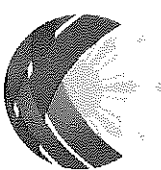




MARIANO MARCOS STATE UNIVERSITY  
Bids and Awards Committee



BACONG PILIPINAS

INVITATION TO MAKE AN OFFER: Negotiated Procurement  
2024-01

THE PROJECT: Provision of Additional Lighting Fixtures and Convenience Outlet, MMSU-CIT  
Techvoc Building (Garments Room)  
Number of Working Days: 30 calendar days  
ABC: P277,954.18

1. The Mariano Marcos State University (MMSU), with offices at Quiling Sur, City of Batang, 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 not later than **5 days** 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 (3 copies).
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 Batang  
[www.mmsu.edu.ph](http://www.mmsu.edu.ph)

March 7, 2024.

  
NATHANIEL R. ALIBUYOG  
BAC CHAIR

Received: \_\_\_\_\_ Received: \_\_\_\_\_

Rm 208 FEM Hall, #16S Quiling Sur, City of Batang, Ilocos Norte  
op@mmsu.edu.ph | +63(77)-600-0459  
[www.mmsu.edu.ph](http://www.mmsu.edu.ph)

*MMSU @46: Strengthening a Culture of ACHIEVEMENT*

## PROJECT INFORMATION DOCUMENT

**Project Title : Provision of Additional Lighting Fixtures and Convenience Outlet  
MMSU-CIT Techvoc Building (Garments Room)**

**Project Location : MMSU City of Laoag, Ilocos Norte**

### GENERAL INSTRUCTIONS

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

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

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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 contractor shall isolate the working area from the other portions of the building. In addition, the contractor shall be required to provide its own power supply system needed in the proper execution of the various works for the duration of the contract.

### ELECTRICAL DESIGN PARAMETERS

#### *1. Codes and Standards*

The Electrical System design Parameters shall be in accordance with the following Codes and Standards.

- **Codes:**
  1. Philippine Electrical Code
  2. National Electrical Code
  3. New Fire Code of the Philippines
  4. Existing Local Codes and Ordinances
- **Standards:**
  1. Bureau of Products Standards (BPS)
  2. National Fire Protection Association
  3. Illumination Engineering Society (IES)
  4. National Electrical Manufacturer's Association (NEMA)
  5. IEC Standards

## PROJECT INFORMATION DOCUMENT

**Project Title** : **Provision of Additional Lighting Fixtures and Convenience Outlet**  
**MMSU-CIT Techvoc Building (Garments Room)**

**Project Location** : MMSU City of Laoag, Ilocos Norte

### ***H. SCOPE OF WORKS***

- o Based on the Master Site Development of the CIT Techvoc Building, the Site Works shall provide complete layout of the following:

1. Supply and installation of Distribution Panel in accordance with the plan's depiction, including all necessary components, and with acceptable workmanship.
2. Service Conductors and Conduit Layout including fittings depicted on plan
3. Supply and installation of all required wiring fixtures, including lighting fixtures, Switches, Twist Lock Outlet, and other items as shown on the plan
4. In the event of a conflict between the plan and BOQ, the one that prevails should be the one that completes the system and with acceptable workmanship. Ask PPDO personnel for more info
5. All Electrical components required to complete the system.
6. Chipping and Restoration
7. Remove all unnecessary wiring and piping to make it appear tidy and clean

### ***III. Building Facilities Electrical System***

#### ***1. Lighting System***

- Provide and install adequate normal branch circuits for Lighting System to all areas as per plan.
- #### ***2. Power System***
- Provide and install adequate main and normal branch circuits for the Power System as per plan.

### ***IV. Provide Details of the following for approval:(prior to installation)***

1. Lighting Fixtures/Luminaires
2. Twist Lock Outlet
3. Panel board and Circuit Breakers ( use Existing Brand)
4. Cable Tray
5. Others as may be required

## PROJECT INFORMATION DOCUMENT

**Project Title : Provision of Additional Lighting Fixtures and Convenience Outlet  
MMSU-CIT Techvoc Building (Garments Room)**

