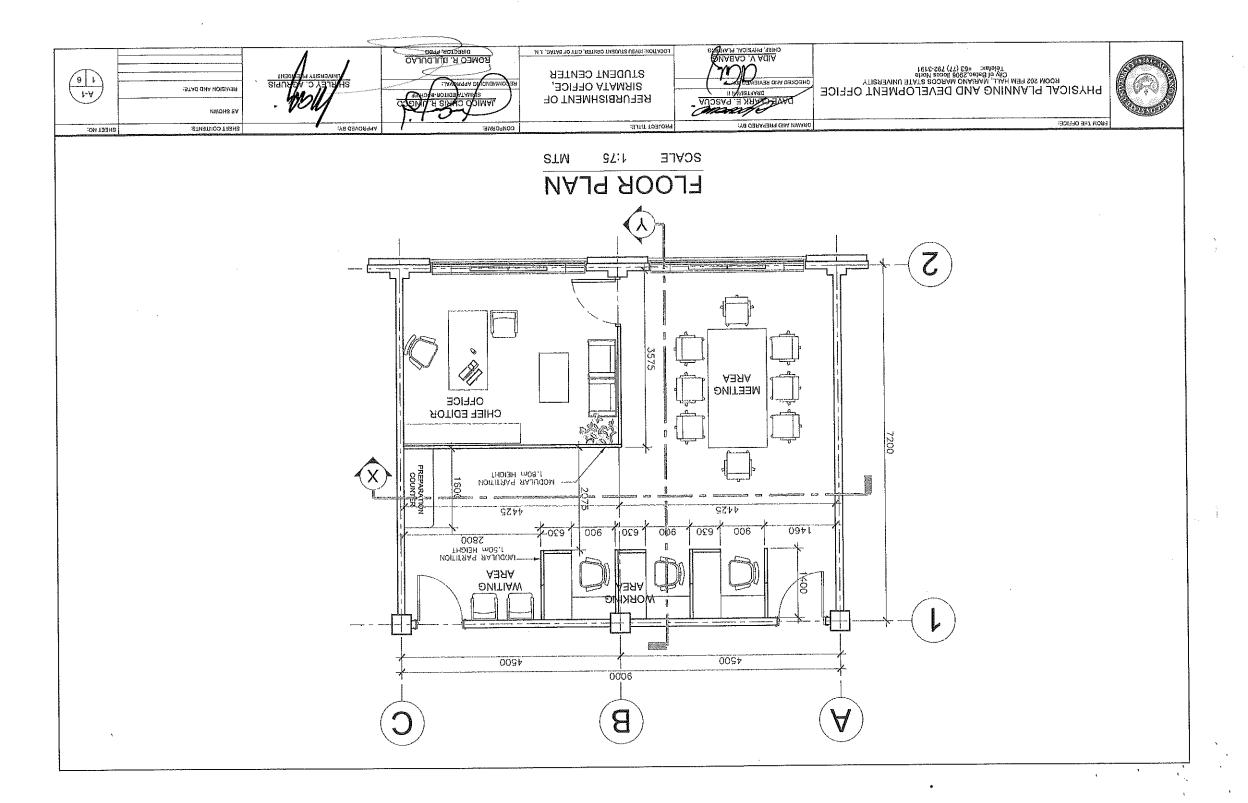
Total Direct and Indirect Cost:

1 1

Plus Indirect Cost:

DIRECT COST: UNIT COST:

OCM
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INDIRECT UNIT COST:





PHYSICAL PLANUING AND DEVELOPMENT OFFICE
GLY OF THE DESCRIPTION SOS FEM HALL, MERION WEGOS STATE UNIVERSITY
GLY OF THE COSOS FURTHER OFFICE AND THE CONTROL OF THE CONTROL

