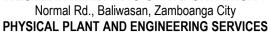


WESTERN MINDANAO STATE UNIVERSITY





CONTRACT ID: CONTRACT NAME: WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

LOCATION:

WMSU, LOT-1,NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.): 60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

Item No.: A Description: General Requirements

PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
A.2.1	PROJECT BILLBOARD	ea	1.00		
A.3	OCCUPATION SAFETY	l.s.	1.00		
A.4	MOBILIZATION AND DEMOBILIZATION	l.s.	1.00		
Total for this Page:			(In Words):		
			(In Figure):	₽	-

	Name of the Representative of the Bidder
_	Position
	Name of the Bidder



WESTERN MINDANAO STATE UNIVERSITY



WMSU-PPES-FR-004.00 Effective Date: 08-Sept.-2021

Normal Rd., Baliwasan, Zamboanga City PHYSICAL PLANT AND ENGINEERING SERVICES

WMSU - PPES - 2023 - 15 CONTRACT ID:

CONTRACT NAME: RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

WMSU, LOT-1, NORMAL ROAD BALIWASAN ZAMBOANGA CITY LOCATION:

PROJECT DURATION (C.D.): 60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

Item No.: B Description: Demolition/Earthworks

PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
B.3.1	MANUAL DEMOLITION/REMOVAL OF MISCELLANEOUS FINISHING & PAY ITEMS INSIDE STRUCTURE WITH SMALL TOOLS	l.s.	1.00		
	Total for this Page:		(In Words):		
			(In Figure):	₽	-

Name of the Representative of the Bidder						
Position						
Name of the Bidder						

THE PROPERTY OF THE PROPERTY O

Republic of the Philippines

WESTERN MINDANAO STATE UNIVERSITY



WMSU-PPES-FR-004.00 Effective Date: 08-Sept.-2021

Normal Rd., Baliwasan, Zamboanga City
PHYSICAL PLANT AND ENGINEERING SERVICES

CONTRACT ID: CONTRACT NAME: WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

LOCATION: WMSU, LOT-1, NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.): 60 CALENDAR DAYS

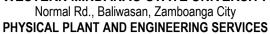
SUMMARY OF BILL OF QUANTITIES (BIDDER)

(All Part of Bill of Quantities)

PART NO.	DESCRIPTION		TOTAL AMOUNT
Α	General Requirements		
В	Demolition/Earthworks		
F	Forms & False Works		
G	Masonry and Plastering Works		
Н	Carpentry & Joinery Works		
1	Doors and Windows ,Glass & Glazing and Railings		
J	Tile & Countertop Works		
K	Metal Works		
М	Painting Works		
Р	Electrical Works		
R	Auxiliary Works		
	Total	of all Amounts:	
Tot	al of all Amounts in words:		
Pesos:			
And			
	Name:	In the capacity _of:	
	Signed:	Date:	
	Duly authorized to sign the Bid for and on behalf of:	_	



WESTERN MINDANAO STATE UNIVERSITY





WMSU-PPES-FR-004.00 Effective Date: 08-Sept.-2021

CONTRACT ID: CONTRACT NAME:

LOCATION:

WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

WMSU, LOT-1,NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.): 60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

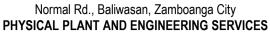
Item No.: F Description: Forms & False Works

PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)
F.3	BUILDING FALSE WORKS (SCAFFOLDING)	m²	38.00		
Total for this Page:			(In Words):		
			(In Figure):	₽	

Name of the Representative of the Bidder						
Position						
Name of the Bidder						



WESTERN MINDANAO STATE UNIVERSITY





CONTRACT ID: WMSU - PPES - 2023 - 15

CONTRACT NAME: RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

LOCATION: WMSU, LOT-1,NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.): 60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

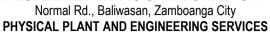
Item No.: G Description: Masonry & Plastering Works

PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)
G.1.1	100 CONCRETE HOLLOW BLOCK (CHB) NON- LOAD BEARING WALL	m²	31.00		
G.2.1	CEMENT PLASTER FINISH	m²	62.00		
Total fauthia Dava			(In Words):		
	Total for this Page: (In Figure):		₱	-	

Name of the Representative of the Bidder						
Position						
Name of the Ridder						



WESTERN MINDANAO STATE UNIVERSITY





CONTRACT ID: CONTRACT NAME:

LOCATION:

WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

WMSU, LOT-1,NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.): 60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

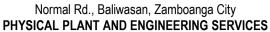
Item No.: H Description: Carpentry & Joinery Works

PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)
H.1.1	FIBER CEMENT CEILING ON METAL FRAMING SYSTEM	m²	1298.00		
H.3	CABINET	ea	2.00		
Total for this Page:			(In Words):		
			(In Figure):	₽	-

Name of the Representative of the Bidder					
	Position				
	Name of the Didder				
	Name of the Bidder				



WESTERN MINDANAO STATE UNIVERSITY





CONTRACT ID: CONTRACT NAME:

LOCATION:

WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

WMSU, LOT-1, NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.):

