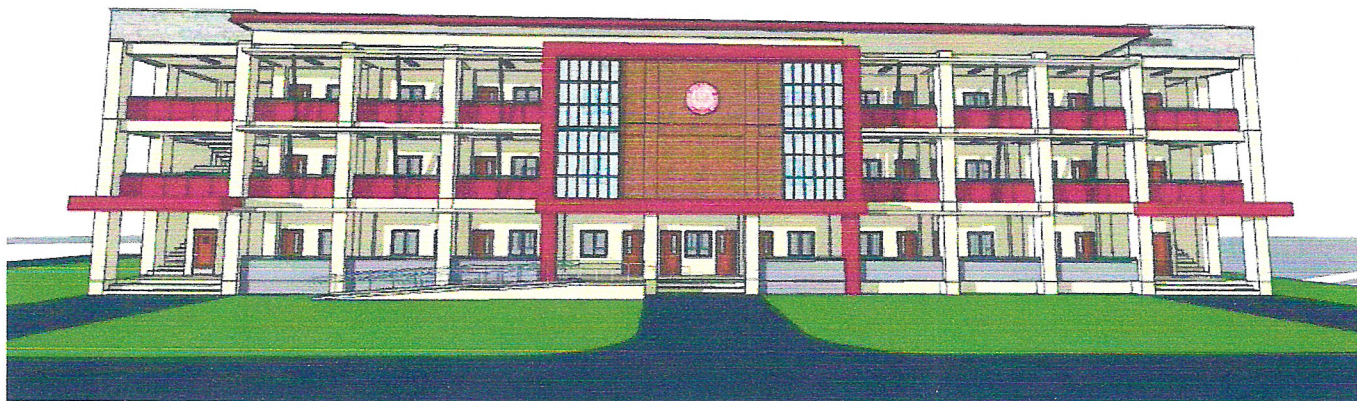




PROJECT PROFILE



PROJECT TITLE : **CONSTRUCTION OF THREE – STOREY CHEMISTRY AND BIOLOGY LABORATORY FOR THE COLLEGE OF AGRICULTURE**

ABC : **PhP 49,000,000.00**

TOTAL FLOOR AREA : **1,468 sq.m.**

Ground Floor : 389.25 sq.m.

2nd Floor : 389.25 sq.m.

3rd Floor : 389.25 sq.m.

NO. OF STOREY : **THREE (3) STOREY**

COST PER SQ.M. : **PhP 33,379/sq.m.**

PROJECT CONSTRUCTION DURATION : **730 Calendar Days**

NO. OF CLASSROOMS : 11 Classrooms x 40 Students/room = 440 Students
(7.00 x 9.00meter = 63 Sq.m.)
(GF- 3, 2F- 4 & 3F- 4 Classrooms)

TOILET : Male, Female, PWD & Gender Neutral Toilets @ GF
Male & Female Toilets @ 2F & 3F



A comprehensive building statutory compliance checklist covers building codes, fire safety, environmental regulations, health and safety, structural integrity, and accessibility,

Building Codes & Structural Integrity:

- Ensuring the building's foundation, walls, and roof meet current structural code requirements.
- Adhering to building regulations for construction and alterations

Fire Safety & Equipment:

- Installation fire sprinkler system, smoke detectors and fire alarms.
- Proper placement of fire extinguishers.
- Ensures clear and unobstructed fire exits and escape routes

Health & Safety:

- Compliance with health and safety regulations.
- Appropriate lighting and ventilation within the building

Accessibility:

- The building is accessible to people with disabilities, through ramps, elevators, and proper signage.

Green Architecture:

- **Energy Efficiency:** Using energy-efficient ventilation, lighting, and appliances, as well as alternative energy sources like solar and wind power.
- **Water Conservation:** Incorporating plumbing fixtures and designs that reduce water consumption, rainwater harvesting systems for landscaping and toilet flushing.
- Thermal roof insulation create a building envelope that minimizes heat transfer, which directly supports the core green principle of energy efficiency.

Common building materials used are raw & manufactured substances used in construction are the following; Concrete, Steel, Wood, Stone, Masonry, Glass, Aluminum & Insulation.

Building Structural Components using the materials above are assembled into the following;

Foundation: The base of the building that supports the entire structure.

Walls: Vertical structures that enclose and support the building.