CHECKED AND KENEWER E. PASCUA

ANDA V. CABANG

ANDA V. CABANG

ONEST BAYRICAL BLAKING УН ОЭМАЧЭЯЧ СИА ИМАКС

LOCATION: MYBU STUDENT CENTER, CITY OF BATAC, 1 M. STUDENT CENTER SIRMATA OFFICE, REFURBISHMENT OF

KOMEGOR, P90

\*YR G3VOR99A

SHEET CONTENTS:

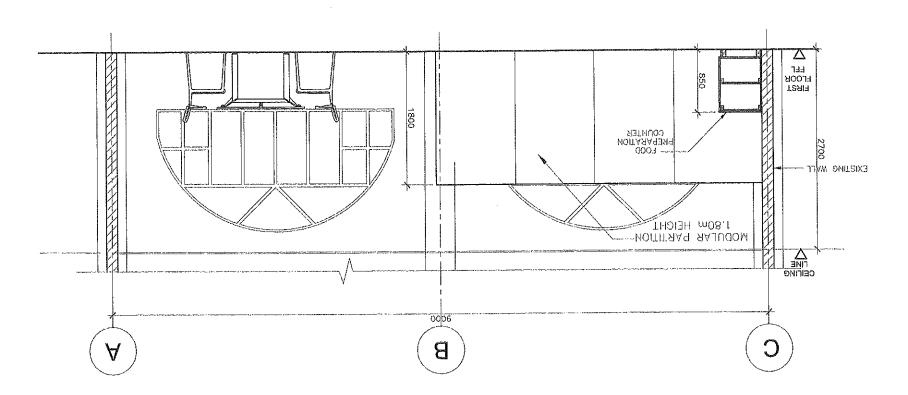
REVISION AND DATE:

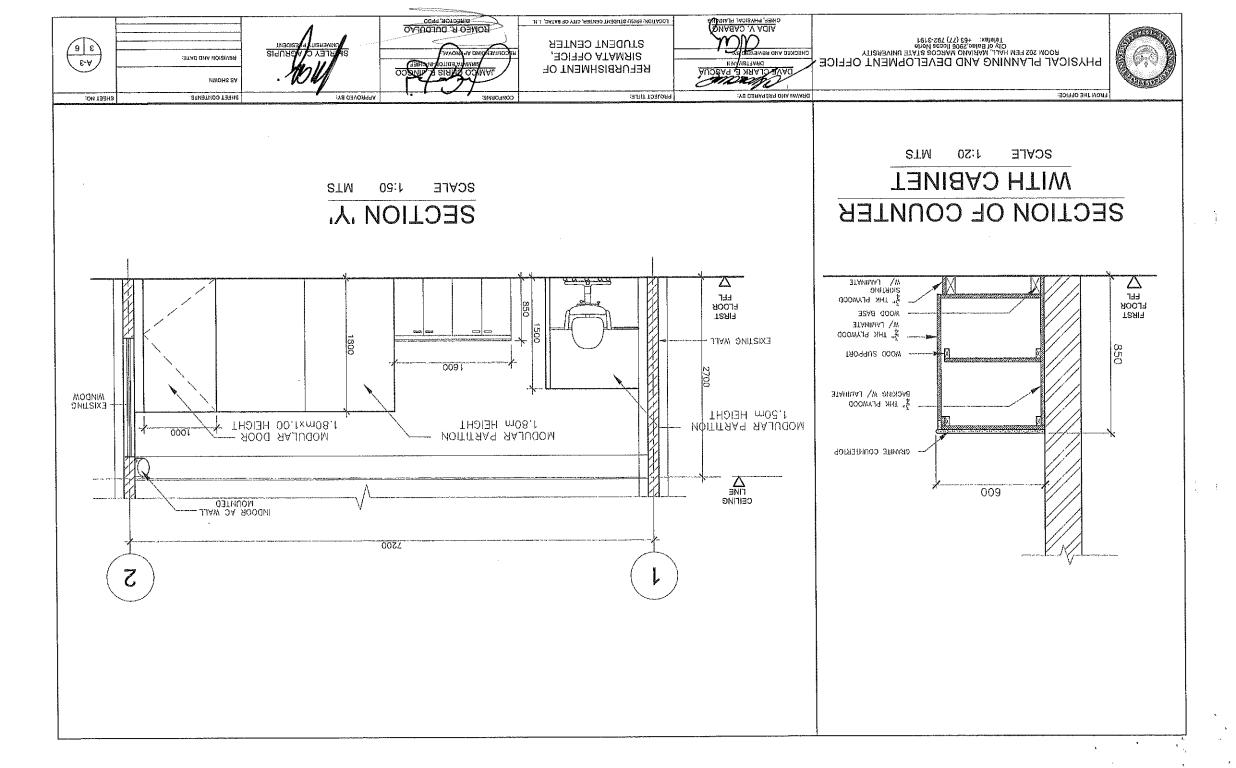
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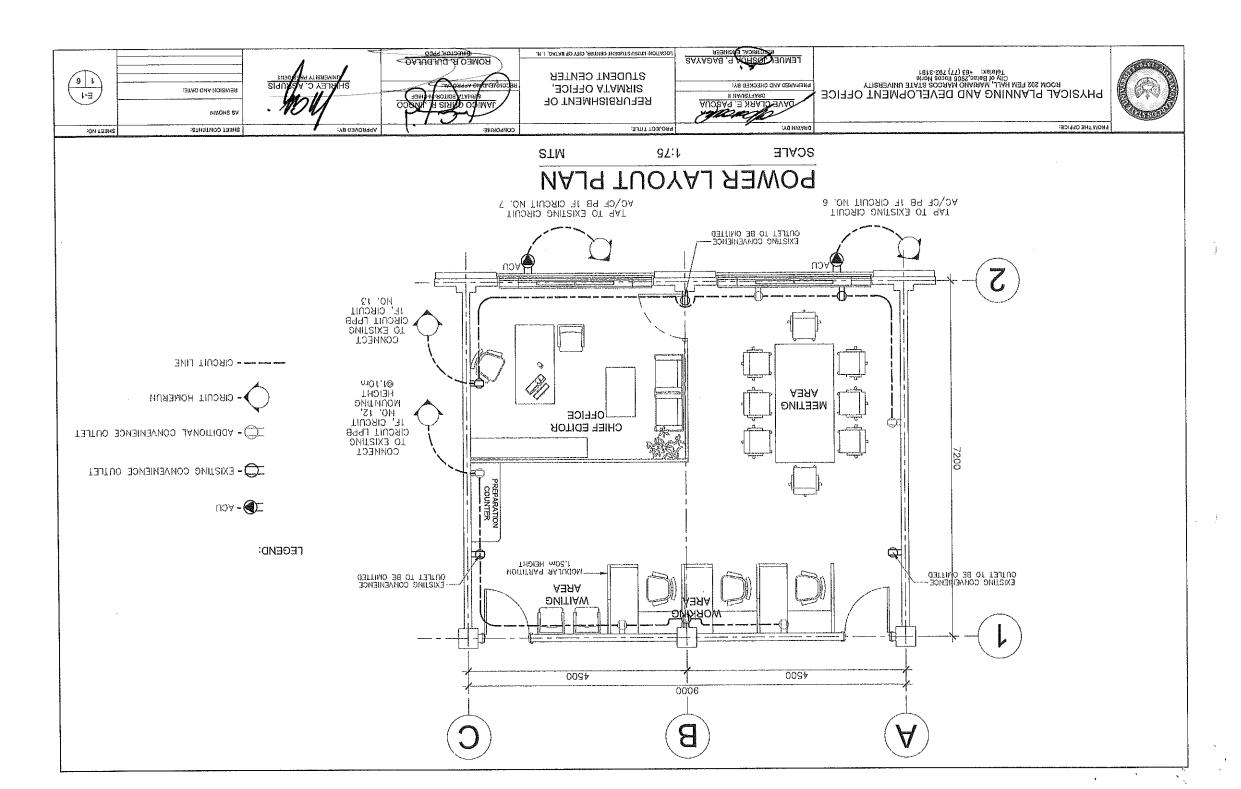