60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

Doors, Windows, Glass & Glazing, Description: Item No.: I and Railings

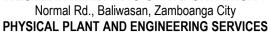
PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)
I.1.5	GLASS PANEL DOOR WITH ACCESSORIES	set	21.00		
I.2.1	ALUMINUM FRAMED GLASS WINDOW WITH ACCESSORIES (JAMB,SILL,ETC.)-SLIDING TYPE	set	49.00		
1.2.4	ALUMINUM FRAMED GLASS WINDOW WITH ACCESSORIES (JAMB,SILL,ETC.)-FIXED	set	7.00		
1.4.8	ALUMINUM FRAMED GLASS WINDOW WITH ACCESSORIES (JAMB,SILL,ETC.)-FIXED	l.s	1.00		
			(In Words):		
			(In Figure):	₽	-

Name of the Representative of the Bidder			
Position	_		
Name of the Bidder	Page 1 of 1		

THE PARTY OF THE P

Republic of the Philippines

WESTERN MINDANAO STATE UNIVERSITY





CONTRACT ID: CONTRACT NAME:

Name of the Bidder

LOCATION:

WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

WMSU, LOT-1,NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.): 60

60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

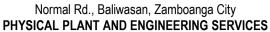
Item No.: J Description: Tile & Countertop Works

nem No.: 3 Description. The & Countertop works					intertop works
PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
J.1.2	GLAZED CERAMIC FLOOR TILES	set	1356.00		
Total for this Page:		(In Words):			
	Total for this raye.		(In Figure):	₽	-
Name of the Representative of the Bidder					
Position					

Page 1 of 1



WESTERN MINDANAO STATE UNIVERSITY





CONTRACT ID: CONTRACT NAME:

LOCATION:

Position

WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

WMSU, LOT-1,NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.):

60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

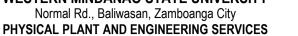
Item No.: **K** Description: **Metal Works**

item no.:	N .		DC30	inplion. Ivietal vvor	
PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
K.9	METAL CUBICLE TRACK	l.m	25.00		
Total for this Page:			(In Words):		
	Total for tills I age.		(In Figure):		
Name of the Representative of the Bidder					

Name of the Bidder

Page 1 of 1

WESTERN MINDANAO STATE UNIVERSITY





WMSU-PPES-FR-004.00 Effective Date: 08-Sept.-2021

CONTRACT ID: CONTRACT NAME:

LOCATION:

WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

WMSU, LOT-1,NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.): 60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

Item No.: M Description: Painting Works

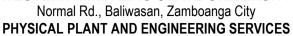
PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)
M.2	PAINT ON CONCRETE/MASONRY SURFACE	m²	2868.00		
			(In Words):		
			(In Figure):	₽	-

Name of the Representative of the Bidder	
Position	
Name of the Bidder	

Page 1 of 1



WESTERN MINDANAO STATE UNIVERSITY





WMSU-PPES-FR-004.00 Effective Date: 08-Sept.-2021

CONTRACT ID: CONTRACT NAME:

LOCATION:

WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

WMSU, LOT-1, NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION 60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

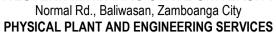
Item No.: P Description: Electrical Works

PAY ITEM NO.	DESCRIPTION	UNIT	QTY.	UNIT PRICE	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)
P.1	CONDUITS,BOXES ,& FITTINGS	m²	1298.00		
P.2	WIRES & WIRING DEVICES	m²	1298.00		
P.3	LIGHTING/POWER FIXTURES (LIGHTINGS,SWITCHES&OUTLETS)	ea	130.00		
P.4	PANEL BOARD INCLUDING CIRCUIT BREAKER	set	3.00		
Total for this Page:			(In Words):		
			(In Figure):	₽	-

Name of the Representative of the Bidder			
Position			
Name of the Bidder			



WESTERN MINDANAO STATE UNIVERSITY





WMSU-PPES-FR-004.00 Effective Date: 08-Sept.-2021

CONTRACT ID: CONTRACT NAME:

WMSU - PPES - 2023 - 15

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES

LOCATION:

WMSU, LOT-1, NORMAL ROAD BALIWASAN ZAMBOANGA CITY

PROJECT DURATION (C.D.): 60 CALENDAR DAYS

BILL OF QUANTITIES (BIDDER)

Item R Description: **Auxiliary Works PAY UNIT PRICE DESCRIPTION** UNIT **AMOUNT** ITEM QTY. NO. (1) (2) (3) (4) (5) (6) R.1 FIRE ALARM SYSTEM 20.00 unit R.3 CLOSE CIRCUIT TELEVISION (CCTV) SYSTEM 13.00 unit (In Words): **Total for this Page:**

Name of the Representative of the Bidder
D 111
Position
Name of the Bidder

Page 1 of 1

(In Figure):





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PROJECT TITLE: RENOVATION OF NURSING SIMULATION

LABORATORY AND SUPPORT FACILITIES

PROJECT WMSU-MAIN CAMPUS, LOT-A NORMAL LOCATION: ROAD, BALIWASAN, ZAMBOANGA CITY

SUBJECT: SUMMARY OF WORKS, GENERAL

REQUIREMENTS AND TECHNICAL

SPECIFICATIONS

I. SUMMARY OF WORKS

A. INTRODUCTION

The Works in this Contract is for the RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES to be located at WMSU-MAIN CAMPUS, LOT-A NORMAL ROAD, BALIWASAN, ZAMBOANGA CITY. The WMSU-Physical Plant and Engineering Services shall perform the construction management services including the management of project deliverables and all issues arising from this Contract Document.

