

PHILIPPINE BIDDING DOCUMENTS



Republic of the Philippines
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IB 2025-22 – CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I



Project Location	BSU La Trinidad Campus, Km. 6, La Trinidad, Benguet
Brief Description	The project is a Construction of a 3-storey academic building having a total area of 1485 sq.m.
Approved Budget for the Contract (ABC)	PhP. 25,000,000.00
Contract Duration	275 calendar days
Amount of Bidding Documents	Php. 25,000.00

June 9, 2025

Preface

These Philippine Bidding Documents (PBDs) for the procurement of Infrastructure Projects (hereinafter referred to also as the “Works”) through Competitive Bidding have been prepared by the Government of the Philippines for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations, government financial institutions, state universities and colleges, local government units, and autonomous regional government. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

The PBDs are intended as a model for admeasurements (unit prices or unit rates in a bill of quantities) types of contracts, which are the most common in Works contracting.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract; (ii) the eligibility requirements of Bidders; (iii) the expected contract duration; and (iv) the obligations, duties, and/or functions of the winning Bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Works to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

- a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular Project.
- b. Specific details, such as the “*name of the Procuring Entity*” and “*address for bid submission*,” should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.
- d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.
- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

Contractor – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

Foreign-funded Procurement or Foreign-Assisted Project – Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term “related” or “analogous services” shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria.

The IB should be incorporated into the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and in particular to the relevant information in the Bid Data Sheet.



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Invitation to Bid

IB 2025-22 Construction of the College of Arts and Humanities Building-Phase I

1. The *Benguet State University (BSU)*, through the *General Appropriations Act (GAA) – FY 2025* intends to apply the sum of *Twenty-Five Million Pesos only (Php. 25,000,000.00)* being the Approved Budget for the Contract (ABC) to payments under the contract for the *Construction of the College of Arts and Humanities Building- Phase I – IB 2025-22*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *Benguet State University* now invites bids for the above Procurement Project. Completion of the Works is required *within 275 Calendar Days upon receipt of the Notice to Proceed*. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information from *BSU-Bids and Awards Committee (BAC) Secretariat through the contact details given below* and inspect the Bidding Documents at the address given below from *8:00 AM to 5:00 PM office hours*.
5. A complete set of Bidding Documents may be acquired by interested bidders on *June 10, 2025* from the given address and website/s below, *and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Five Hundred Pesos only (Php. 25,000.00)*.

Payment may be made in either mode, as follows:

- a. Payment, in person, to the BSU Cashier's Office, First Floor, Administration Building, Km 5, Balili, La Trinidad, Benguet. The Procuring Entity shall allow the bidder to present its proof of payment for the fees which will be presented in person, by facsimile, or through electronic means.
- b. Online payment through the Landbank payment portal- <https://www.lbp-eservices.com/egps/portal/index.jsp>. Bidders shall present its confirmation receipt to the BAC Secretariat in person, by facsimile, or through electronic means, which shall be used as proof of payment for the bidding documents fee.

6. The *Benguet State University* will hold a Pre-Bid Conference on June 18, 2025, 10:00 AM, at the RDC Conference Hall, 2/F Administration Building, Benguet State University, Km. 5, Balili, La Trinidad, Benguet.
7. Bids must be duly received by the BAC Secretariat through **manual submission** at the office address as indicated below, on or before 1:30 PM, June 30, 2025. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.
9. Bid opening shall be on 2:00 PM, June 30, 2025 at the given address below and/or through *via Google Meet Platform at the link: meet.google.com/iih-nrds-cpo*. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The *Benguet State University* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

*BAC Secretariat
Procurement Management Office (PMO)
Benguet State University – La Trinidad Campus
1/F Administration Building
Km. 5, La Trinidad, Benguet
Email: procurement@bsu.edu.ph
Telefax: (074) 661-1839*
12. You may visit the following websites:
For downloading of Bidding Documents: www.bsu.edu.ph/bids-awards

June 9, 2025

Sgd
JANET P. PABLO
*Chairperson, Bids and Awards Committee
Infrastructure and Consultancy*

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

1. Scope of Bid

The Procuring Entity, *Benguet State University* invites Bids for the **Construction of the College of Arts and Humanities Building- Phase I, with Project Identification Number IB 2025-22.**

The Procurement Project (referred to herein as “Project”) is for the construction of Works, as described in Section VI (Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **FY 2025** in the amount of **Php. 25,000,000.00.**

2.2. The source of funding is: **FY 2025 General Appropriations Act**

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manual and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or invitation to bid by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex “I” of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.

- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

There is no restriction on the origin of Goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN.

7. Subcontracts

- 7.1. The Procuring Entity has prescribed that:
Subcontracting is not allowed.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project as indicated in paragraph 6 of the IB.

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting

Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

- 10.3. A valid special PCAB License in case of Joint Ventures, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and specifications. Unless there is a value engineering clause in the **BDS**, alternative Bids shall not be accepted.

13. Bid Prices

All bid prices for the given scope of work in the Project as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as determined by the NEDA and approved by the GPPB pursuant to the revised Guidelines for Contract Price Escalation guidelines.

14. Bid and Payment Currencies

- 14.1. Bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.

- 14.2. Payment of the contract price shall be made in: **Philippine Pesos**.

15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 15.2. The Bid and bid security shall be valid until *October 28, 2025 or one hundred twenty (120) calendar days from opening of bids*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one (1) original copy of the bid, and one additional (1) copy of the bid in either hard copy **OR** digital copy.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission to the given website or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

17. Deadline for Submission of Bids

The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

18. Opening and Preliminary Examination of Bids

- 18.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

- 18.2. The preliminary examination of Bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the

conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.

19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 15 shall be submitted for each contract (lot) separately.

19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. Post Qualification

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Notes on the Bid Data Sheet (BDS)

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

- a. Information that specifies and complements provisions of the ITB must be incorporated.
- b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.

Bid Data Sheet

ITB Clause				
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: a. Construction of Buildings with at least 50% similarities with the major work component of the project; b. Have been completed within 5 years prior to submission of bids			
7.1	<i>Subcontracting is not allowed</i>			
10.3	<i>PCAB License requirement shall be:</i> <i>Size Range: Medium A</i> <i>License Category: B</i> <i>Principal Classification: General Building/ General Engineering</i>			
10.4	The key personnel must meet the required minimum years of experience set below:			
	Key Personnel	No. of Personnel	General Experience	Relevant Experience
	Site Engineer/ Site Architect	1	At least 3 years	At least 3 years
	Part time Safety Officer – with COSH training from accredited provider by DOLE	1	At least 3 years	At least 3 years
	Electrical Engineer/ Master Electrician	1	At least 3 years	At least 3 years
	Sanitary Engineer/ Master Plumber	1	At least 3 years	At least 3 years
	Construction Foreman	1	At least 3 years	At least 3 years
	Note: 1. All the key personnel should have applicable and prescribed General and Relevant Experiences in line on specialization. 2. Key personnel must have valid PRC licenses/certificates/ accreditation and PTR and shall be presented during the Post Qualification			
10.5	The minimum major equipment requirements are the following:			
	Equipment	Capacity	Number of Units	
	Truck	2-5 MT	1 unit	
	Transit Mixer		1 unit	

	<i>Concrete Vibrator</i>		2 units
	<i>Welding Machine</i>		2 units
	<i>Bar Cutter</i>		1 unit
	<i>Bar Bender</i>		2 units
	<i>Cutting Outfit</i>		1 lot
	<i>H-Frames</i>	1.7mX1.2m	40 sets
	<i>Various Power Tools</i>		1 lot
	<i>Various Minor Tools</i>		1 lot
<i>Note: Condition of the equipment will be inspected during the post qualification.</i>			
12	<i>Alternative Bid is not Allowed</i>		
15.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <ul style="list-style-type: none"> a. The amount of not less than 2% of ABC, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; b. The amount of not less than 5% of ABC if bid security is in Surety Bond. 		
16	<p>Each Bidder shall submit one (1) original of the bid documents, and one (1) additional copy of the bid in either hard copy OR digital copy. For digital copy/scanned copy of the bid, it may be saved in a flash drive. The flash drive shall contain the following:</p> <ul style="list-style-type: none"> a. The technical component of the bid in PDF format – saved in a “folder” marked as Technical Component; b. Financial component of the bid in PDF format – saved in a “folder marked as financial component; c. Detailed Estimates and Bill of Quantities – in Excel Format <p>Note: The bidder shall affix his/her signature in all photocopied documents in the original copy of the bid.</p>		
19.2	Partial bids are not allowed.		
20	No further instruction		
21	<p>Additional contract documents relevant to the Project as required:</p> <ul style="list-style-type: none"> a. PERT/CPM b. Construction Safety and Health Program duly approved by DOLE; c. Construction Schedule and S-curve; d. Manpower Schedule; e. Construction Methods; 		

	<ul style="list-style-type: none"> f. Updated Program of works showing general methods, arrangement, order and timing for all activities in the works; g. Equipment Utilization Scheduled; and h. Contractor's All Risk Insurance (CARI)
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Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Contractor, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special Conditions of Contract.