Beams and Columns: Vertical and horizontal structural elements that carry loads from the roof and floors to the foundation.

Floors: The flat surfaces that support people and furniture, connecting different levels of the building.

Roof: The uppermost part of the building that provides shelter.

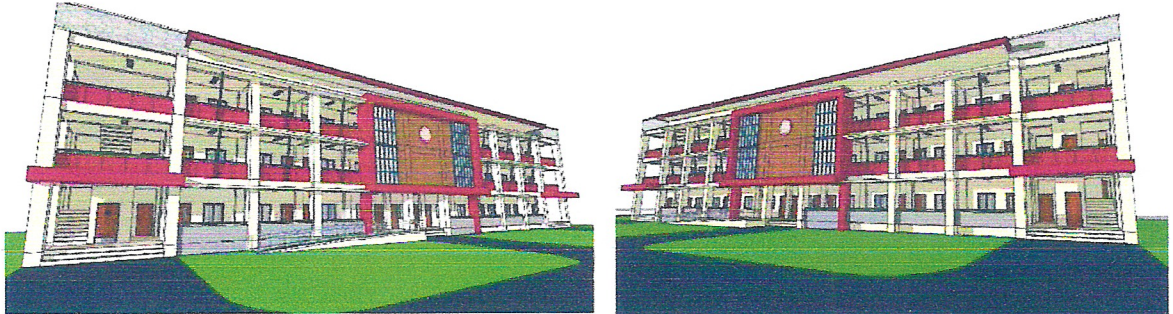


Republic of the Philippines
WESTERN MINDANAO STATE UNIVERSITY
PHYSICAL PLANT AND ENGINEERING SERVICES
Zamboanga City



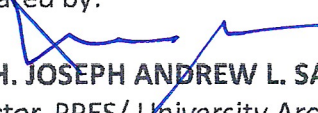
Doors and Windows: Openings in the walls that provide access and allow for natural light and ventilation.

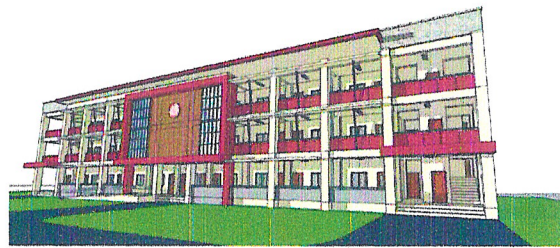
Plumbing and Electrical Systems: The pipes and wiring systems for water, waste, and power.



PERSPECTIVE

Prepared by:


ARCH. JOSEPH ANDREW L. SAHIAL
Director, PPES/ University Architect
PDO-III



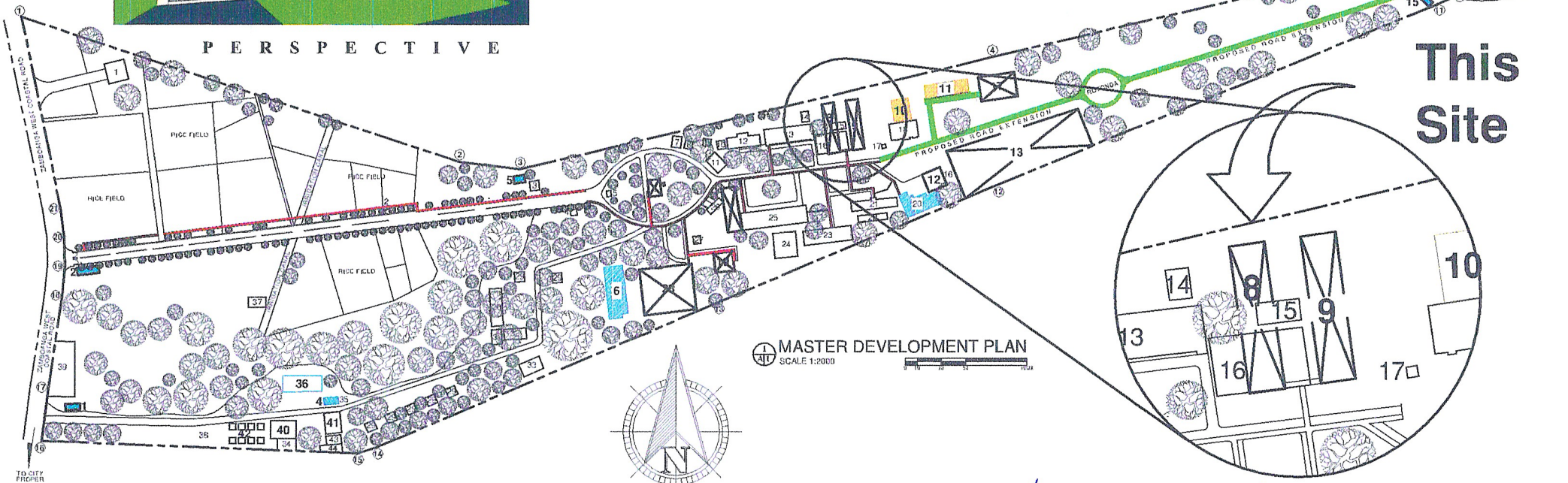
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LEGEND