**Project Location : MMSU City of Laoag, Ilocos Norte**

### *V. Summary of Materials*

1. General Lighting Luminaires: Fixtures type shall be as indicated on the Lighting Layout Plan.
  - Suspended Linear Light, 1200 x100mm 240 Volts
2. Wiring Devices:
  - Switches shall be of 16A, 240V except as otherwise noted and approved. Terminals shall be screw-type or quick-connected type.
  - Twist Lock Receptacle 3 Prong with Plug 16A, 250VAC, Faceplate Color: Snow White
3. Panel boards and Circuit Breakers: The Panel board and Circuit Breakers shall be IEC standards UL Listed.
  - Provide circuit breakers of frame, trip rating and interrupting capacity as shown on the drawings. The circuit breakers shall be quick-make, quick break, thermal-magnetic, trip-indicating and shall have common trip on all multiple breakers with internal trip mechanism. Circuit Breakers Should be Bolted type
  - All current-carrying parts of the panel boards shall be plated. The assembly shall isolate from the enclosure.
  - Circuit breaker shall be the same brand with the existing (Schneider) type C
4. Electrical Conduits, Boxes and Fittings: All conduits, boxes and fittings shall be standard rigid steel, zinc coated or galvanized.
  - Intermediate Metal Conduits (IMC)
  - Plasticized Polyvinyl Chloride (uPVC) if required shall be schedule 40
5. Conductors: All wires shall be copper 99%, plastic insulated for 600V type THHN, lead free, stranded, except for the feeder lines, transformer wirings, THW must be use or approved brand by the end-user. AND USED ONLY 1 TYPE WIRES AND BRAND.

## PROJECT INFORMATION DOCUMENT

**Project Title : Provision of Additional Lighting Fixtures and Convenience Outlet  
MMSU-CIT Techvoc Building (Garments Room)**

**Project Location : MMSU City of Laoag, Ilocos Norte**

- All conduits of convenience outlets and wireways for lighting branch circuit homeruns shall be wired with a minimum of 3.5 mm square in size.

## ***VI. INSTALLATIONS***

- Electrical works of the project shall be done by duly accredited electricians under the direct supervision of a licensed electrical practitioner, i.e. REE/RME with PCAB license specializing Electrical Works/System.
- The contractor shall provide a licensed electrical practitioner REE/RME in the construction site to regularly supervise the implementation of the electrical works or as resident project supervisor during this stage of the electrical works until the said system is satisfactorily completed and tested. The testing process shall be done in the presence of University Inspection team and other designated technical personnel of the University.
- Sample of each fixtures, wires, wiring devices, circuit breaker panels shall be submitted for approval by the technical committee or inspection committee of the University prior to their installation. No installation of materials shall be made without the prior approval by the technical committee or the designated personnel of MMSU.
- Provision of manhole shall be referred for verification by the Architect.
- Conduit run in walls for Wiring devices and lightings shall be concealed and all conduits shall be the thick wall type as specified by the end-user.
- Grounding system - 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.
- The electrical contractor shall furnished all necessary labor, materials and equipment for satisfactory completion of the entire electrical installation as shown on the drawings and described in the specifications
- All wirings shall be tested for circuit continuity and shall be tested to assure that the wiring system is free of short-circuit, accidental grounding or other defects prior to normal system operation.
- 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 are connected ready for use. Tests shall be made with an instrument capable of measuring accurately the resistance involved and having a voltage rating of 1000 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.

## **PROJECT INFORMATION DOCUMENT**

**Project Title : Provision of Additional Lighting Fixtures and Convenience Outlet  
MMSU-CIT Techvoc Building (Garments Room)**

**Project Location : MMSU City of Laoag, Ilocos Norte**

- Tests shall be such that 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 triplicate.
- Energizing the systems - After the Contractor is assured 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.
- In case that conflicts arise 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

## ***VII. TEST RESULTS***

Test results must be provided with a witness from the PPDO/PMS.

- Voltage Reading (line to line and line to ground) of all phases.
- Tagging/Labeling of Panel Board
- Functionality Test

## ***VIII. Miscellaneous***

All other electrical related design and details shall be approved by the End User and its authorized representatives or consultants.

**PROJECT INFORMATION DOCUMENT**

**Project Title : Provision of Additional Lighting Fixtures and Convenience Outlet  
MMSU-CIT Techvoc Building (Garments Room)**

**Project Location : MMSU City of Laoag, Ilocos Norte**

**Supplementary Provisions**

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

In case of conflicts that will arise among the 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 and PPDO Project-in-Charge in proper resolution of the said conflicts.