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

2. Sectional Completion of Works

If sectional completion is specified in the **Special Conditions of Contract (SCC)**, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date shall apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

3. Possession of Site

3.1 The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the **SCC**, which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.

3.2 If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

4. The Contractor's Obligations

The Contractor shall employ the key personnel named in the Schedule of Key Personnel indicating their designation, in accordance with **ITB** Clause 10.3 and specified in the **BDS**, to carry out the supervision of the Works.

The Procuring Entity will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

5. Performance Security

5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the

successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.

- 5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the **SCC** supplemented by any information obtained by the Contractor.

7. Warranty

- 7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.
- 7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

8. Liability of the Contractor

Subject to additional provisions, if any, set forth in the **SCC**, the Contractor's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Contractor is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

9. Termination for Other Causes

Contract termination shall be initiated in case it is determined *prima facie* by the Procuring Entity that the Contractor has engaged, before, or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to corrupt, fraudulent, collusive, coercive, and obstructive practices as stated in **ITB** Clause 4.

10. Dayworks

Subject to the guidelines on Variation Order in Annex "E" of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the **SCC**, the Dayworks rates in the Contractor's Bid shall be used for small additional amounts of work only when the Procuring Entity's Representative has given written instructions in advance for additional work to be paid for in that way.

11. Program of Work

- 11.1. The Contractor shall submit to the Procuring Entity's Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC**.
- 11.2. The Contractor shall submit to the Procuring Entity's Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC**. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

12. Instructions, Inspections and Audits

The Contractor shall permit the GOP or the Procuring Entity to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors of the GOP or the Procuring Entity, as may be required.

13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the **SCC**, subject to the requirements in Annex "E" of the 2016 revised IRR of RA No. 9184.

14. Progress Payments

The Contractor may submit a request for payment for Work accomplished. Such requests for payment shall be verified and certified by the Procuring Entity's Representative/Project Engineer. Except as otherwise stipulated in the **SCC**, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

15. Operating and Maintenance Manuals

- 15.1. If required, the Contractor will provide "as built" Drawings and/or operating and maintenance manuals as specified in the **SCC**.
- 15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity's Representative's approval, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from payments due to the Contractor.

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Works procured. In preparing this Section, the following aspects should be checked:

- a. Information that complements provisions of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.

Special Conditions of Contract

GCC Clause	
2	<i>No further instructions</i>
4.1	<i>The Benguet State University shall give possession of all parts of the Site to the Contractor upon receipt of the Notice to Proceed.</i>
6	<i>No further instructions</i>
7.2	<i>In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures: Fifteen (15) years.</i>
10	Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the updated Program of Work to the Procuring Entity's Representative within ten (10) days upon receipt of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is 1% of the ABC .
13	The amount of the advance payment is equivalent to fifteen percent (15%) <i>of the total contract price to be paid in a lump sum by BSU.</i>
14	Materials and equipment delivered on the site but not completely put in place shall not be included for payment.
15.1	The date by which operating and maintenance manuals are required is within seven (7) calendar days upon completion of the project. The date by which "as built" drawings are required is within seven (7) after the completion.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is 1% of the ABC .

Section VI. Specifications

Notes on Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying or conditioning their Bids. In the context of international competitive bidding, the specifications must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of economy, efficiency, and fairness in procurement be realized, responsiveness of Bids be ensured, and the subsequent task of bid evaluation facilitated. The specifications should require that all goods and materials to be incorporated in the Works be new, unused, of the most recent or current models, and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.

Samples of specifications from previous similar projects are useful in this respect. The use of metric units is mandatory. Most specifications are normally written specially by the Procuring Entity or its representative to suit the Works at hand. There is no standard set of Specifications for universal application in all sectors in all regions, but there are established principles and practices, which are reflected in these PBDs.

There are considerable advantages in standardizing General Specifications for repetitive Works in recognized public sectors, such as highways, ports, railways, urban housing, irrigation, and water supply, in the same country or region where similar conditions prevail. The General Specifications should cover all classes of workmanship, materials, and equipment commonly involved in construction, although not necessarily to be used in a particular Works Contract. Deletions or addenda should then adapt the General Specifications to the particular Works.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for goods, materials, and workmanship, recognized international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that goods, materials, and workmanship that meet other authoritative standards, and which ensure substantially equal or higher quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the SCC.

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Procuring Entity's Representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's Representative at least twenty-eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

These notes are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final Bidding Documents.

TECHNICAL SPECIFICATIONS

Name of Project:

Location: **BSU LA TRINIDAD CAMPUS, KM. 6, LA TRINIDAD, BENGUET**

GENERAL PROVISIONS AND REQUIREMENTS

SECTION 1 – SPECIFIC

1. SCOPE OF WORK

- a. The work covered under this contract shall include the construction of the building including supervision, labor and the supply of materials, equipment and services necessary to properly conduct and produce the desired work product. Included herein are mobilization, civil works, concrete and masonry works, carpentry, tinsmith, doors and windows, electrical works, plumbing works and painting works. General cleaning/demobilization of all temporary works and structures for an efficient, smooth and up to date completion of the contract.

2. CONTRACT DRAWINGS

- a. Details and extent of work are shown on the drawings accompanying these specifications.
- b. Sketches and other details not shown in plans shall be furnished by the Benguet State University architect or engineer during the pace of construction.

3. PARTS OF THE SPECIFICATIONS

- a. This specification shall include the following parts whose applicable provisions are binding in the contract:

Section I	-	Specific
Section II	-	General Conditions
Section III	-	Mobilization
Section IV	-	Concrete and Masonry
Section V	-	Carpentry and Lumber
Section VI	-	Tinsmith Works
Section VII	-	Doors and Windows
Section VIII	-	Painting Works
Section IX	-	Plumbing and Water Service System
Section X	-	Electrical Works
Section XI	-	General Cleaning and Demobilization

- b. Works performed under any of the following parts of the Specifications shall not be paid separately, but the cost thereof shall be considered as having been included in the lump sum contract price.
- c. These specifications are intended to supplement the provisions of PD 1096 otherwise known as the National Building Code of the Philippines and its IRR in order to provide the proper design and construction. In case of discrepancies between plans and specifications, these specifications shall prevail. It is the duty of the Contractor to examine both carefully, compare and verify dimensions and data furnished by BSU in case of discrepancies between figures and drawings, the matter should be brought immediately to the BSU architect or engineer before any adjustments shall be made by the Contractor.

SECTION II – GENERAL CONDITIONS

1. WORKMANSHIP

- a. All operations required under any and all parts of the Specifications shall be undertaken in a neat, workmanlike manner. Only skilled personnel with sufficient experience in similar operations shall be allowed to undertake the same.

2. CLEARING, GRUBBING, GRADING AND FILLING

- a. The contractor shall clear, grub, and grade the proposed building location for a distance of four (4) meters in all directions outside the building line without extra compensation. Provided, however, that he shall not be required to clear beyond existing street lines, should the said street line be nearer than those of the four (4) meters to any building line.

3. EXCAVATION AND BACKFILL

- a. The contractor shall make the necessary excavation of whatever materials maybe encountered, for all foundations to the extent required and the grade indicated on the drawings, without extra compensation.

4. ELECTRICITY AND WATER SUPPLY

- a. The contractor shall provide at his own expense electricity and ample supply of fresh water, sufficient for all construction purposes.

5. INSPECTION OF THE SITE

- a. The tender may deem to have been based on data, regarding physical conditions of the site. The contractor acknowledges and warrants that he has inspected and examined the site and the surroundings and has satisfied himself by submission of his bid as to the nature of the work and materials necessary for the completion of the project, the means of access to the site, the accommodation he may require, and that he has obtained for himself, all the necessary information as to risks, contingencies and other circumstances which may have influenced or affected his bid. NO increase in cost or extension of time will be considered for the failure to inspect and examine the site condition.