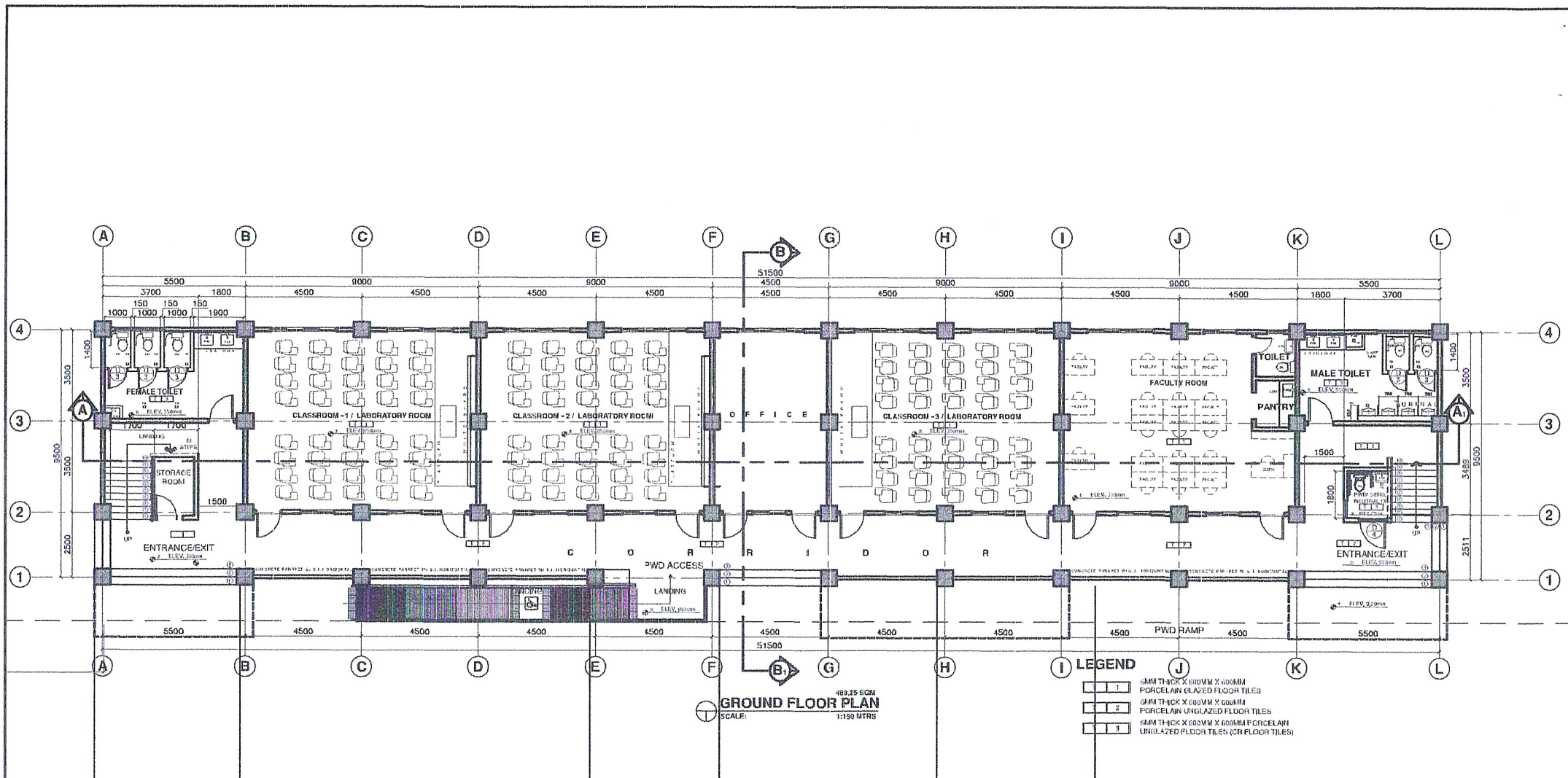
PROPOSED INFRASTRUCTURES & PROJECTS

- 1 PROPOSED "PASALUBONG" CENTER
- 2 PROPOSED ORIENTATION/HOLDING AREA
- 3 PROPOSED BROODING CAGES
- 4 PROPOSED HARDENING AND GROWING FACILITY
- 5 PROPOSED FARM SHOP
- 6 PROPOSED DORMITORY
- 7 PROPOSED LIBRARY
- 8 PROPOSED CHEMISTRY AND BIOLOGY LABORATORY
- 9 PROPOSED CAGRI ACADEMIC BUILDING
- 10 PROPOSED REGIONAL FARMERS TRAINING CENTER ENHANCEMENT EXTENSION FACILITY
- 11 CONSTRUCTION OF AGRICULTURE INNOVATION CENTER
- 12 RENOVATION OF GREEN HOUSE AND WATER SYSTEM
- 13 PROPOSED BOTANICAL GARDEN
- 14 PROPOSED SECURITY POST
- 15 PROPOSED COMMERCIAL STALLS WITH PARKING AREA
- 16 PROPOSED MOSQUE
- 17 PROPOSED STORAGE FACILITY

- 18 REGIONAL FARMERS TRAINING CENTER BUILDING
- 19 GREENHOUSE
- 20 TISSUE CULTURE LABORATORY BUILDING
- 21 CAGRI FACULTY BUILDING
- 22 CAGRI LIBRARY BUILDING
- 23 FOOD TECHNOLOGY BUILDING
- 24 CAGRI GREENHOUSE
- 25 CAGRI ACADEMIC BUILDING
- 26 CSC OFFICE
- 27 CLINIC