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

Form of Warranty Security	Amount of Warranty Security (Equal to percentage of the Total Contract Price)
a) Cash or Letter of Credit issued by a Universal or Commercial Bank: Provided, however, that the LC shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank.	Five percent (5%)
b) Bank guarantee confirmed by a Universal or Commercial Bank.	Ten percent (10%)
c) Surety bond callable upon demand issue by GSIS or a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Thirty percent (30%)

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

- C. Permanent Structures (15 years)
- D. Semi-Permanent Structures (5 years)
- E. Other Structures (2 years)


**PROJECT INFORMATION DOCUMENT**

**Project Title : Provision of Additional Lighting Fixtures and Convenience Outlet  
MMSU-CIT Techvoc Building (Garments Room)**

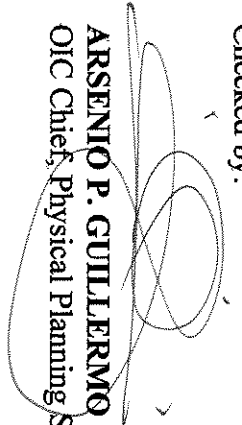
**Project Location : MMSU City of Laoag, Ilocos Norte**

**C. The Approved Budget for the Project to be bid is Two Hundred Seventy Seven Thousand  
Nine Hundred Fifty four and 18/100 Only (Php. 277,954.18)**

**Prepared by:**

  
**ROBINSON I. ABES**  
Registered Electrical Engineer

**Checked by:**

  
**ARSENIO P. GUILLERMO**  
OIC Chief, Physical Planning Section

**Noted by:**

  
**ROMEO B. DULA**  
Director



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

**Provision of Additional Lighting Fixtures and Convenience Outlet, MMSU CIT Techvoc Building**  
MMSU, City of Laoag, Ilocos Norte

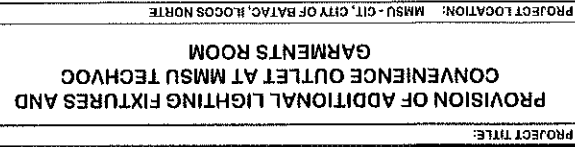
BILL OF QUANTITIES			
Item No.	Description	Quantity	Unit
1.	Electrical Works (Garments Room)	1.00	Is
	I. Pipes, Conduits, and Fittings		
	32mmØ PVC Pipe		
	32mmØ PVC Long Elbow		
	32mmØ PVC Adapter with Locknut		
	20mmØ PVC Pipe		
	20mmØ PVC Long Elbow		
	20mmØ PVC Adapter with Locknut		
	Threaded Rod 3/8 x 3m		
	II. Conductors, Lead Free		
	14.0mm sq. THHN		
	5.5mm sq. THHN		
	3.5 mm² THHN		
	III. Wiring Devices and Lighting Fixtures		
	Twist Lock Receptacle 3 Prong with Plug 16A, 250 VAC, Faceplate Color: Snow White		
	Switches, Wide Series, with Cover Plate 2 GANG, Single Throw Switch		
	Suspended Linear Light, 1200mm x 10mm, 240Volts, Including Hangers and Consumables		
	Castle Lantern Wall Lamp Outdoor Fixture, 1-E27, IP66, 220V		
	IV. Panel Boards		

	<b>Panel boards, Enclosures, Pull Boxes, and Wire Gutters (Rustproof)</b> <b>Specifications: Gauge #16 Galvanized Materials, Powder Coated Finish, Bolted Type, Complete Ground Lugs, with Tin Plated Bus bar. Circuit Breaker: All bolt-on type, of one toggle with highly visible trip indicator.</b>		
	( DP), WITH TIN PLATED COPPER BUS BAR IN NEMA 3R ENCLOSURE Main: Main:60AT, 230V, 2P, 60hz,10KAIC Branches: 8-20AT, 230V,2P,60hz,10KAIC		
	60AT, 230V, 2P,60Hz,10KAIC		
	100mm x 100mm x 2.4m Cable Tray with Cover 1.5mm		
	<b>VI. Boxes, to include fixing with locknuts, screws and other consumables all in accordance with electrical plans and specifications</b>		
	Utility Box		
	Junction Box		