6. CHANGES

- a. The BSU architect or engineer reserves the right to make slight changes in details of work or materials as he may deem advisable. These changes may include revision or modifications of shapes or dimensions of elements that may involve additional expenses to the contractor shall be covered by appropriate adjustment of the contract price.

7. CONFLICT BETWEEN PLANS, SPECIFICATIONS AND BILL OF MATERIALS & ESTIMATES

- a. Should there be any conflict between indications on drawings, provisions in specifications, bill of materials and estimates shall be referred to the BSU architect or engineer for his/her decisions on the matter and whose opinion shall be final.
- b. Any omission in the specifications of work or works to be undertaken but necessary for the completion of work, shall be undertaken by the contractor as if indicated on the drawings, without extra compensation. Such works shall be done in the usual manner as required as to quality of both materials and workmanship.

8. REJECTIONS

- a. Materials or workmanship not in reasonable conformance with the provisions of these specifications shall be rejected at any time during the progress of the work. The contractor shall receive copies of reports of rejection of materials and workmanship made by the authorized technical representative of BSU. Any part of the work that he has been done and is not of the quality required by reasonable interpretation of the plans and specifications shall be torn down or removed immediately and rebuilt or otherwise remedy such work in accordance with the requirements of the plans and specifications.

9. VARIATION ORDER / CHANGE ORDER / EXTRA WORK ORDER

- a. Any changes or deviations made on plans, specifications, bill of materials and estimates should be referred and reported to the BSU architect or engineer for proper documentation prior to implementation.
- b. All IRR of RA 9184 regarding Variation Order, Change Order or Extra Work Order should be strictly followed.

10. ESTABLISHED GRADE LINE AND PREPARATION OF SITE

- a. The contractor shall inspect and examine the individual site conditions. No increase in cost or extension of time will be considered for failure to examine site condition.

- b. Care shall be taken to protect and maintain adjacent properties, trees, materials and such other facilities such as conduits, drains sewers, pipes and other wires that are to remain in the property. Restore without cost to BSU all properties may be affected during the performance of work.
- c. All unusable materials and debris resulting from the performance of work shall be removed from the premises and salvageable material shall be hauled and stacked neatly by the contractor to BSU storehouse.
- d. Remove all earth and sub-grade materials unsuitable for the preparation of the sub-grade for the items of construction. Clear and remove shrubs, stumps, roots and other vegetation from the site.

SECTION III – MOBILIZATION

1. SCOPE

- a. The work shall include mobilization of equipment, manpower, hauling of materials, and necessary tools needed for the proper and smooth completion of the project.

SECTION IV – CONCRETE AND MASONRY WORK

1. SCOPE

- a. The work includes the furnishing of labor, equipment and materials, and the performing of all necessary operations in connection with the concrete and masonry works for the rehabilitation of the building.

2. MATERIALS

- a. Concrete hollow blocks (CHB) shall be of superior and approved quality of size 4"x 8"x 16", sound and free from cracks and other imperfections.
- b. Sand and gravel shall be well graded and free from any deleterious materials.
- c. Cement and aggregates shall be stored in a manner as to prevent their deterioration or the intrusion of foreign matter that will deteriorate the quality or which has been damaged shall be tested by standard mortar test to determine its suitability for use.
- d. Mortar shall be workable, cement-sand mixture and attaining a 28-day compressive strength of 1500 psi.
- e. Concrete Aggregates shall conform to the "Specifications for Aggregates" (ASTM G33 latest revision). The maximum size of the aggregates shall not be larger than one-fifth $\frac{1}{5}$ of the narrowest dimension between side of the forms of the member of which concrete is to be used, not larger than three-fourths ($\frac{3}{4}$) of the minimum clear spacing between individual reinforcing bars in no case larger than two (2) inches in diameter.
- f. Reinforcing steel bars for columns, beams, footing, pedestal walls, etc., shall be a structural grade deformed bars. Ties and stirrups of beams and columns as well as slab reinforcements may be plain bars unless noted in the plans or specified herein.
- g. Forms shall conform to the shape, lines and dimensions of the members as called for on plans, and shall be substantial and sufficiently tight to prevent leakage of mortar. They shall be properly braced or tied so as to maintain position and shape.
- h. Plywood, metal, plastic materials or surfaced lumber forms shall be used where it will be best give the most advantage in the specific concrete work involved.
- i. Unless otherwise ordered, forms and shoring shall not be disturbed and shall remain in place for minimum period of 24-hours.

3. CONCRETE AND MASONRY WORK

- a. Before placing reinforcement and before pouring concrete, remove all loose rusts, mill, oil or other adhering materials which tend to reduce or destroy bond between concrete and reinforcement.
- b. Reinforcing steel bars shall be cut, bent, lapped or splice as recommended by the ACI codes. Splices where permitted, shall provide sufficient lap (not less than 60 times the diameter of the bars to be deformed) to transfer the stress

- between bars by bond and shear, and shall be secured in place by the use of tie wires not smaller than No.16 gauge. Splices in adjacent bars shall be staggered.
- c. Reinforcing steel bars shall be placed accurately and secured in place by use of concrete or metal supports, spacers or ties to firmly hold them in their proper positions during pouring and setting of concrete.
 - d. Reinforcing steel bars shall not be bent or straightened in any manner that will injure the materials. Bars with kinks or bends shall not be used.
 - e. Reinforcing steel bars shall have protective covering not less than three-fourths (3/4) inches of concrete in slabs that are not exposed to the ground; not less than one and a half inches (1-1/2"), in beam, girders, and columns, and not less than (3") for footing on soil.
 - f. All horizontal and vertical bars as the case maybe shall be anchored 20 bar diameters into the concrete footing, columns and beams.
 - g. All horizontal the reinforcement shall be tied to the vertical reinforcement at every intersection with no. 16 G.I. tie wire.

Concrete:

Design working stresses for concrete based on the following 28 days of ultimate compressive strength:

1. Mat Footing	3,000 psi (20.70 Mpa.)
2. Columns	4,000 psi (27.58 MPa.)
3. Slab, Stair	3,000 psi (20.70 Mpa.)
4. Beams	4,000 psi (27.58 MPa.)

Reinforcement:

1. Unless otherwise Noted in the plans, the yield strength of reinforcing bars shall be:
Mat Footing-----FY=276 MPA (40,000 psi) Grade 40
Columns----- Fy= 414 MPA (60,000 psi) Grade 60
Columns (Lateral Ties) ----FY= 276 MPA (40,000 psi) Grade 40
Beams----- Fy= 414 MPA (60,000 psi) Grade 60
Beams (Stirrups)----- Fy= 276 MPA (40,000 psi) Grade 40
Slabs/ Stairs----- Fy= 276 MPA (40,000 psi) Grade 40
2. All mild reinforcement steel shall be of new Billet Structural Grade (fy=33,000 psi) deformed bars conforming to ASTM A-615.
3. All detailing, fabrication and installation of reinforcing bars must follow the ACI Manual Standard Practices for Detailing Reinforced Concrete Structures (ACI-315.65).
4. All reinforcement shall be continuous with a minimum length of laps for splices as per corresponding notes in ACI Detailing Manual.

Walls:

1. See Architectural Drawings for concrete and masonry walls not shown on the structural drawings.
2. Wall reinforcement shall be wired together and double curtain braced apart.

Clearances:

Minimum concrete cover shall be as follows:

1. Footing	0.076 m clear
2. Columns	0.038 m clear
3. Walls	0.019 m clear
4. Beams	0.038 m clear
5. Slabs	0.019 m clear

Dowels:

Provide dowels for walls starting on beams.