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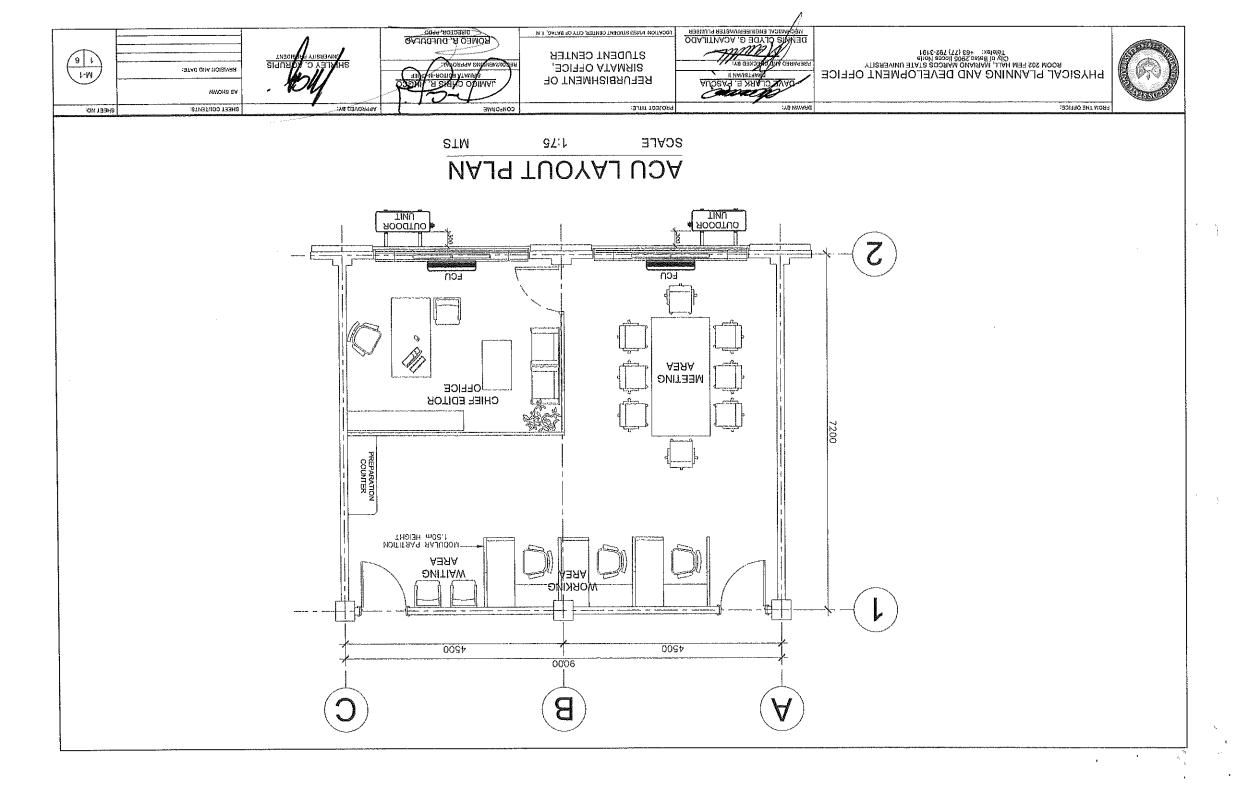
SIM 09:1 SCALE **SECTION 'X'** 