B. NAME OF PROJECT

RENOVATION OF NURSING SIMULATION LABORATORY AND SUPPORT FACILITIES to be located at WMSU-MAIN CAMPUS, LOT-A NORMAL ROAD, BALIWASAN, ZAMBOANGA CITY

C. START AND COMPLETION OF DATES

The Contractor shall be held responsible for meeting intermediate dates as contained within the attached documents.

Such dates are binding, and damages will apply to intermediate as well as end dates:

Start on Site : Based on date stipulated on Notice to Proceed

Punch listing :





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

All Works Complete

D. WORK AREAS

All works shall be done within the confine of the lot boundaries. Provide temporary work enclosures on all sides affected by building repair works. Provide appropriate announcement boards and signage's, to include all construction permits, clearances,

and duration of works

E. SCOPE OF WORK - GENERAL

The Scope of Work includes the furnishing of all labors, materials, equipment, and tools including supervision necessary to complete all the Works stated herein. All Works are to be complete in accordance with the Contract Documents and as directed by the WMSU-Physical Plant and Engineering Services to result in a

completely functional facility.

The Scope of Work shall consist of the following in accordance with the Drawings and Specifications, including Supplemental Agreement but is not limited to the

following;

E.1 GENERAL REQUIREMENTS

a. Project Billboard

b. Occupational Safety and Health Program

c. Mobilization and Demobilization

E.2 DEMOLITION / EARTH WORKS

a. Manual Demolition / Removal of Miscellaneous Finishing and Pay Items

inside the structure with small tools





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

E.3 CONCRETE WORKS

a. Reinforced Concrete Lintel Beams

E.4 FORMS AND FALSEWORKS

a. Building Formworks

E.5 MASONRY AND PLASTERING WORKS

- a. 100 mm Concrete Hollow Block (CHB) Non Bearing Wall
- b. Cement Plater Finish

E.6 CARPENTRY AND JOINERY WORKS

- Installation of Fiber Cement Ceiling on Metal Framing System as Indicated in the Drawings
- b. Fabrication of Cabinets

E.7 DOORS, WINDOWS, GLASS AND GLAZING, AND ACRYLIC SIGNAGE

- a. Fabrication, Supply and Installation of All Doors
- b. Fabrication, Supply and Installation of All Windows
- c. Supply and Installation of Acrylic Signage

E.8 TILE AND COUNTERTOP WORKS

a. Installation of Floor Tiles including Tile Adhesive
 as Indicated in the Drawings s

E.9 PAINTING WORKS

- a. Paint of Masonry and Concrete Surfaces
- b. Paint on Wood Surface

E.10 ELECTRICAL WORKS

a. Provision and Installation of Conduits Boxes and Fittings





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

- b. Provision and Installation of Wires and Wiring Devices
- c. Provision and Installation of Lighting Fixtures/Power Fixtures
- d. Provision and Installation of Panel Boards including circuit breakers

E.11 AUXILIARY WORKS

- a. Provision and Installation of Close Circuit Television (CCTV) System
- b. Provision and Installation of Fire Detection and Alarm Systems (FDAS)

E.12 AS-BUILT (RECORD) DRAWINGS AND RELATED DOCUMENTS E.13 PERMITS AND CERTIFICATES

II. GENERAL REQUIREMENTS

The works shall be carried out according to the Technical Specifications and shall govern the methods of construction and the kind of materials to be used for the Renovation of the Nursing Simulation Laboratory with Facilities as shown in the plans and detail drawings.

The plans, detailed drawings and this Specification, shall be considered as complementing to each other, so that what is mentioned or shown in one, although not mentioned or shown in the other, shall be considered as appearing on both. In case of discrepancy, between the Technical Specifications and Approved Detailed Drawings, the Technical Specifications shall prevail.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

All works shall be carried out in coordination with carpentry, masonry, electrical, auxiliary, and other building works. Materials not conforming to Specifications shall be rejected

A. GENERAL CONDITIONS

Prior to execution of works, the Contractor shall verify the existing condition of the structural and project boundaries. Total demolition of existing portion of the structure within the proposed project site is required.

B. CONTRACTOR'S OFFICE & ACCOMODATION

Provision of Contractor's Temporary Facility is required. The structure of the building shall be adequate, rainproof, spacious, airy and hygienic with proper lightings and toilet facilities. The area shall be kept neat and clean. Any garbage or sewage shall be disposed at a location and in a manner approved by WMSU-Physical Plant and Engineering Services Office.

Space allocation for storage of various materials such as cement, reinforcement steel and petroleum products, etc. shall be clearly separated to avoid contamination. Petroleum products shall be stored and handled in a way that avoids contamination of ground water. Workshops shall be installed with oil and grease traps for the same purpose.

The Contractor shall provide, at its own expense, adequate temporary accommodation and toilet facilities for its own workmen and keep the same in good conditions. The Contractor shall construct suitable soak pits along with room of pit-type latrines. Sufficient water must be provided and maintained in the toilets. Proper methods of sanitation and hygiene should be employed during the whole project duration. The above-mentioned temporary structures shall be removed on the





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

completion of the works at Contactor's own cost. All materials and labor cost shall be provided by the Contractor.