Foundation:

1. Except otherwise shown, excavations shall be made as near as possible to the neat lines required by the size and shape of the structure.
2. Backfill shall be placed in layers not exceeding 0.15m in depth. Each layer must be moisten as directed and thoroughly compacted before placing the next lay

Pouring Schedule and Removal of Forms:

1. The Contractor shall submit for in the approval schedule of concrete pouring and location of construction joints to the architect or engineer of the institution at least four (3) days prior to pouring.
2. All chases and openings on slabs and walls shall be approved by the architect or engineer of the institution.
3. The Contractor shall furnish and maintain adequate forms and shoring until the concrete members have attained its curing period.
4. Stripping of forms and shores:

Foundation-----	24hrs
Suspended Slab except when additional loads are imposed-----	8 days
Walls-----	21 days
Beams-----	14 days
Columns-----	21 days

Work Item

Description

1. **Foundation** Reinforced Concrete ("Class AA" mixture, Ready mix concrete 3000 psi, 21MPA); with The necessary reinforcing bars as indicated in the structural plan.
2. **Columns** Reinforced Concrete ("Class A" mixture, Ready mix concrete 4000 psi, 27.58MPA); with the necessary reinforcing bars as indicated in the structural plan.
3. **Beams** Reinforced Concrete ("Class A" mixture, Ready mix concrete 4000 psi, 27.58MPA); with The necessary reinforcing bars as indicated in the structural plan.
4. **Floor Slabs**
 - 4.1 All Floor Slab Reinforced Concrete ("Class B" mixture, Ready mix concrete 3000 psi, 21MPA); with the necessary reinforcing bars as indicated in the structural plan.
 - 4.1.a Finishing Porcelain Floor Tiles
5. **Walls**
 - 5.1 Exterior Walls 4" Hollow Concrete Blocks (CHB) with concrete mix in the hollow core and with reinforcing bars as indicated in the Structural Plan. Plain Cement Plaster finished on both side unless otherwise specified.
 - 5.1.a Finishing Semi-Gloss Latex by Boysen/Davies or equivalent
 - 5.2 Interior Walls Plain Cement Plaster in Paint coat finish by Boysen/Davies or equivalent
 - 5.2.a Finishing Paint Cement Plaster finish
 - 5.2.b Divisions
 - 5.3 Molding Plain Cement Plaster finish
 - 5.3 Facade Accessories N/A
4. **CONCRETE PROPORTION AND CONSISTENCY**
 - a. The unit of measurement shall be cubic foot. One bag of cement shall be considered as one cubic foot. Water shall be measured as to ensure the desired quantity of successive batches.

- b. The re-tempering of concrete, i.e. mixing with additional cement, aggregate or water shall not be permitted.
- c. Water shall be removed from excavation before concrete is deposited. Any continuous flow of water into the excavation shall be directed through side drains to a slump or be removed by other approved methods to avoid washing the freshly deposited concrete and forms shall be thoroughly wetted.
- d. Concrete shall be conveyed to forms as rapidly as practicable, by methods which shall prevent segregation or loss of ingredients. There shall be no free vertical drop greater than 1.5 meters. Approval of BSU shall be obtained before starting any concrete pour. Concrete shall be worked readily into the corners and angles of the forms around all reinforcement and embedded items by depositing the concrete as close as possible to its final position in the forms.
- e. If possible, concreting shall be done continuous until section is completed. When stoppage of concrete operations occurs, construction joints shall be placed either horizontally or vertically as indicated by BSU and provided with shear keys or dowels to develop bond.
- f. Pouring of concrete for foundations shall be done after BSU has verified the actual soil conditions at the site and approved the start of concreting. No footing shall rest on fill.
- g. The contractor shall not pour any concrete until BSU inspects and approves the conditions of forms, reinforcement and embedment's.
- h. For reduction or additions, on the contract sum due to deletion or extra involved, cast-in-place concrete shall be measured in cubic meter and payment shall be based on the actual volume using the unit prices on the proposal form.

5. CURING

All concrete shall be moist in an approved method of combination applicable to local conditions. Surface of the concrete shall be kept continuously wet by covering with water, by continuously spraying, or by covering with water, by continuously spraying, or by covering with burlap or other approved materials thoroughly saturated with water and keeping the covering wet by spraying or intermittent hosing. Water for curing shall be free from any elements which might cause objectionable staining or discoloration of the concrete.

6. REPAIR OF CONCRETE

- a. Imperfections shall be repaired and shall be completed within 24 hours after removal of forms.
- b. Fins shall be nearly removed from exposed surfaces.
- c. Damaged or honeycomb concrete must be removed to reach sound concrete and should be replaced with dry pack, rich mortar or concrete with pea gravel.
- d. Voids which appear upon the removal of forms shall be drenched with water and immediately filled with materials of the same composition as that used in the surface and smooth with a wood spatula or float.
- e. Large bulges and abrupt irregularities that protrude shall be removed by brushing, hammering and grinding.
- f. All materials, procedures and operations used in the repair of concrete shall be approved by BSU.
- g. The cost of materials, labor and equipment used in the repair shall be the sole responsibility of the contractor.

7. CONCRETE SLAB ON FILL

All concrete shall be moist in an approved method of combination applicable to local conditions. Surface of the concrete shall be kept continuously wet by covering with water, by continuously spraying, or by covering with water, by continuously spraying, or by covering with burlap or other approved materials thoroughly saturated with water and keeping the covering wet by spraying or intermittent hosing. Water for curing shall be free from any elements which might cause objectionable staining or discoloration of the concrete.

8. CONCRETE SLAB ON FILL

- a. Concrete slab on fill shall be laid on a prepared foundation. Sub-grade shall be rolled, rammed, or tamped layer by layered to a thoroughly compacted foundation.

9. CEMENT FINISH FOR CONCRETE AND CHB SURFACES

- a. All concrete surfaces including those indicated as "Cement Plaster" on drawings shall be given a fine finish.
- b. The cement surface shall be kept wet for four (4) hours before the required finish is applied.

10. INSPECTION

- a. Concrete shall be proportional, mixed, and placed in the presence of BSU representative, ample notice shall be given before mixing is recommenced.

11. CONCRETE HOLLOW BLOCKS

- a. Concrete hollow blocks shall be thoroughly wetted with water and embedded-in and cemented together with mortar. All blocks shall be laid plumb, true to line with level and accurately spaced courses breaking joints with the course below. Horizontal and vertical mortar joints shall be 3/8" thick with full mortar average on the face shells and the webs surrounding the cells to be completely filled. All blocks joints shall be struck flush to smooth even surface. Provide reinforcements as shown or specified and completely fill the cell with mortar to completely encase the reinforcement.
- b. Vertical and horizontal reinforcements shall be provided and hollow comes where such reinforcements run through shall be full filled with class "A" concrete. Unless otherwise indicated in the drawings, reinforcements shall consist of 10mm diameter vertical and horizontal bars spaced at 600mm on centers securely anchored to columns of frames and to the existing walls
- c. Mortar for joints and finishing plasters shall consist of one (1) part cement, (2) parts of sand, and minimum amount of water. Mortar joints shall be neatly trowelled and scraped of excess mortar.
- d. Prior to laying, blocks shall be uniformly moistened but not soaked; joints shall be neatly trowelled and scraped of excess mortar.

SECTION V- CARPENTRY WORKS AND LUMBER

1. SCOPE

- a. The contractor shall furnish all labor, materials, tools, and services necessary to complete all rough and finish carpentry work shown on the drawings or herein specified.

2. GENERAL

- a. Lumber shall be well seasoned, dry and free from large, loose and unsound knots, spas, shakes or other imperfections that may impair its strengths, durability or appearance. All exposed wood work shall be smoothly dressed and well sand-papered.
- b. All moldings shall be mitered at corners and capped at angles. Factory made doors, transoms, and windows, completely assembled with sash fitted in place, shall be used upon approval.

3. PLYWOOD BOARDS

- a. All plywood boards shall be of superior quality and thickness as indicated on plans.

4. FRAMES

- a. All framing doors and windows shall be done, as much as possible with carefully fitted mortise and tenon joints. Frames shall be rabbeted and cut with under cuts for water drips.

5. WALLS AND PARTITIONS

- a. Partitions shall be 4.5 mm thick Fiber Cement Board on .4mm thick x 50mm x 75mm x 3m metal stud 500 mm O.C. both ways and .4mm thick x 50mm x 75mm x 3m metal track. All walls shall be doubled (unless otherwise specified).

6. MISCELLANEOUS WOODWORK

- a. All other items of wood work not mentioned in the specifications not included in those items specifically excluded from the building construction, and needed to complete woodwork, shall be done in accordance with shop drawings and to be furnished later.

7. CEILING

- a. Interior exterior ceiling shall be 4.5mm thick fiber cement board on 0.5mm thick x 19mm x 50mm Double Metal Furring spaced at 600mm O.C. both ways or as specified on plans.
- b. Ceiling eaves shall be 0.50mm thick x 100mm Metal Spandrel Panel on 0.5mm thick x 19mm x 50mm Double Metal Furring spaced at 600mm O.C. both ways.