эли тозколч









|           |                |               |  | 07                    | 550                     | 0.5                        | 9'T                          | 078'07                     | 857,61                     | £82'S                                     | 7  | ATAM#I2  | MOUNTED - VARIABLE<br>WITH FF FEATURES:<br>WITH FF FEATURES:<br>WARE FILE REM TO           |   |
|-----------|----------------|---------------|--|-----------------------|-------------------------|----------------------------|------------------------------|----------------------------|----------------------------|---|--|--|--|---|
| CURRENT,  |                |               | Hd                                     | ZH                    | ٨                       | ан                         | Hi                           | к1\нв                      | ян\ита                     | ΚΛΛ                                       | YΤΩ  | 3NOZ   | DESCRIPTION  | ITEM  |
| FULL LOAD | GATED<br>R3WO9 | 1             |  |                       |                         |                            | ,                            | /TIDA9AD 5                 | COOLING                    |   |  | 30 33403   |  |   |
|           | CURRENT        | POWER CURRENT | I, POWER CURRENT<br>(AMP) INPUT, (AMP) | PH (AMP) INPUT, SAMPI | H2 PH (AMP) INPUT, SAMP | V H2 PH (AMP) INPUT, (AMP) | V Hz PH (AMP) INPUT, CURRENT | V Hz PH (AMP) INPUT, (AMP) | V H2 PH (AMP) INPUT, (AMP) | THE PH INPUT, CURRENT NAME, CURRENT (AMP) | TOTALE TOWER TOTALE TOWER TOTALE TOWER TOTALE TOWER TOTALE TOWER T | QTY 1, POWER CURRENT NAME, CORRECT CONSTRENT CONSTRUCTOR CONST | SPACE OI STATED  COOLING CAPACITY  V H2 PH  I, POWER CURRENT CONRESS  CURRENT INPUT. [AMP] | DESCRIPTION SPACE OF ZONE KW BTU/HR RI/HR TR HP LAMP IN HAZOURED - VARIABLE MOUNTED - VARIABLE MAUL |

### AIRCONDITIONING AND VENTILATION DESIGN.

COOLING LOAD PER AREA

= 64.8 m2 / 11.6 KWr

= 2.58 m2 / KWr x 3.516 KWr/TON

CONFORME

Of = 11,566.2 W or 11.6 KWr AOT \ 5m 8.et =

USE TWO AIRCONDITIONING UNITS, DIVIDE TOTAL LOAD TO TWO (2)

| τ  | 09 | 520 | 2,0 | 9.1      | 028'02 | 867,er           | £87,2 | 7   | ATAMAIZ       | SPLIT TYPE WALL<br>MOUNTED - VARIABLE<br>FREQUENCY DRIVE | tno/ |
|----|----|-----|-----|----------|--------|------------------|-------|-----|---------------|--|------|
| Hd | ZН | ۸   | dН  | YT<br>RT | KI/HR  | соогіи<br>Вти\ня | ΚΛ    | VTO | SPACE or ZONE | DESCRIPTION  | Mat  |

Zmmszmms 5/16mm 8AGLE BAR TROPPORT

OUTDOOR UNIT DETAIL

TLOOR FECOOR GROUND



INDOOR UNIT DETAIL

PHYSICAL PLANNING AND DEVELOPMENT OFFICE COM 802 FEM HALL, MERROW WENCOS STATE UNIVERSITY
City of Beled, 2986 (19026 Variet)
Telefax: +63 (77) 792-3191

| W-2 6 |
|-------|
|       |

\$HEE1110:

REVISION AND DATE:

SHEEL CONTEILES

APPROVED BY:

STUDENT CENTER

SIRMATA OFFICE,

REFURBISHMENT OF

ниолест тиле:

0t = 39,475.2 btu/h

C, TOTAL LOAD, Q1

 $(4/n19 5.895.05) \times 5.1 = 10$ 

COCATION LINEU STUDENT CENTER, CITY OF BATAC, T.M.

DENNIS CLADE G, ACANTILADO MECHATOLADO