The Contractor shall provide at his own expense calibrated meters for each water and electricity connection and pay billings thereof.

C. SAFETY MEASURES

The Contractor shall be responsible for safety of all workmen and other persons entering the Works and shall be all at his own expense take all measures necessary to ensure their safety. Such measures shall be subject to the approval of WMSU-Physical Plant and Engineering Services shall include but not limited to:

- 1. Assign Qualified Safety Officer.
- 2. Appropriate personal protective equipment (helmet, dust mask, safety shoes, vest, and hand gloves) must be provided and worn by workmen.
- 3. First Aid Cabinet must be fully equipped and readily available for treatment of sickness and injuries;
- 4. Provide safety and emergency regulations for fire and electric shock prevention;
- 5. Safe control of flowing water; and
- 6. Conduct regular safety meeting.

D. NOTICE BOARD

The Contractor shall erect notice board (4' x 8') at the site giving details of the Contract in the format provided by DPWH/COA. It shall be removed upon receipt of Certificate of Completion.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

E. ENVIRONMENTAL PROTECTION WORKS

The environment means surrounding area including human and natural resources to be affected by execution and after completion of works. The Contractor shall take all precautions for safeguarding the environment during the course of construction of the works. He shall abide by all prevalent laws, rules and regulations governing pollution and environmental protection. The Contractor shall prohibit employees from cutting trees and the former shall be the responsible for the action of the latter.

Waste materials must be collected, stored, and transported to approved dump / disposal area.

The WMSU-Physical Plant and Engineering Services shall have the power to disallow the method of construction and / or the use of any borrow / quarry area, if the stability and safety of the works or any adjacent structure will be compromised, or there is undue interference with the natural or artificial drainage, or the method or use of the area will promote undue erosion.

F. MATERIALS AND WORKMANSHIP

All materials and equipment used in the Works shall be new and best in quality, design and performance. All materials

used shall be of the quality specified and where not specified shall be in accordance with the relevant Standards Acceptable by the

University Architect or the Physical Plant and Engineering Services Director

All materials and work necessary for the efficient functioning of the installation shall be provided even if not explicitly

mentioned in the Contract Documents





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

All works shall be carried out to the best engineering practice by fully competent tradesmen.

G. DELAYS

In the event the Contractor falls behind the Project Schedule, then he may be required to accelerate his work. In such cases, the Contractor shall immediately apply appropriate extra resources at his own expense until such time as the schedule slippage has been recovered.

H. PROJECT LOGBOOK

The Contractor shall keep a record of the daily project activity report wherein full details of the work carried out during each day shall be available for inspection by the WMSU-Physical Plant and Engineering Services anytime during normal office hours. It shall include: (The form is available @ PPES)

- 1. Project Name;
- 2. Contractor's Name;
- 3. Contractor's Representative;
- 4. Weather Conditions, rainfall, and water level (indicate "NO WORK "if unworkable days)
- 5. Description, quality, and location of work performed;
- 6. Shift and working hours;
- 7. Number and category of workers working at the site;
- 8. Test carried out and results;
- Inspection carried out by PPES;
- 10. Problems or abnormal occurrence;



11.

REPUBLIC OF THE PHILIPPINES WESTERN MINDANAO STATE UNIVERSITY NORMAL ROAD, BALIWASAN, ZAMBOANGA CITY

PHYSICAL PLANT AND ENGINEERING SERVICES



WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

DEFECTIVE / Non-Compliant Work & Corrective Action.

- 12. Site Instructions;
- 13. Visitors; and
- 14. Accidents (if any)

I. INSPECTION PRIOR TO EXECUTION

The Contractor shall submit an inspection request form 24 hrs in advance prior to inspection date of items that needs to

be inspected before any execution be made. To with;

- 1. Concreting Works
- 2. False Ceiling Works
- a.) Contractor's Representative
- b.) Closing of Ceiling
- Tiling Works
- . a.) Layout
- 4. Leak Test
- a.) Water Line
- b.) Sanitary Line
- c.) Water Proofing

Copy of the from is available @ PPES that a contractor can reproduced.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

III. TECHNICAL SPECIFICATIONS

A. GENERAL REQUIREMENTS

A-I. Project Billboard

 The Contractor shall erect a (4' x 8') notice board at the project site, giving details of the Contract in the format provided by the Commission on Audit (COA). The said project billboard will be removed only upon receipt of Certificate of Completion.

A-II. Occupational Safety and Health Program

- The Contractor shall be responsible for safety of all workmen and other
 persons entering the project site and shall be all at his own expense to take all
 necessary measures to ensure their safety.
- 2. All Safety Measures to be taken shall be subjected to the approval of the WMSU-Physical Plant and Engineering Services Office Director and shall include but not limited to the following:
 - a. Site Safety Officer.
 - Appropriate Personal Protective Equipment such as hard hats, dusk mask, safety shoes, reflectorized vest, hand gloves and the like shall be provided and worn by all workmen on site;
 - c. First Aid Cabinet must be fully equipped and readily available for treatment of sickness and/or injuries;
 - d. Provide Safety emergency regulations for fire and electric shock preventions;





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

- e. Safe control of flowing water, and
- f. Conduct regular safety meeting.