- 28 LADIES DORMITORY
- 29 FACULTY BOARDING HOUSE
- 30 "ITIK PINAS" PRODUCTION FACILITY
- 31 "ITIK PINAS" BROODING FACILITY
- 32 "ITIK PINAS" GROWING UNIT
- 33 5 DOORS APARTMENT
- 34 ARTIFICIAL INSEMINATION LAB
- 35 "ZAMPEN NATIVE CHICKEN" GROWING AND HARDENING FACILITY



	DESIGNED BY:	PROJECT TITLE:	REQUESTIONER:	RECOMMENDING APPROVAL:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENTS:	SHEET NO.	
	ARCH. JOSEPH ANDREW L. SAHIA, UAP UNIVERSITY ARCHITECT	CONSTRUCTION OF THREE-STOREY CHEMISTRY AND BIOLOGY LABORATORY FOR THE COLLEGE OF AGRICULTURE	DR. ELDERICO P. TABAL DEAN, COLLEGE OF AGRICULTURE	ARCH. JOSEPH ANDREW L. SAHIA, UAP DIRECTOR OF PHYSICAL PLANNING AND ENGINEERING SERVICES	DR. JOSELITO L. MADROÑAL VICE PRESIDENT FOR ACADEMY AND FINANCE	DR. MA. CARLA L. OCHOTORENA WMSU-PRESIDENT	AS RETURN	A01	
	PRC: 0010577 PTR: 3344412 TIN: 445-013-228	LOCATION: VMSU CAMPUS C, SAN RAMON, ZAMBOANGA CITY, 7009		PRC: 0010577 PTR: 2129231 TIN: 445-013-228			PREPARED BY: MST	01/04	