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

Provision of Additional Lighting Fixtures and Convenience Outlet, MMSU CIT Techvoc Building  
MMSU, City of Batac, Ilocos Norte

SPECIFICATIONS	
Building Part / Material	Specifications
<b>I. ELECTRICAL WORKS (GARMENTS ROOM)</b>	(show sample of material for approval by the end-user)
Circuit Breakers and Enclosures	Circuit Breaker: All Bolt-On Type Circuit Breakers and UL listed (Use Existing Brand )
Pipes, Conduits, and Fittings	It must meet the standard thickness and diameter
Conductors, Lead Free	It must be UL listed brands, lead free, and at least 99% made from copper wire.(Use Existing Brand)
Lighting Fixtures	Suspended Linear Light, 1200mm x 100mm, 240Volts
Wiring Devices	Twist Lock Receptacle 3 Prong with Plug 16A, 250 VAC, Faceplate Color: Snow White
	Switches, Wide Series, with Cover Plate 2 GANG, Single Throw Switch( Use Existing Brand )



DATE SUBMITTED:

NAOHS BY

**SHEET CONTENT:**

**CONFIRMED:**

RECOM

DATE:

INDEX:

**APPROVED:**

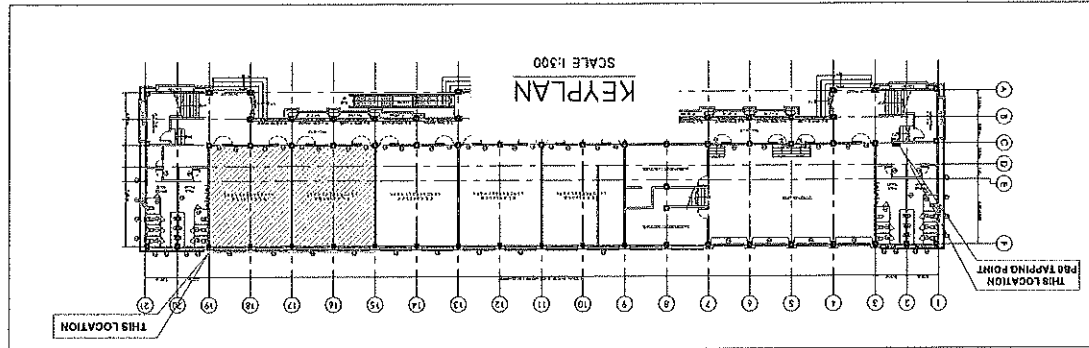
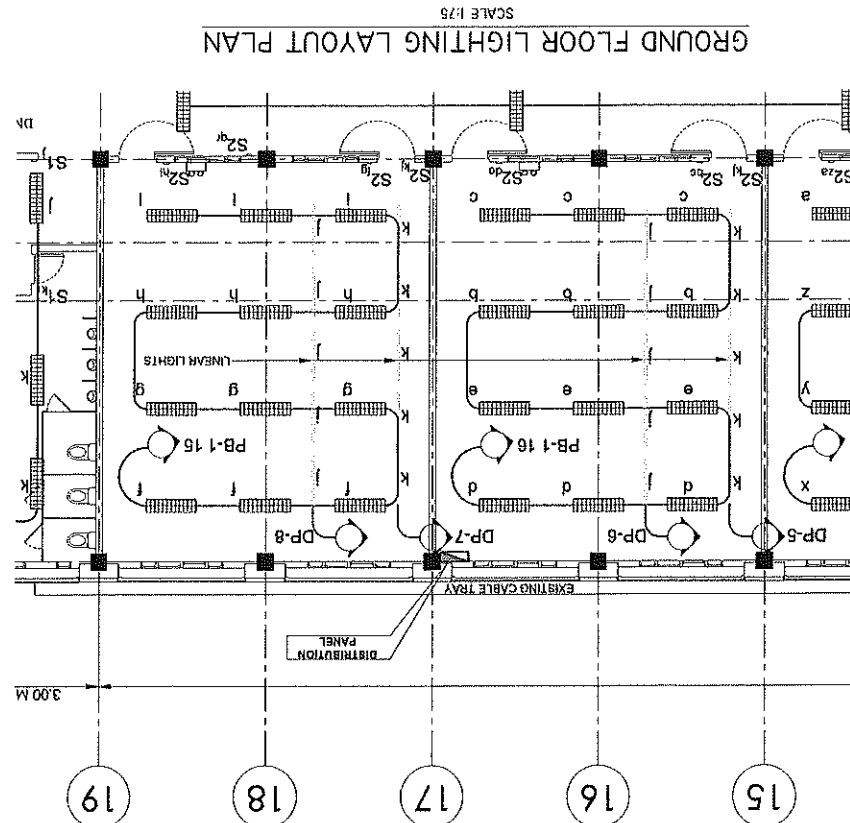
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UNIVERSITY PRESIDENT