A-III. Mobilization and Demobilization

- The work shall consist of the mobilization and demobilization of the contractor's forces and equipment necessary for performing the work required under the contract.
- 2. Mobilization shall include all activities and associated costs for transportation of Contractor's personnel, equipment, and operating supplies to the site; building; and other necessary general facilities for the contractor's operation at the site.
- Demobilization shall include all activities and costs for the transportation of personnel, equipment and supplies not required or included in the contract from the site; including the disassembly, removal and site cleanup, of offices, buildings and other facilities assembled on the site specifically for this project.
- 4. This work includes mobilization and demobilization required at the time of award.
- 5. If additional mobilization and demobilization activities and costs are required during the performance of the contract as result of changed, deleted or added items of work for which the Contractor is entitled to an adjustment in contract price, compensation for such cost will be included in the price adjustment for the item or items of work changed or added.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

B. DEMOLITION / EARTH WORKS

B.I Manual Demolition / Removal of Miscellaneous Finishing and Pay Items inside the structure with small tools

- Works in this item herein include the removal of existing Tiles, Red Cement Flooring, Dry walls, Doors and Windows, All Ceiling Boards, Air Condition Units, Electrical fixtures and Roughing-Ins, including handling, salvaging, piling, and disposing off the cleared materials with all leads and lifts.
- 2. Materials obtained from the scope of demolition and removal of items inside the structure shall be properly turned over WMSU-Property Management Office (PMO) for assessment. Demolished materials assessed by PMO for discarding shall be disposed of by the Contractor.
- 3. Burning of demolished or any unwanted materials shall not be allowed.

C. .FORMS AND FALSEWORKS

C-I. Building Formworks

- All forms shall be designed by the Contractor for a safe construction activity and installed to dimensions shown on the Drawings.
- 2. All materials for formworks shall be durable and free from warps, dilapidation.
- All formworks shall serve as support and barricade during the curing process of the concrete on masonry wall.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

4. All Formworks shall be carefully removed without shock or disturbance to the concretet and masonry work.

D. MASONRY AND PLASTERING WORKS

D-I. 100 mm Concrete Hollow Block (CHB) Non Bearing Wall

- 1. All new CHB reinforcing bars must be properly anchored/attached to the reinforcing bars of the existing CHB walls.
 - Adequate trimmer bars of size & length shall be provided within the new openings as indicated in drawings.
- 2. Deliver to site CHB units undamaged and free from breakage to edges or corners.
- 3. Concrete hollow block units shall be nominal 100 x 200 x 400 or 150 x 200 x 400 (as indicated in plan) stretcher blocks, all cells grouted with steel reinforcements shown on Drawings, (350min) psi when tested to applicable ASTM Standards and Industry norms.
- 4. Erect CHB units to plumb and true to alignment within acceptable tolerance.
- Mix proportion for grouting and setting bed shall be 1: 4 (Cement: sand), maximum proportion. The Contractor shall make necessary adjustments to suit project requirements without extra cost to the Company.
- 6. Damaged unit masonry shall not be used
- 7. The Contractor shall provide and maintain extra units or numbers at site without extra cost to WMSU-Physical Plant and Engineering Services Office.
- 8. All masonry units and associated materials shall satisfy test requirements of ASTM C190, C140), non- load bearing test.
- 9. Install all CHB based on anchorage details as shown in drawings.



PHYSICAL PLANT AND ENGINEERING SERVICES



WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

D-II. Cement Plaster Finish

- 1. All surfaces to be rendered or cement plastered shall be clean from any loose material or contamination to provide strong bond between plaster and the surface.
- Mix proportion shall not be less than 1 part of cement to 4 parts of screened sand Necessary adjustments shall be made to provide a strong and consistent mix, free from cracking due to rapid hydration of plaster mix.
- 3. Tampering of previously mix concrete will not be permitted.
- 4. All surfaces to receive paint finish shall be smooth whilst surfaces to receive tiles shall be rough to provide better adhesion or bond
- 5. Water shall be potable and clean.

REVIEWED AND CHECKED BY:

ENGR. EDGAR A. DEMAYO, CE University Engineer

E. CARPENTRY AND JOINERY WORKS

E-I. Installation of Fiber Cement Ceiling on Metal Framing System as Indicated in the Drawings

- Works herein shall include supply and installation of fiber cement ceiling board on metal furring ceiling joist. All materials to be used herein shall be free of cracks, dents, and other imperfections.
- 2. 3.5 mm thick x 4' x 8' fiber cement board shall be used for interior ceiling in the entire second floor and third floor.
- 3. Interior ceiling joints shall be sealed without forming any bubble and joints shall be finished flush to make the ceiling in one piece.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

- Fiber Cement Boards shall be riveted by 1/8" Ø x ½" blind rivet to 0.40 mm thick x 3/4" x 2" metal furring, spaced at 0.60m both ways.
- 5. Metal furring ceiling joist shall have adequate hangers and carrying metal runners to stay in perfect line and level.
- Prior to enclosure of ceiling, all dimensions, alignment of metal frames, material specifications, electrical and auxiliary rough ins, carrying metal runners shall be checked to comply with standard installation requirements.