DESIGNED BY:
ARCH. JOSEPH ANDREW L. SAHIAL, UAP
UNIVERSITY ARCHITECT

PRC: 0010577 PTR: 3344412 TIN: 445-013-228

PROJECT TITLE:
**CONSTRUCTION OF THREE-STOREY
CHEMISTRY AND BIOLOGY LABORATORY FOR
THE COLLEGE OF AGRICULTURE**

LOCATION: WMSU CAMPUS C, SAN RAMON, ZAMBOANGA CITY, 7000

REQUISITIONER
DR. ELDER CO P. TABAL
DEAN, COLLEGE OF AGRICULTURE

PRC: 0010577 PTR: 2928291 TIN: 445-013-228

RECOMMENDING APPROVAL
ARCH. JOSEPH ANDREW L. SAHIAL, UAP
DIRECTOR OF PHYSICAL PLANT
AND ENGINEERING SERVICES

PRC: 0010577 PTR: 2928291 TIN: 445-013-228

RECOMMENDING APPROVAL
DR. JOSELO D. MADRONAL
VICE PRESIDENT FOR ADMIN AND
FINANCE

PRC: 0010577 PTR: 2928291 TIN: 445-013-228

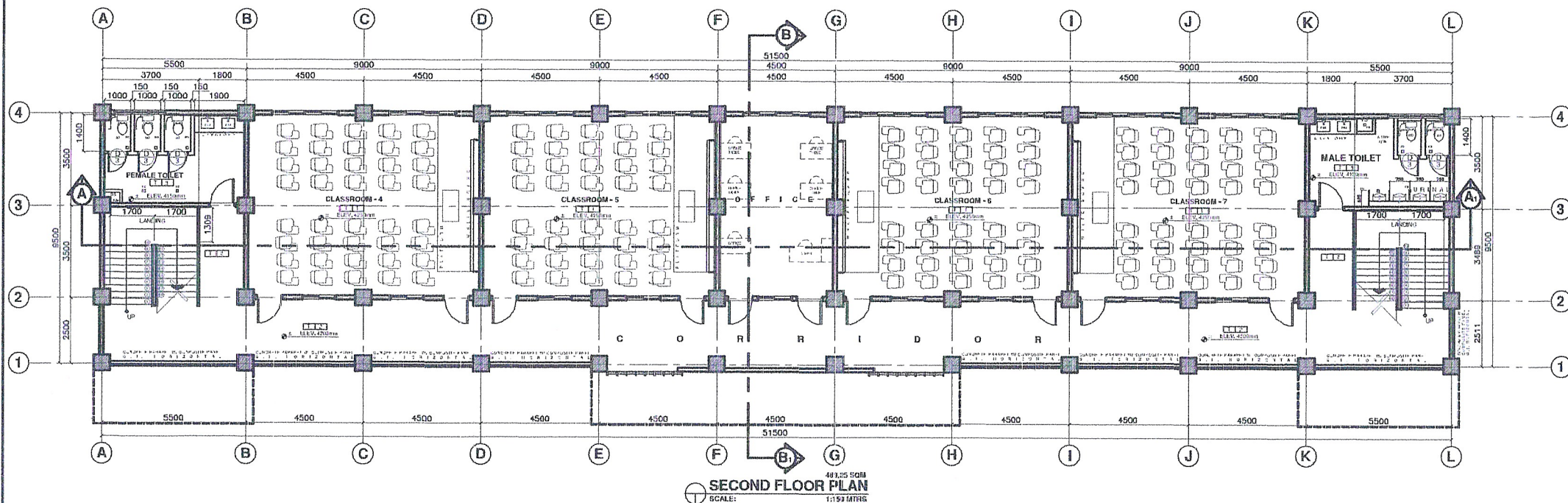
APPROVED BY:
DR. MA. CARLA A. OCHOA-TORONA
WMSU PRESIDENT

PRC: 0010577 PTR: 2928291 TIN: 445-013-228

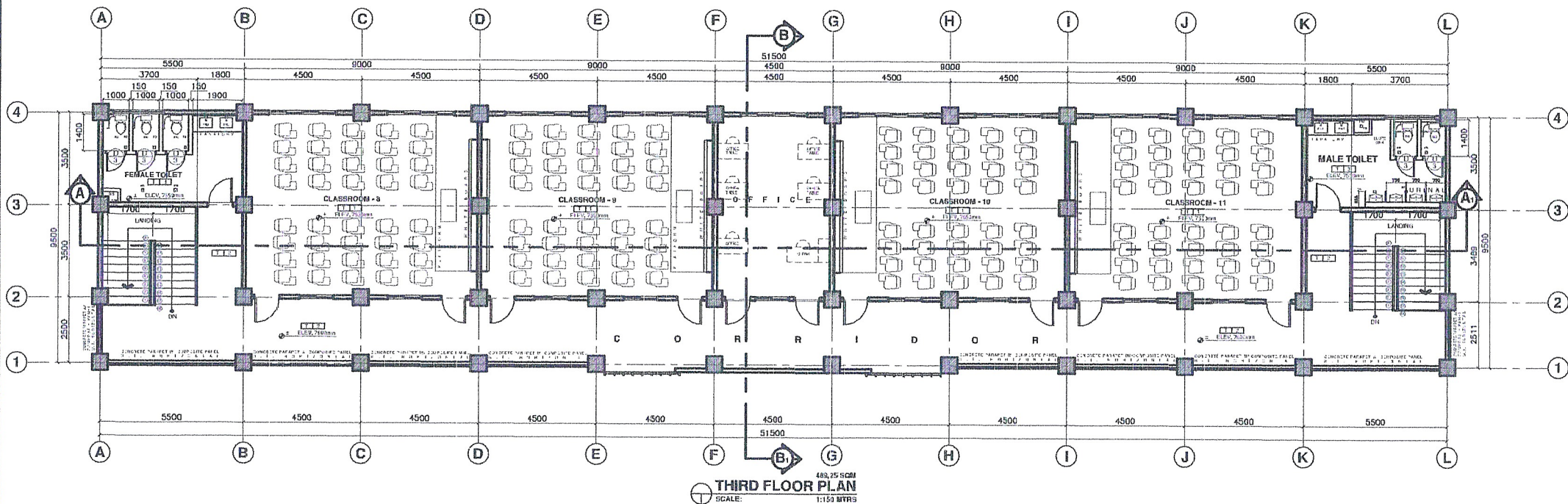
SHEET CONTENTS: SHEET NO.
AS SHOWN
A02
0204

PREPARED BY: MST





	DESIGNED BY:	PROJECT TITLE:	REQUISITIONER:	RECOMMENDING APPROVAL:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENTS:	SHEET NO.	