8. ROOF FRAMING

- a. Angle bar shall be full welded. Use 1/2" thick 3"x3"x 6m angle bar and 2" x 3" C-purlins.
- b. No part of the roof frame shall be exposed to weather especially moist and rain.

9. HARDWARES

- a. The contractor shall likewise furnish and install necessary hardware to leave the work complete, although not specifically mentioned herein. All such hardware shall conform in superior quality and finish to the rest of the hardware specified. Sample shall be approved by the BSU Architect or Engineer before installing.
- b. All door locksets shall be KW 400, Kwikset.
- c. All entrance doors for toilets shall be provided with door knobs and specified locks.
- d. 3 1/2" x 3 1/2" STANLEY. All flush doors with a width not more than 90cm. shall have three hinges, and four hinges, and four hinges for more than 90cm.

SECTION VI – TINSMITHRY WORKS

1. SCOPE OF WORK

- a. The work consists of furnishing all labor, tools, equipment and materials needed in the performance of operations relative to the fabrication, delivery to site, and installation, completion as required and specified.

2. MATERIALS

- a. Use .4mm pre-painted long span, rib type, dark green metal roofing.
- b. Sheet shall be laid with end laps as indicated on the drawings, the minimum end lap shall be 30mm and the minimum side lap shall be 2 1/2" rib wide. Steel sheets shall be fastened to the purlins at every alternate corrugation.
- c. Ridges, valleys, and hips shall be pre-painted with minimum thickness of 0.5mm.
- d. Ridge rolls shall lap at least 30cm over the roofing sheets. The ridge roll shall be fastened to the roofing sheets at every alternate corrugation.
- e. Valley rolls shall lap at least 30cm over the roofing sheets. The ridge roll shall be fastened to the roofing sheets at every fourth corrugation.
- f. Flashing shall be pre-painted with minimum thickness of 0.5mm. For corrugated sheets whose corrugations run parallel to the walls, one wing of the flashing sheets shall be corrugated to match the corrugations of the roofing sheets and shall be wide enough to cover at least 3 corrugations. All fascia boards shall be installed with flashings.

SECTION VII - DOORS AND WINDOWS

1. SCOPE OF WORK

- a. The contractor shall furnish all materials, labor, equipment, tools and services necessary to complete all work specified and shown on drawings. This work shall include the installation of powder coated aluminum windows.

2. ALUMINUM WINDOWS

- a. The type of window shall be in accordance with the schedule of window indicated and as reflected on plans.
- b. Hardware and Operation. All hardware and other attachments necessary to ensure proper operations of ventilators shall be as per manufacturer's specifications.
- c. Window glass shall be of 6mm thick designed for glazing from the outside.

3. DOORS

- a. The type of doors shall be in accordance with the schedule of doors indicated and as reflected on plans.
- b. Roll-up door shall be made of superior quality materials.
- c. Wooden doors shall be composed of materials as specified in the door schedule where lumbers should be well seasoned, dry and free from large, loose and unsound knots, saps, shakes or other imperfections that may impair its strengths, durability or appearance. All exposed wood work shall be smoothly dressed and well sandpapered.

4. DIMENSION TO BE VERIFIED

- a. All dimensions of openings as shown on drawings must be verified by the contractor.

SECTION VIII - PAINTING WORKS

1. GENERAL

- a. The manufacture's painting specification for Davies paints shall be considered part of these specifications.

2. SCOPE OF WORK

- a. The contractor shall furnish all labor, equipment, materials and services required to complete the entire painting work herein called for. Painting work shall include the painting of all interior and exterior masonry work, wood work, metal work, wallboards, etc., as specified herein after the required there to.
- b. The contractor shall be furnish all tools, brushes, spraying equipment, tackles, scaffolding, ladders, pails, pans and other equipment required to complete the entire painting work.

3. WORKMANSHIP

- a. All work shall be done by skilled painters in a workman like manner by being brushed or sprayed on the surfaces. All paints etc., shall evenly applied so as to be free from sags, runs, crawls, or other paint defects. All coats shall be of minimum brush marks. All brushes shall be clean and in good condition, heavy brushes are preferred.
- b. All paints shall be thoroughly stirred so as to keep the pigment evenly in suspension when paint is being applied.
- c. No paintings shall be done under conditions that are unsuitable for the production of good results. No oil painting shall be done on damp weather.
- d. All coats shall be thoroughly dry before the succeeding coat is applied. Allow at least twenty-four (24) hours between coats unless otherwise specified by the manufacturer.
- e. Painting coats are specified and intended to cover surfaces perfectly, if surfaces are not fully covered, further coats shall be applied to attain the desired evenness of the paint application.
- f. All parts of the molding shall be left clean and true to details. All findings shall be uniform as to sheen, color, and texture except when glazing is required.

4. MATERIALS

- a. All paints and painting materials shall be as manufactured by Davies Paints Philippines Inc.
- b. All paint materials shall be delivered at the site in their original containers, with labels intact and seals unbroken.
- c. With the exception of ready-mixed materials in original containers all mixing shall be done at the jobsite. No materials are to be reduced or changed except as specified by the manufacturer of the said materials. The use of white zinc (lithopone) will not be allowed.
- d. A place will be designated by the BSU architect or engineer for the storage of paint materials and tools. Whenever it may be necessary to change the location of his storage space, the contractor shall promptly move to the newly designated place. The storage space floor shall be adequately protected from damage and from paint. Paints shall be kept covered at all times and safeguarded to prevent fire.

5. COLORS

- a. All colors of paint and varnishes shall be in accordance with color scheme as approved by BSU.

6. PROTECTION

- a. Protect all electrical plates, surface hardware, etc. during the painting operations.
- b. All floors, other surfaces and equipment shall be protected during the painting operations by any method acceptable and approved by the BSU Architect or Engineer.

7. PREPARATION OF SURFACES

- a. Before applying paint finish, all surfaces must be thoroughly dry, clean and free from dust, grease, and dirt and properly prepared to receive finish. Boysen/Davies paint or equivalent and Varnish Remover shall be used.
- b. No painting shall be done at any time unless the surface to be treated is thoroughly dry. The contractor shall inspect all surfaces to be painted and shall report all defects therein to the BSU architect or engineer prior to painting. The architect or engineer will cause these defects to be remedied. The commencing to the work by the contractor indicates his acceptance of the surface to be painted.
- c. Wood surface shall be sand papered to a smooth and even surface duster. Blemishes on surfaces to be varnished shall be corrected. After primer stain coat all cracks and nail holes shall be filled with putty. Putty used in stained work shall batch the stained wood.
- d. Brick, stucco, and concrete surfaces shall be free from excess mortar. Treat surfaces with Davies Masonry Neutralizer brushing the surface free of loose crystals when dry. New plaster must be allowed to dry thoroughly. Places in walls must be repaired with plastic patch-deep holes with matching plaster.
- e. Metal surfaces shall be cleaned, free of mill scale, rust and foreign matter by scrapping flame cleaning, sand blasting or wire brushing. Loosed and scaling point shall be scraped and fire-brushed to sound metal surface.
- f. Manufacture's requirements for preparation of surfaces shall be considered apart of these specifications.

8. PAINTING SCHEDULE

- a. Wood (ceiling)
 - Primer : Boysen/Davies Flat Wall Enamel or equivalent
 - Second Coat : Boysen/Davies Flat Latex, White or equivalent
 - Third Coat : Boysen/Davies Semi-gloss, Latex, White or equivalent

- b. Exterior Wall

- Cementitious Waterproofing: Boysen /Davies or equivalent

- Skim Coat : Boysen /Davies or equivalent

- Primer : Boysen /Davies Acrytex Cast B_5715 or equivalent

- Second Coat : Boysen /Davies Wallguard, Semi-gloss Latex or equivalent
- Third Coat : Boysen /Davies Wallguard, Semi-gloss Latex or equivalent
- c. Interior Wall
 - Cementitious Waterproofing: Boysen /Davies or equivalent
 - Skim Coat : Boysen /Davies or equivalent
 - Primer : Boysen /Davies Flat Latex or equivalent
 - Second Coat : Boysen /Davies Semi-gloss Latex, White or equivalent
 - Third Coat : Boysen /Davies Semi-gloss Latex, White or equivalent
- d. Steel Window
 - Primer : Boysen /Davies Red Oxide or equivalent
 - Second Coat : Boysen /Davies Permacoat Gloss Latex Paint or equivalent
- e. Other Wood Surfaces
 - Baseboard : Boysen /Davies Chocolate Brown or equivalent
 - Door Jamb : Boysen Raw Siena

SECTION IX – PLUMBING AND WATER SERVICE SYSTEM

1. SCOPE OF WORK

- a. The works shall include the following:
 - Supply and the installation of pipes and fittings for all sanitary lines and water line.
 - Supply and installation of all plumbing fixture shown in the drawings and described in this specification.
 - Installing a system of drain, soil, vent, waste and building sewer.
 - Connecting building sewer to the constructed septic tank.