E-II. Fabrication of Cabinets

- 1. This work item includes the provision and materials for the fabrication and installation of cabinets as specified in the drawings.
- The contractor shall furnish all materials, tools, equipment and labor required for the completion and satisfactory performance of work in strict compliance with this specifications and approved plans/drawings.
- 3. All materials to be used under this work shall be of approved quality. Materials should clean and dry and free from rust, dents, cracks and other imperfections thereby impairing its strength, durability and appearance.
- 4. All exposed woodwork shall be smoothly dressed and well sandpapered. All joints and connections shall be glued and properly nailed or screwed.
- 5. All works under this item shall be done with complete accessories as specified in the drawings.

F. DOORS, WINDOWS, GLASS AND GLAZING, AND ACRYLIC SIGNAGE

F-I. Fabrication, Supply and Installation of All Doors

1. This work item includes fabrication or supply and delivery of all Doors



PHYSICAL PLANT AND ENGINEERING SERVICES

of doors as shown on Drawings and herein specified.



WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

- 2. Furnish all materials and labor, use of tools for the fabrication, delivery and installation
- 3. Door frames, jambs, and panels shall be of standard size and thickness, unless otherwise specified in the plans/drawings.
- 4. All Solid Wooden Doors shall be kiln dried and treated. Lever type doors, Panel doors ready for installation with the provisions for locksets, door keys, and hinge completely operational.
- The frames shall be plumb-set and squared in the frames working of walls or building partitions. Locks of doors shall be filled at the lock block, 1000 mm above the finished floor level.
- 6. Locks shall be installed in conformity with the templates and instructions supplied with the locksets.
- 7. The Contractor shall submit sample cross sections of door frames to be installed to the WMSU-Physical Plant Office (PPO) or to the University Architect (OUA) for approval. Fabricated doors and shutter shall be finished square, smoothly sanded, and free from damage or dent.
- 8. Deliver all doors and windows free from any damage. Store materials to avoid contamination form soil or unwanted materials.

F-II. Fabrication, Supply and Installation of All Windows

- 1. This work item includes fabrication or supply and delivery of all Windows.
- 2. Furnish all materials and labor, use of tools for the fabrication, delivery and installation of doors and windows as shown on Drawings and herein specified.
- 3. Windows and window frames shall conform to the size, designs and kinds of materials in the details of windows as indicated in the plans. Aluminum (analok) window frames, jambs, and panels shall be of standard size and thickness.
- 4. All windows shall use 3/16" thick clear glass in 2"x6" Aluminum (Analok) window jamb and frame unless otherwise specified in the drawings.
- 5. Deliver all windows free from any damage. Store materials to avoid contamination form soil or unwanted materials.



PHYSICAL PLANT AND ENGINEERING SERVICES



WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

F-III Supply and Installation of Acrylic Signage

- 1. The contractor shall supply and install acrylic signage as specified in the plans/drawings.
- 2. Before the fabrication and installation of the signage, the contractor shall submit a printed copy of their samples to be approved by the WMSU-Physical Plant and Engineering Services Director.
- 3. The signage must be 200mm in height and 7mm thick with various lengths and number of sets as specified in the plans/drawings.
- 4. All letterings in the signage shall be 150mm in height, Arial printed (red)
- 5. All signage shall be anchored adequately in concrete after installation.
- 6. Deliver and install all signage free from any damage.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

G. TILE AND COUNTERTOP WORKS

G-I. Installation of Floor Tiles including Tile Adhesive

- 1. Works herein shall include supply and placing of unglazed ceramic floor tiles as indicated in the plans and drawings.
- 2. The surface where the tile is laid must be level, true to elevation, dry and free from oil and other sediments.
- 3. Allow at least 7 days curing of the scratch coat and setting bed.
- 4. All areas and rooms including stairs, shall be finished with 6mm thick x 600mm x 600m Ceramic glossy white floor tiles.
- The Tile grout color and aluminum nosing with rubber for the stair nosing shall be subject for the WMSU-Physical Plant and Engineering Services Director's approval.
- 6. The Contractor shall submit sample of tiles to the WMSU-Physical Plant and Engineering Services for approval of type, quality, and color.
- 7. All materials to be used herein shall be brand new and passing Philippine Standard material quality control requirements. It shall have cast, stamp, or indelible marks on it like manufacturer's trademarks or name, weight, type, or classes of products when so required.
- Before the tiles are placed, the surfaced shall be brushed cleaned and wetted.
 The surface shall be tested for levelness or conformity of slope by flooding it with water.
- 9. Tiles shall be installed by applying heavy duty adhesive to backs of tile and firmly pressing tile into the floating coat to true plane and position.
- 10. Joints shall be maintained uniformly wide by aligning spacer lugs on tile edges. All joint lines shall be kept straight and true to profiles, plumbed and internal corners rounded using the appropriate trims.
- 11. Flooring shall be sloped to floor drain as shown in the plans.



PHYSICAL PLANT AND ENGINEERING SERVICES



WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

12. All tile work finishing shall be adequately protected from damage during the progress of construction. Chipped, cracked, or broken tile shall not be used, and all defective work shall be replaced and repaired to the approval of the

WMSUPhysical Plant and Engineering Services at Contractor's expense.