	ARCH. JOSEPH ANDREW L. SAHIAL, UAP UNIVERSITY ARCHITECT	CONSTRUCTION OF THREE-STOREY CHEMISTRY AND BIOLOGY LABORATORY FOR THE COLLEGE OF AGRICULTURE	DR. ELDER CO P. TABAL DEAN, COLLEGE OF AGRICULTURE	ARCH. JOSEPH ANDREW L. SAHIAL, UAP DIRECTOR OF PHYSICAL PLANT AND ENGINEERING SERVICES	DR. JOSEITO V. MADRONAL VICE PRESIDENT FOR ADMIN AND FINANCE	DR. MA. CARLA A. OCHOTORENA WMSU-PPRESIDENT	AS ORIGIN	A03 0304	
	PRC: 0010577 PTR: 334412 TIN: 445-013-224	LOCATION: WMSU CAMPUS C, SAN RAMON, ZAMBOANGA CITY, 7000		PRC: 0310577 PTR: 242931 TIN: 445-013-228			PREPARED BY: MST		



	DESIGNED BY:	PROJECT TITLE:	REQUISITIONER	RECOMMENDING APPROVAL	RECOMMENDING APPROVAL	APPROVED BY:	SHEET CONTENTS	SHEET NO.	
	ARCH. JOSEPH ANDREW L. SAHIA, UAP UNIVERSITY ARCHITECT	CONSTRUCTION OF THREE-STOREY CHEMISTRY AND BIOLOGY LABORATORY FOR THE COLLEGE OF AGRICULTURE	DR. ELDER CO P. TABAL DEAN, COLLEGE OF AGRICULTURE	ARCH. JOSEPH ANDREW L. SAHIA, UAP DIRECTOR OF PHYSICAL PLANT AND ENGINEERING SERVICES	DR. JOSELITO D. MADRONAL VICE PRESIDENT FOR ADMIN AND FINANCE	DR. MA. CARLA A. OCHOTORENA WMSU-PRESIDENT	AS SHOWN PREPARED BY: MST	A04 0404	
	PRC: 0010577 PTR: 2529391 TIN: 445-013-228	LOCATION: WMSU CAMPUS C, SAN RAMON, ZAMBANGA CITY, 7000	PRC: 0010577 PTR: 2529391 TIN: 445-013-228						