2. GENERAL

- a. Piping shall be standard G.I. Pipe schedule 40 of size as indicated On the drawing or as specified herein. The main service line shall connect to the water tank.
- b. Minimum fairly constant, service pressure at a point outlet discharge shall not be less than 8 psi for all fixtures except for direct flush valves, for which it shall not be less than 15 psi and except where special equipment is used requiring higher pressure.
- c. Piping for sanitary lines shall be standard PVC pipe. Water closets, urinals, lavatories, sink and floor drain pipes shall connect water directly to soil pipes leading to the septic tank. Every water closet and lavatory shall be provided with individual shut-off. Every plumbing fixture shall be separately provided with vented vitae sealed trap placed close to the fixtures. The open end of the vent pipes shall be entirely covered with no.16 mesh copper wire. Floor drains shall be nicked plated.
- d. The body of clean-out ferrules shall conform the thickness of the required pipe and fittings of the same material, and shall extend not less than one quarter inch (1/4") above the hub. The Clean-out plug shall be provided with raised nut of recessed socket from removal, in accordance with the American Standard Tapered Pipe Threads.
- e. Clean-out shall be of the same nominal size as the pipes up to four (4") inches and not less than four (4") inches for larger pipes.

3.PERFORMANCE TEST

- b. It shall be the responsibility of the contractor to test all the system of the entire plumbing installation for proper operational condition. The test shall be conducted in the presence of the BSU Project Architect or Engineer.

1. MATERIALS

- a. All plumbing fixtures shall be within the American Standard or equivalent.

2. PLUMBING FIXTURES AND ACCESSORIES

- a. Water Closet and Lavatory and Fittings - American Standard or equivalent
- b. Stainless Single Tub Kitchen sink (complete w/ fittings)

3. INSTALLATION

- a. All fixtures shall be installed firmly and carefully to avoid injury to the item. They shall be installed with high quality workmanship to the satisfaction of BSU.

SECTION X - ELECTRICAL WORK

1. SCOPE OF WORK

- a. Work covered by this specification shall include furnishing all labor, materials, equipment and services required to construct and install the complete electrical system shown on accompanying plans and specified herein. All work shall be in accordance with the governing codes and regulation and with the specifications, except when the same shall conflict with such codes, etc., in which case the latter shall then govern.
- b. Under this section of the specifications, the contractor shall provide all materials and equipment and perform all the work necessary for the drawings as herein specified; except as otherwise excluded, as which without excluding the generality of the foregoing, shall include but not limited to the following principal items of work.
 - A complete wiring for the exterior and interior lighting and power system, including all feeders, branch circuit and connections to all lighting power outlets.
 - All general lighting fixtures and lamps
 - Grounding system of all electrical equipment
 - Optional items of work
 - If anything has been omitted in any items of work on materials usually furnished, which are necessary for the completion of the electrical works as outlined herein before, such must be hereby included in this section of the work.

2. CODES, REGULATIONS AND ORDINANCES

- a. The electrical items under this contract is to be installed according to the requirements of the latest Philippine Electrical Code, the rules and regulations of the Authority concerned and the requirements of the Power Company. Nothing contained in these specifications or shown on the drawings shall be construed as to the conflict with the National and Local Ordinances or Laws governing the installation of electrical work, and all laws and ordinances are hereby made part of these specifications, the contractor is required to meet the requirements thereof.

3. PLANS AND DRAWINGS

- a. The contract drawing, which constitutes an integral part of this contract, shall serve as working drawings. They indicate the general layout of the complete electrical system and show arrangements of feeders, circuits, outlets, switches, control panel board, fixture and other works.
- b. The Contractor shall follow all plans to avoid possible installation conflicts. Should drastic changes from the original plan be necessary to resolve such conflicts, the contractor shall notify the BSU Architect or Engineer and shall secure from him written approval and agreement concerning necessary changes and adjustments before alteration of the installation work will commence.

4. MINOR MODIFICATIONS

- a. The plans as drawn are based upon architectural plans and details and show conditions as accurately as possible to indicate them in scale. The plans are diagrammatical and do not necessarily show all fittings, etc., necessary to fit

the conditions. The locations of lighting fixtures, convenience outlets, and switches shown on plan are approximate.

5. MATERIAL STANDARDS

- a. All materials shall be new and shall conform with standard specified in the Philippines Electrical Codes and other such as IEEE for every case where such a standard has been established for the particular type of materials in questions.
- b. All materials on all systems shall comply with the following specifications, unless specifically accepted, and all materials where not specified shall be of the best of their respective kind.
- c. Sample of all materials shall be submitted for approval as required by BSU.
- d. All electrical materials shall be new and shall meet the requirements and shall bear the inspection label, wherever standards have been established.
- e. The entire installation shall be free from improper ground and from short circuits.
- f. It shall be the responsibility of the contractor to test all the systems of the entire electrical installations for proper operational condition.
- g. The contractor shall do all the cutting and fitting required for the installation of the electrical items and coordinate with the work of other trades, in accordance with the drawings and in the manner satisfactory to BSU.

6. WIRE AND CABLE

- a. All wires shall be copper, soft-drawn and annealed, shall be of 98% conductivity shall be smooth and fine of a cylindrical form and shall within the actual size called for.
- b. All wires and cables shall comply with the requirements as to the particular usage.
- c. All wires and cables for lighting and power system shall be moisture and heat resistant rubber or thermoplastic insulate.
- d. No wire smaller than # 12 shall be used for convenience outlet.
- e. All wires and cables shall be as manufactured by PHELPS DODGE.

7. PIPES

- a. Wiring shall be done in RSC and CPC pipe, for steel conduit, it shall be of standard weight mild steel hot galvanized, with an interior coating.
- b. Wiring running on walls shall be in a 20mm PVC molding.
- c. No wire shall be pulled into any conduit until the conduit system is completely in all details and in the case of concealed work.
- d. The end of all conduits shall be tightly plugged to exclude plaster, dust and moisture while the building is in the process of construction. All conduit ends shall be reamed to remove all burrs.

8. OUTLETS BOXES AND FITTINGS

- a. All outlets of whatever kind for all system there shall be provided suitable fitting, which shall be either a box or other device especially designed to receive the type of fittings to be mounted thereon.

9. JUNCTION AND PULL BOXES

- a. Junction and pull boxes (PVC) shall be provided as indicated or as required for facilitating and pulling of wires and cables. Junction and pull boxes in finished places shall be located and installed with the permission and to the satisfaction of the BSU Architect and Engineer.

10. WALL SWITCHES

- a. Wall switches shall be rated at 15 amperes, 240 volts, one way or as required.

11. INDIVIDUAL BREAKER AND SWITCHES

- a. Provide individual circuit breakers, safety switches and disconnect switches as where indicated. Voltage ratings shall be suitable in each case of service application.
- b. Enclosure shall be in General Purpose and shall be almost all the requirements and specifications of the Philippine Electrical Code.
- c. Breakers shall be capable of being closed and operated by hand without employing any other source of power.

- d. Safety and disconnected switches shall be fusible and non-fusible as required end of sizes as indicated in plans.

12. LIGHTING SYSTEM

- a. The lighting system shall be complete in every respect, all indicated on the plan or specified.
- b. All works for the lighting system inside the ceiling shall be done utilizing knob and tube work and lighting circuits shall be balanced at panels
- c. Mounting heights of devices shall be as follows;
- Local switches 4' to 5'
 - Convenience outlet 12" above the floor or above the counters, or as directed by the BSU Engineer / Architect.
- d. Install all lighting fixtures and lamps as specified or at the locations shown in plans or as directed by BSU engineer or architect. All lighting fixtures to be installed shall be LED or CLF.
- e. Submit samples of each fixture to the BSU architect for approval prior to installation.