H. METAL WORKS

H-I. Installation of Fiber Cement Ceiling on Metal Framing System as Indicated in the Drawings

- Works herein shall include supply and installation of metal cubicle track. All
 materials to be used herein shall be free of cracks, dents, and other
 imperfections.
- 2. 2" thick x 2 ½" aluminum ultra cube for cubicle track shall be used for interior cubicle partition in some areas on the second floor nursing art laboratory room.
- 3. Metal cubicle track shall be supported by a 10mm plain round bar and shall be screwed by a 1 ½ " metal flat head screw.

I. PAINTING WORKS

- Painting works shall be as indicated on Drawings and described in the Bill of Quantities. Includes substrate preparation, application of neutralizers, putty, sanding, cleaning, protection, etc. to provide a strong or durable paint coating, following manufacturer's written instructions and acceptable trade practices.
- 2. Provide materials that are suitable for the job and or type of construction.
- 3. Paint materials shall be of the brand specified herein or approved equal by the University Architect.



PHYSICAL PLANT AND ENGINEERING SERVICES



WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

- 4. Examine substrate and conditions under which painting will be performed. Proceed with the work only when conditions are satisfactory.
- 5. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions otherwise detrimental to formation of a durable paint film.
- Clean surfaces to be painted before applying paint or surface treatments.
 Remove oil and grease prior to mechanical cleaning. Program cleaning and painting so that contaminants from cleaning process will not fall into wet, newly-painted surfaces.
- Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions and as herein specified, for each particular substrate condition.

I.I. Paint of Masonry and Concrete Surfaces

- Perimeter Concrete Facade
 - a. Concrete, concrete masonry, rendered smooth
 - b. One (1) coat of Acrylic Concrete Primer and Sealer by roller, let dry for 2 hours.
 - c. Putty surface imperfections, hairline cracks with Concrete Putty using putty knife.
 - d. One (1) coat Acrylic Concrete Primer and Sealer by roller let dry for 2 hours
 - e. Finish with two coats Latex Semi-Gloss by roller allow two hours' interval between coats.

2. Interior Walls

- a. Concrete, concrete masonry, rendered smooth
- b. One (1) coat of Acrylic Concrete Primer and Sealer by roller, let dry for 2 hours.
- c. Putty surface imperfections, hairline cracks with Concrete Putty using putty knife.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

- d. One (1) coat Acrylic Concrete Primer and Sealer by roller let dry for 2 hours
- e. Finish with two coats latex semi-gloss paint by roller allow two hours' interval between coats.
- All cement board ceiling surfaces shall be painted as follows;
 - a. Apply one coat of Acrylic Concrete Primer Sealer by brush, roller or spray. Let it dry for 2 hours.
 - b. Repair surface imperfections with Concrete Putty using putty knife let it dry for 2 hours and sand
 - c. Apply one coat of Acrylic Concrete Primer Sealer by brush, roller or spray. Let it dry for 2 hours.
 - d. Finish with two coats Premium Washable Paints by brush, roller or spray allow 2 hours between coats
 - e. Reduction / Cleaning Water

REVIEWED AND CHECKED BY:

AR. JOSEPH ANDREW L. SAHIAL
Director, Physical Plant and Engineering Services

J. ELECTRICAL WORKS

- All electrical works herein shall be done in accordance with the latest edition
 of the Philippine Electrical Code (PEC), rules and regulations of the National
 Building Code and shall comply with the requirements of the Local City
 Ordinances and issued Approved Plans.
- 2. All materials and fixtures to be used herein shall be brand new and passing Philippine Standard material quality control requirements.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

- 3. It shall have cast, stamp or indelible marks on it like manufacturer's trademarks or name, weight, type or classes of products when so required.
- 4. All electrical wirings shall be done using polyvinyl chloride conduits (PVC). Minimum size for all conduit shall be 20 mm Ø electrical trade size.
- 5. All electrical wires shall be copper and thermoplastic insulated type THHN except for the main feeder conductors which is THN. The minimum size of wires for power lines shall be 3.5mm and 2.0mm for lighting with color coding as follows:

- 6. All lighting fixtures shall be 1 X 18W, T8 LED DAYLIGHT LAMP W/ SLOTTED REFLECTIVE DIFFUSER and 2 X 18W, T8 LED DAYLIGHT LAMP W/ SLOTTED REFLECTIVE DIFFUSE as specified in the plans/drawings.
- 7. All convenience outlet shall be three (3) prong type, to address proper grounding. The mounting height above finished floor line of all wiring devices shall be as follows:

- 8. There shall be adequate and effective equipment grounding. Ground resistance should be no more than 5 ohms. If ground resistance is more than 5 ohms, additional ground rod shall be installed. Grounding electrode conductor shall not be smaller than 80 mm² copper (Cu) or 185 mm² aluminum (Al).
- 9. All electrical works herein shall be coordinated with other building works.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

10. All electrical works herein shall be done under the direct supervision of a duly registered Electrical Engineer (PEE or PE).