BILL OF ESTIMATED MATERIALS

Project Title: CONSTRUCTION OF CHEMISTRY AND BIOLOGY LABORATORY FOR THE COLLEGE OF AGRICULTURE
Location: WMSU San Ramon Campus, Zamboanga City

SCOPE OF WORK

ITEM NO.	DESCRIPTION	LABOR	MATERIAL	EQUIPMENT	TOTAL
B	GENERAL REQUIREMENTS	₱ 206,601.30	₱ 140,488.88	₱ 479,315.91	₱ 826,405.20
ITEM 801	REMOVAL OF STRUCTURE AND OBSTRUCTIONS	₱ 76,981.78	₱ -	₱ 647,893.75	₱ 724,875.53
ITEM 803	STRUCTURE EXCAVATION	₱ 56,499.78	₱ -	₱ 846,052.66	₱ 902,552.44
ITEM 804	EMBANKMENT	₱ 162,044.25	₱ 425,310.65	₱ 46,869.16	₱ 634,224.05
ITEM 807	SITE DEVELOPMENT	₱ 74,957.18	₱ 196,736.92	₱ 21,680.37	₱ 293,374.47
ITEM 900	REINFORCED CONCRETE	₱ 944,315.75	₱ 2,874,690.60	₱ 1,271,644.61	₱ 5,090,650.96
ITEM 901	PLAIN/LEAN CONCRETE	₱ 98,121.17	₱ 228,311.20	₱ 108,694.75	₱ 435,127.12
ITEM 902	REINFORCING STEEL	₱ 1,443,318.83	₱ 3,462,441.34	₱ 536,618.54	₱ 5,442,378.71
ITEM 903	FORMWORKS AND FALSEWORKS	₱ 35,114.76	₱ 381,236.63	₱ 236,339.29	₱ 652,690.68
ITEM 1000	TERMITE CONTROL WORKS	₱ 40,199.34	₱ 100,483.88	₱ 4,022.83	₱ 144,706.04
ITEM 1001	STORM DRAINAGE AND SEWERAGE	₱ 91,010.46	₱ 227,491.71	₱ 25,973.46	₱ 344,475.64
ITEM 1002	PLUMBING WORKS	₱ 57,748.93	₱ 151,740.29	₱ 359,465.76	₱ 568,954.98
ITEM 1003	CARPENTRY AND JOINERY WORKS	₱ 234,611.96	₱ 586,445.45	₱ 23,478.09	₱ 844,535.49
ITEM 1006	STEEL DOORS AND FRAMES	₱ 137,648.84	₱ 344,122.09	₱ 44,007.67	₱ 525,778.60
ITEM 1007	ALUMINUM FRAMED GLASS DOORS	₱ 126,169.16	₱ 315,422.90	₱ 40,337.50	₱ 481,929.56
ITEM 1008	ALUMINUM GLASS WINDOWS	₱ 201,112.74	₱ 473,121.82	₱ 10,754.33	₱ 684,988.88
ITEM 1010	WOODEN DOORS AND WINDOWS	₱ 85,305.92	₱ 229,824.91	₱ -	₱ 315,130.83
ITEM 1012	GLASS AND GLAZING	₱ 120,784.88	₱ 301,918.72	₱ 12,087.18	₱ 434,790.79
ITEM 1013	CORRUGATED METAL ROOFING	₱ 16,023.68	₱ 40,053.42	₱ 1,603.52	₱ 57,680.62
ITEM 1014	PREPAINTED METAL SHEETS	₱ 127,689.07	₱ 258,088.15	₱ 12,752.97	₱ 398,530.20
ITEM 1016	WATERPROOFING	₱ 130,456.40	₱ 286,204.09	₱ -	₱ 416,660.49
ITEM 1018	CERAMIC/GRANITE TILES	₱ 558,865.74	₱ 1,170,846.82	₱ 46,720.18	₱ 1,776,432.74
ITEM 1021	CEMENT FLOOR FINISH	₱ 149,936.42	₱ 314,122.99	₱ 12,534.42	₱ 476,593.82
ITEM 1027	CEMENT PLASTER FINISH/DECORATIVE STONE	₱ 293,665.06	₱ 523,583.72	₱ 12,782.48	₱ 830,031.25
ITEM 1032	PAINTING, VARNISHING, AND OTHER RELATED WORKS	₱ 194,319.19	₱ 485,728.02	₱ 19,445.91	₱ 699,493.12