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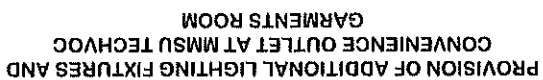
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LEGEND:

-  - CIRCULAR HOVERLINE
-  - MOST TYPE OUTLET MOUNTED TO CABLE TRAY
-  - 50mmx100mm CABLE TRAY
-  - LINEAR LIGHT
-  - PANEL BOARD
-  - CIRCUIT LINE



**PROJECT LOCATION:** MMSU - CIT, CITY OF BATAAC, ILOCOS NORTE

DATE SUBMITTED:

(KAYAN; M.; DEF-BSCH)

\*\*\*\*\*

**HAZARD BY**

**CECILIEN & PATIS**

10

~~ROMBER, BOLDOZAO~~

\_\_\_\_\_

SHIRLEY C. AGROFIS  
UNIVERSITY PRESIDENT

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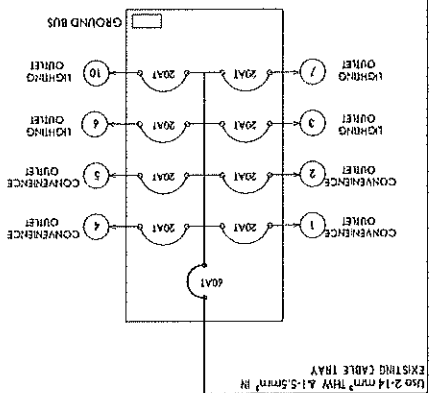
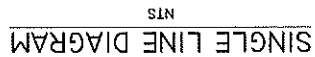
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**RECOMMENDED:**

**CONFIRMED:**

**SHEET CONTENT:**

**PROJECT TITLE:**



CIRCUIT		LOAD DESCRIPTION		VA LOAD	VOLTS	AMPERES A	CIRCUIT BREAKER		CONDUCTOR		TYPE	DIAMETER	TYPE
1	200VA CONVEYANCE OUTLET	1,300	6.22	230	6.22	2	60	AT	2 - 3.0mm <sup>2</sup> + 1 - 0.5mm <sup>2</sup>	THHN	20MM	PVC	
2	200VA CONVEYANCE OUTLET	1,200	5.23	230	5.23	2	60	20	2 - 3.0mm <sup>2</sup> + 1 - 0.5mm <sup>2</sup>	THHN	20MM	PVC	
3	200VA CONVEYANCE OUTLET	1,200	5.22	230	5.22	2	60	20	2 - 3.0mm <sup>2</sup> + 1 - 0.5mm <sup>2</sup>	THHN	20MM	PVC	
4	200VA CONVEYANCE OUTLET	1,200	5.22	230	5.22	2	60	20	2 - 3.0mm <sup>2</sup> + 1 - 0.5mm <sup>2</sup>	THHN	20MM	PVC	
5	5 SEETS LINEAR LIGHT	500	2.30	230	2.30	2	60	20	2 - 3.0mm <sup>2</sup> + 1 - 0.5mm <sup>2</sup>	THHN	20MM	PVC	
6	5 SEETS LINEAR LIGHT	500	2.17	230	2.17	2	60	20	2 - 3.0mm <sup>2</sup> + 1 - 0.5mm <sup>2</sup>	THHN	20MM	PVC	
7	5 SEETS LINEAR LIGHT	500	2.17	230	2.17	2	60	20	2 - 3.0mm <sup>2</sup> + 1 - 0.5mm <sup>2</sup>	THHN	20MM	PVC	
8	6 SEETS LINEAR LIGHT	500	2.30	230	2.30	2	60	20	2 - 3.0mm <sup>2</sup> + 1 - 0.5mm <sup>2</sup>	THHN	20MM	PVC	
TOTAL		6,800.00	29.57										