No Revisions in the design shall be done without the prior knowledge and approval of the WMSU-Physical Plant and

Engineering Services Office, any revisions done without approval shall cause responsibility of the designer to cease as a

whole.

REVIEWED AND CHECKED BY:

ENGR. RICARDO B. GONZALES

University Electrical Engineer

K. AUXILIARY WORKS

K-I. Provision and Installation of Close Circuit Television (CCTV) System

- 1. The purpose of the schematic diagram is to provide a general concept and principle of the proposed CCTV surveillance system.
- 2. All materials and fixtures to be used herein shall be brand new and passing Philippine Standard material quality control requirements.
- 3. The contractor shall provide the materials and installation of CCTV surveillance system to include all wiring and accessories, devices, equipment





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

software and video analytics as may deem necessary for a successful operation of the system.

4. Quantity of CAT6 conduit shall be:

CONDUIT SIZE	20MM ØC	25MM ØC	30ММ ØС
#24 AWG CAT 6	4	6	9

- CCTV Camera exposed in weather condition must be in a weatherproof enclosure
- 6. All CCTV cameras for indoor are fixed dome type and for outdoor fixed camera
- 7. PB2 and PB4 are 4u-wall mounted server rack/data cabinet attached near ceiling.

K-II. Provision and Installation of Fire Detection and Alarm Systems (FDAS)

- All fire detection and alarm system shall be done in accordance with the revised Fire Code of the Philippines, National Building Code and shall comply with the requirements of the Local City Ordinances and issued Approved Plans.
- 2. All materials and fixtures to be used herein shall be brand new and passing Philippine Standard material quality control requirements.
- The minimum size of metal conduit for FDAS shall be 20mmØ IMC or RSC.
- 4. Activator for Smoke Detectors, and manual pull stations shall initiate the following for the FIRE ALARM CONTROL PANEL (FACP):





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

Activation of both audio and visual alarms

LCD display shall indicate all applicable information associated with the fire alarm condition including the zone.

Document all system activities and changes.

- 5. Provide additional power supply for notification circuit if the fire alarm notification circuit is insufficient
- 6. Panel must be addressable to FACP.

No Revisions in the design shall be done without the prior knowledge and approval of the WMSU-Physical Plant and

Engineering Services Office, any revisions done without approval shall cause responsibility of the designer to cease as a

whole.

REVIEWED AND CHECKED BY:

ENGR. KEVIN MARC A. BEJERANO

Electronics and Communications Engineer

L. AS-BUILT (RECORD) DRAWINGS AND RELATED DOCUMENTS

 The Contractor shall maintain a neat and accurately marked set of As-Built Drawings which shall be provided to WMSU-Physical Plant and Engineering Services Office for review and approval prior to final acceptance of the Work.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

- 2. The As-Built Drawings shall represent the Work as constructed and document changes to the Work shown on the Project Plans, and shall show the actual asconstructed conditions of installed or modified systems, equipment, and material.
- 3. The As-Built (Record) Drawings shall show, by field measured dimensions, the exact locations of all underground work, including all piping and components, and the final elevations and locations of all improvements constructed, modified or adjusted.
- 4. Record drawings shall be available for inspection by the agency at all times and shall be updated at least weekly with all Field or Site Instructions and other written directives, Contract Change Orders, and Contract adjustments shown thereon and initialed by the Agency. Progress payments or portions thereof may be withheld if As-Built Drawings are not kept up to date.
- 5. Unless otherwise specified in the Special Provisions, the Contractor shall submit two (2) sets of As-Built Drawings to WMSUPhysical Plant and Engineering Services Office at the final inspection. These As-Built Drawings shall include certification by the Contractor that the As-Built Drawings are a true representation of the Work as actually constructed.
- 6. The Work will not be formally accepted until the As-Built Drawings are provided to and approved by the to the WMSU-Physical Plant and Engineering Services Office. Final payment or a portion thereof may be withheld if final As-Built Drawings are not provided.

M. PERMITS AND CERTIFICATES

1. All works covered by this specification shall be complete and functional in all respects and shall comply with the rules, regulations and requirements of local authorities having jurisdiction over the installations and all other relevant statutory requirements.





WMSU - PPO -FR _ 007A.00 Effective Date: 08 - Sep - 2021

PHYSICAL PLANT AND ENGINEERING SERVICES

- 2. The Contractor shall apply from all local authority necessary permits and certificates. These shall include but are not limited to building permit, occupancy permits and associated construction permits. The timing for the applications shall be such that, to the opinion of the WMSU-Physical Plant and Engineering Services Office, the overall work progress will not be affected.
- 3. Upon completion of the Works, the Contractor shall carry out all necessary tests on the various systems of the installations as required by agency or the local authorities, and shall apply for and obtain all certificates and approval from the relevant authorities for the work done and shall submit same to WMSU-Physical Plant and Engineering Services Office.
- 4. The Contractor shall arrange for local authorities' inspections and obtain the required approval and permits or certificates from the local authority at a time as directed by WMSU-Physical Plant and Engineering Services Office y.
- 5. The Contractor is to note that the contracted works will not be considered as practically complete prior to the receipt of the approval of certificates.

APPROVED BY:

AR. JOSEPH ANDREW L. SAHIAL

Director, Physical Plant and Engineering Services