ITEM 1033	METAL DECK	₱ 256,743.79	₱ 703,158.70	₱ 44,179.61	₱ 1,004,082.10
ITEM 1038	REFLECTIVE INSULATION	₱ 46,504.21	₱ 112,018.04	₱ 4,650.42	₱ 163,172.67
ITEM 1039	ALUMINUM CLADDING	₱ 155,951.61	₱ 375,651.86	₱ 15,595.16	₱ 547,198.63
ITEM 1043	PVC DOORS AND FRAMES	₱ 20,572.68	₱ 47,389.36	₱ 4,222.81	₱ 72,184.86
ITEM 1045	ALUMINUM PANEL	₱ 155,014.04	₱ 373,393.46	₱ 15,501.40	₱ 543,908.90
ITEM 1046	MASONRY WORKS	₱ 175,132.59	₱ 437,831.48	₱ 6,754.94	₱ 619,719.02
ITEM 1047	METAL STRUCTURES	₱ 305,230.80	₱ 669,598.99	₱ 729,418.09	₱ 1,704,247.88
ITEM 1051	RAILINGS	₱ 96,564.46	₱ 241,411.16	₱ 151,206.06	₱ 489,181.68
ITEM 1100	CONDUITS, BOXES, & FITTINGS (CONDUIT WORKS/CONDUIT ROUGH-IN)	₱ 40,719.90	₱ 67,721.92	₱ -	₱ 108,441.82
ITEM 1101	WIRES AND WIRING DEVICES	₱ 126,844.81	₱ 507,379.23	₱ -	₱ 634,224.04
ITEM 1102	POWER LOAD CENTER, SWITCHGEAR AND PANELBOARDS, AND OTHER OVERCURRENT PROTECTION DEVICES	₱ 141,382.61	₱ 1,272,443.47	₱ -	₱ 1,413,826.08
ITEM 1103	LIGHTING FIXTURES AND LAMPS	₱ 67,402.17	₱ 494,282.57	₱ -	₱ 561,684.73
ITEM 1104	AUXILIARY SYSTEM	₱ 71,175.75	₱ 377,217.37	₱ 22,657.54	₱ 471,050.66
ITEM 1106	CCTV SYSTEM	₱ 63,966.52	₱ 267,371.11	₱ 13,123.99	₱ 344,461.62
ITEM 1200	AIRCONDITIONING AND VENTILATING SYSTEM	₱ 52,544.73	₱ 998,349.80	₱ -	₱ 1,050,894.53
ITEM 1201	WATER PUMPING SYSTEM	₱ 33,531.11	₱ 74,913.62	₱ -	₱ 108,444.72
ITEM 1202	FIRE PROTECTION SPRINKLER SYSTEM (AFSS)	₱ 124,219.69	₱ 302,701.25	₱ 7,869.71	₱ 434,790.64

ITEM 1208	FIRE ALARM SYSTEM	P	52,473.41	P	232,030.42	P	5,244.44	P	289,748.27
ITEM 1705	FILL AND BACKFILL	P	109,113.99	P	196,861.22	P	538,560.28	P	844,535.49
ITEM 1728	SUPPLY AND DELIVERY	P	-	P	851,802.66	P	-	P	851,802.66
								P	36,260,593.22

SUMMARY

A TOTAL MATERIAL COST	P	22,121,942.87
B TOTAL LABOR COST	P	7,758,591.44
C TOTAL EQUIPMENT COST	P	6,380,058.91
D CONTINGENCIES	P	3,626,059.32
E CONTRACTOR'S PROFIT	P	2,900,847.46
F MOBILIZATION/DEMOLITION	P	490,000.00
G VAT	P	5,134,500.00
1.2% ADMIN COST	P	588,000.00
TOTAL PROJECT COST	P	49,000,000.00

Estimated by:

Ar. Chelsea Laine F. Riego, RMP
Architect I

Recommending Approval By:

Arch. Joseph Andrew L. Sahial, Uap
Director-PPES/University Architect

Approved by:

Ma. Carla A. Oñatorrena, RN, Ph.D
University President