SECTION XI – GENERAL CLEANING AND DEMOBILIZATION

1. SCOPE OF WORK

- a. Upon the completion, the contractor shall remove from the building all the materials and debris created by him, and leave his part of the work in a clean and finished condition acceptable to the owner. Washing and polishing of window glass and all other glazing works shall be done by him.

SPECIAL PROVISIONS

1. START AND COMPLETION OF WORK

The contractor shall start the work within five (5) calendar days after specified date in the notice to proceed given to by BSU and he shall complete the work within the agreed number of calendar days.

All salvage materials shall be turned over to the BSU main campus storehouse.

2. CONSTRUCTION MEN IDENTIFICATION

The contractor shall provide all his men working in the project with identification cards at the project site that BSU required.

3. ACCIDENT

The contractor shall provide, at the site, such medical facilities which are necessary to supply the first aid of anyone who may be injured in connection with the work. The contractor must promptly report in writing to BSU all accidents whatsoever arising out of or in connection with the performance of the work, whether on, or adjacent to the site, which cause death, personal injury, on property damages giving full details and statement of witnesses.

4. COST AND FIGURE DISCREPANCIES

In case of discrepancies between costs and total bid cost, the latter shall govern. In case of error between price in words and figures occurs, the price in figures shall be considered as the bid.

5. PROTECTION

The contractor shall protect the work of all other trades against damage or injury by his employee, or by his material, tools or utensils used in connection with this contract. Any damage done by him or his employees shall be repaired at his own expense, without any additional compensation beyond the contract price.

The contractor shall be held responsible for the repairs to have own or other made necessary by the defective workmanship or careless of other crafts.

Any damage to any part or part of the structure of the structure of the building caused by the contractor shall be repaired at his own expense.

6. WARRANTY AND GUARANTEES

The contractor shall guarantee all works specified are free from the defective workmanship and materials, and will remain so far for a period of 1 year from the date of acceptance of the work. Any defects, appearing within the aforesaid period, shall be remedied by the contractor at his own expense.

7. WORKMANSHIP

The work throughout shall be executed in the best and most thorough manner under the redirection of and to the satisfaction of the BSU Engineer and Architect and shall have the power to reject any works and materials which, in his judgment, are not in full accordance therewith.

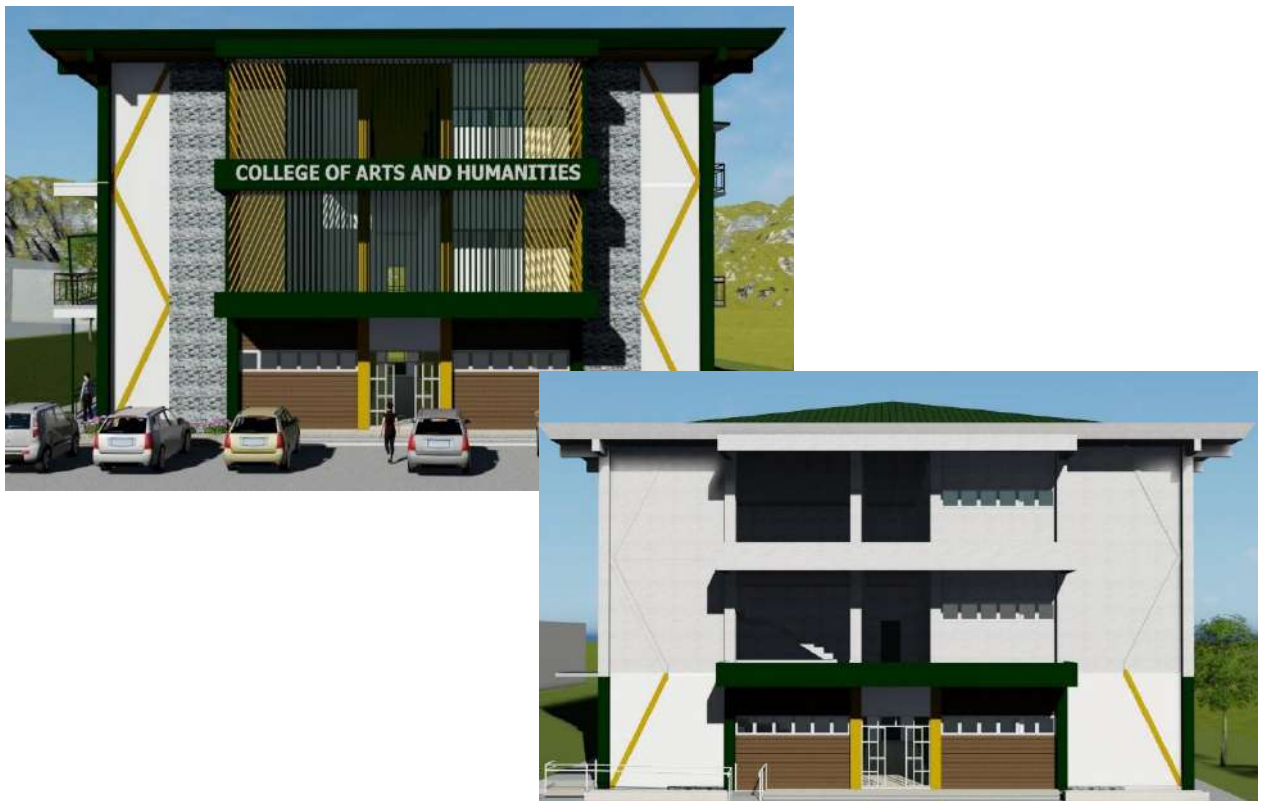
8. MANNER OF PAYMENT

The contractor shall be paid through progress billing and shall submit a request for the payment corresponding to the percentage of work accomplished with statement of work accomplishment and the project photos before and after each activity as attachment. Such request shall be verified by the monitoring and inspection committee or its duly appointed representative. Benguet State University shall have the right to deduct from the contractor's progress billing such amount as may be necessary to cover the third party's liabilities, as well as the uncorrected defects in the projects.

The payment shall be subjected to retention of ten percent (10%) referred to as the "retention money" in accordance with pertinent provisions of RA 9184.

Section VII. Drawings

IB 2025-22– CONSTRUCTION OF THE COLLEGE OF ARTS HUMANITIES BUILDING-PHASE I



Please see attached plans and design

Section VIII. Bill of Quantities

Notes on the Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

- a. to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and
- b. when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and brief as possible.

Daywork Schedule

A Daywork Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Entity of the realism of rates quoted by the Bidders, the Daywork Schedule should normally comprise the following:

- a. A list of the various classes of labor, materials, and Constructional Plant for which basic daywork rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a daywork basis.
- b. Nominal quantities for each item of Daywork, to be priced by each Bidder at Daywork rates as Bid. The rate to be entered by the Bidder against each basic Daywork item should include the Contractor's profit, overheads, supervision, and other charges.

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as

the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Procuring Entity to select such specialized contractors. To provide an element of competition among the Bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

Signature Box

A signature box shall be added at the bottom of each page of the Bill of Quantities where the authorized representative of the Bidder shall affix his signature. Failure of the authorized representative to sign each and every page of the Bill of Quantities shall be a cause for rejection of his bid.

These Notes for Preparing a Bill of Quantities are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final documents.

Please see attached Bill of Quantities and Detailed Estimates

Section IX. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. *The mandatory provisions of Required Forms shall be considered as per GPPB Circular No. 4-2020; or*
- c. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary “pass/fail” criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- a. Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) **in accordance with Section 8.5.2 of the IRR;**

Technical Documents

- b. Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid, **(strictly follow the form in Section X); and:**
- c. Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules. SLCC shall be supported by an Owner's Certificate of Final Acceptance issued by the project Owner other than the contractor, or a final rating of at least Satisfactory in the CPES, or a similar performance and monitoring system. In case of contracts with the private sector, an equivalent document shall be submitted **(strictly follow the form in Section X)**
 1. For owner's Certificate of Acceptance, which shall contain the following:
 - i. Name of project owner that issued the certificate;
 - ii. Name of Contractor/ constructor
 - iii. Name of Contract; and
 - iv. Contract Duration
 2. For CPES and similar performance and monitoring system, a final rating of at least Satisfactory.

and

- d. Valid PCAB License, or
- e. Special PCAB License in case of Joint Ventures **and** registration for the type and cost of the contract to be bid; **and**
- f. Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission **or** Original copy of Notarized Bid Securing Declaration **(strictly follow form in Section X); and**
- g. Project Requirements, which shall include the following:
 1. Organizational chart for the contract to be bid;
 2. List of contractor's key personnel, to be assigned to the contract to be bid, with their complete qualification and experience data;