COMPUTATION:  
CONNECTED LOAD = 6800 VA  
DEMAND LOAD @ 80% = 5440.00 VA  
FL = 23.55 A  
USE 60A/2P 20VOLT MCB, 10MM<sup>2</sup>

FEEDER CONDUIT  
2 - 14.0mm<sup>2</sup> + 1 - 5.5mm<sup>2</sup> THN CU W/RE IN EXISTING GABLE TRAY  
NOTE: USE EXISTING RUND A TYPE TO PREVENT MISROUTING

SCHEDULE OF LOADS



PROVISION OF ADDITIONAL LIGHTING FIXTURES AND  
CONVENIENCE OUTLET AT MMSU TECHVOC  
GARMENTS ROOM

PROJECT LOCATION: MMSU - CIT. CITY OF BATON ROUGE, LOUISIANA

DATE SUBMITTED:

REVIEWED: ENGR. TRADON

DRAWN: M. DEPASQUE

AS SHOWN

SHEET CONTENT:

CONFORMED:

DESIGNED BY: PAUL

DATE:

RECOMMENDED BY: R. B. B. B. B.

DATE:

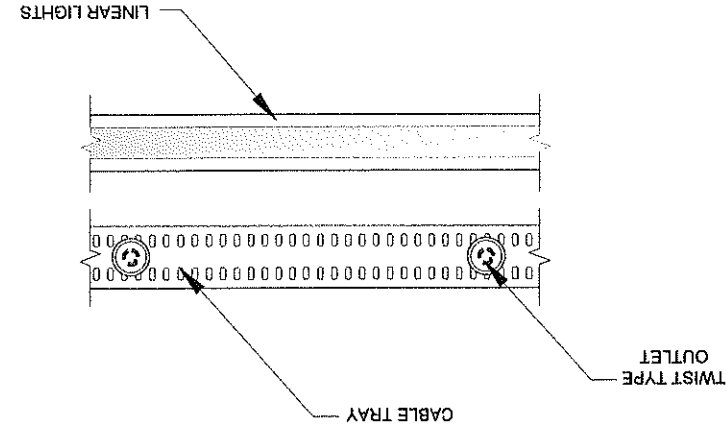
APPROVED BY: S. C. A. A. A.

DATE:

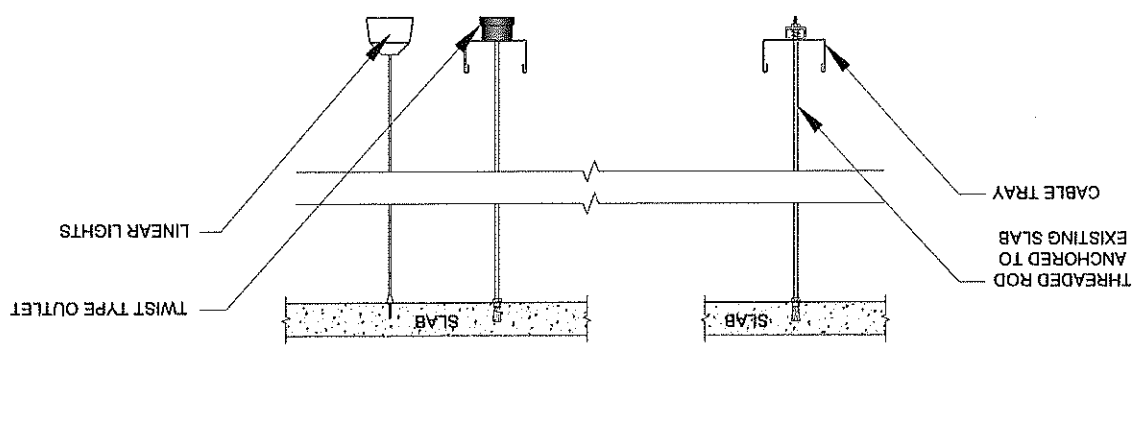
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SHEET NUMBER:

REFLECTED PLAN OF SUSPENDED LIGHTS  
AND CABLE TRAY



SECTION OF SUSPENDED LIGHTS AND CABLE  
TRAY WITH TWIST TYPE OUTLET



SECTION