Key Personnel	No. of Personnel	General Experience	Relevant Experience
Site Engineer/ Site Architect	1	At least 3 years	At least 3 years
Safety Officer – Part time, with COSH training from accredited provider by DOLE	1	At least 3 years	At least 3 years
Electrical Engineer/ Master Electrician	1	At least 3 years	At least 3 years
Sanitary Engineer/ Master Plumber	1	At least 3 years	At least 3 years
Construction Foreman	1	At least 3 years	At least 3 years

3. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, and certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**
- h. Original duly signed Omnibus Sworn Statement (OSS) **and** if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

- i. The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) (See sample form in Section X), which shall contain the following mandatory provisions:
 1. Name of the Project to be bid;
 2. ABC to be bid;
 3. Amount or value of bidder's current assets based on Audited Financial Statements (AFS);
 4. Amount or value of bidder's current liabilities based on AFS; and
 5. Amount or value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started. Coinciding with the contract to be bid

Class "B" Documents

- j. If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence **or** duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

II. FINANCIAL COMPONENT ENVELOPE

- k. Original of duly signed and accomplished Financial Bid Form; **and**

Other documentary requirements under RA No. 9184

- l. Original of duly signed Bid Prices in the Bill of Quantities (must have signature box in each and every page); **and**
- m. Duly accomplished Detailed Estimates Form, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid (must have signature box in every page); **and**
- n. Cash Flow by Quarter; and
- o. Soft Copy (in Flash drive) of bill of quantities and detailed estimates to be included in the "original copy" of the bid.

Notes:

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. This checklist is only a guide to the prospective bidder/s. Each prospective bidder shall take responsibility to ensure the completeness of its submission after taking the steps to carefully examine all of the Bidding Documents and its amendments.*
- b. All photocopied documents shall be marked "certified true copy of the original document" with corresponding signature over printed name of the bidder or its duly authorized representative and indicating the position in the company.*
- c. Bidder shall follow the sequence of items in the checklist of documents for submission and use tabs to facilitate the inspection process.*
- d. Incomplete required documents and expired licenses/ permit shall be a ground for disqualification*
- e. The documents that will be submitted by the bidder shall be used for procurement purposes only.*

Section X. Bidding Forms

1. Bid Form
2. Bid Securing Declaration Form
3. Net Financial Contracting Capacity (NFCC) Form
4. Statement of Single Largest Completed Contract (SLCC)
Form
5. Statement of All Ongoing Government & Private
Contracts Form
6. Omnibus Sworn Statement (Revised)
7. Certificate of Site Inspection

Bid Form for the Procurement of Infrastructure Projects
[shall be submitted with the Bid]

BID FORM

Date: _____

Project Identification No.: _____

To: [name and address of Procuring Entity]

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: [insert name of contract];

We offer to execute the Works for this Contract in accordance with the PBDs;

The total price of our Bid in words and figures, excluding any discounts offered below is: [insert information];

The discounts offered and the methodology for their application are: [insert information];

The total bid price includes the cost of all taxes, such as, but not limited to: [specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties], which are itemized herein and reflected in the detailed estimates,

Our Bid shall be valid within a period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;

If our Bid is accepted, we commit to obtain a Performance Security in the amount of [insert percentage amount] percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines³ for this purpose;

We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;

We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and

We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.

We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the [Name of Project] of the [Name of the Procuring Entity].

We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Date: _____

³ currently based on GPPB Resolution No. 09-2020

Bid Securing Declaration Form

[shall be submitted with the Bid if bidder opts to provide this form of bid security]

REPUBLIC OF THE PHILIPPINES)

CITY OF _____) S.S.

BID SECURING DECLARATION

Project Identification No.: *[Insert number]*

To: *[Insert name and address of the Procuring Entity]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.
3. I/We shall enter into contract with the PE and furnish the required performance security within ten (10) calendar days, from receipt of the Notice of Award.
4. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
 - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
 - c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of [month] [year] at [place of execution].

[Insert NAME OF BIDDER OR ITS
AUTHORIZED REPRESENTATIVE] *[Insert signatory's
legal capacity] Affiant*

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

Project Identification No. _____
Project Title: _____
ABC of the Project/Lot/Item to be Bid: _____

CERTIFICATE OF NET FINANCIAL CONTRACTING CAPACITY (NFCC)
(Please show computation)

This is to certify that our Net Financial Contracting Capacity (NFCC) in Philippine Pesos _____ (₱ _____) is at least equal to the total ceiling price of the goods/services/works we are bidding. The amount is computed as follows:

$$\text{NFCC} = (\text{CA} - \text{CL}) (15) - \text{C}$$

Where:

CA = Current Assets

CL = Current Liabilities

C = value of all outstanding or uncompleted portions of contracts/projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract of the bid.

Issued this _____ day of _____, 20____.

(Company Authorized Representative)

NAME:

DESIGNATION:

Note: Kindly attach supporting documents

Procuring Entity: Benguet State University

Name of Project:

Location of the Project:

Statement of Single Largest Completed Contract (SLCC) which is Similar in Nature

Business Name: _____

Business Address: _____

Name of Contract	Date of Contract	a. Owner’s Name	a. Date Awarded	Contract Amount	Contract Duration	1. Date of Completion	Date of Final Acceptance	Description/s of the similar project/s
		b. Address	b. Contract Effectivity			2. Amount of Completed contract		
		c. Telephone Nos.						
		d. Contact Person						
		e. Email Address						
<u>GOVERNMENT</u>								
<u>PRIVATE</u>								

Note: Kindly attach documents to support the above statements (Notice of Award, Notice to Proceed, Contract, Certificate of Completion, Certificate of Final Acceptance, CPES)

Submitted by : _____

Print Name and Signature

Designation : _____

Date : _____

Procuring Entity: *Benguet State University*

Name of Project:

Location of the Project:

Statement of All Ongoing Government & Private Contracts Including Contracts Awarded but Not Yet Started

Business Name:

Business Address:

Name of Contract/Location (A)	Date of Contract (B)	Project Duration (C)	a. Owner's Name b. Address c. Telephone Nos. d. Contact Person e. Email Address (D)	Nature of Work (E)	a. Date of Award b. Date Started c. Date of Completion (F)	Contract Amount (G)	% of Accomplishment		Value of Outstanding Contract (J) (G-I)
							Planned (H)	Actual (I)	
<u>GOVERNMENT</u>									
<u>PRIVATE</u>									

Note: Kindly attach documents to support the above statements (Notice of Award, Contract, Notice to Proceed and other documents). All spaces should be filled out with correct information.

Submitted by : _____

Print Name and Signature

Designation : _____

Date : _____

Omnibus Sworn Statement

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. Select one, delete the other:

If a sole proprietorship: I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. Select one, delete the other:

[If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

[If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;
6. ***Select one, delete the rest:***

If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a partnership or cooperative: None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a corporation or joint venture: None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a) Carefully examining all of the Bidding Documents;
 - b) Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - c) Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d) Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. ***In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute***

criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of ____, 20__ at _____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED
REPRESENTATIVE]

[Insert signatory's legal capacity] Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]



COMPANY LETTER HEAD

BILL OF QUANTITIES

PROJECT TITLE:		CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES-PHASE I					
PROJECT LOCATION :		BSU La Trinidad Campus, Benguet					
TOTAL PROJECT COST :		PHP	25,000,000.00				
PROJECT DURATION:		275 C.D.	INCLUSIVE OF:	39	UNWORKABLE DAYS		
IMPLEMENTATION MODE:							
PROJECT DESCRIPTION		EQUIPMENT NEEDED		EQUIPMENT NEEDED			
		NO.	DESCRIPTION	NO.	DESCRIPTION		
Construction of a 3-storey academic building having a total area of 1485 sq.m.		1	Truck (2-5 MT)	2	Bar Bender		
		1	Transit Mixer	1	Cutting outfit		
		2	Concrete Vibrator	40	H-Frame 1.7m x 1.2m, set		
		2	Welding Machine	1	Various Power tools		
		1	Bar Cutter	1	Various Minor tools		
				TECHNICAL PERSONEL			
				NO.	DESCRIPTION		
				1	Site Engineer/ Site Architect		
				1	Safety Officer (Part-time)		
				1	Construction Foreman		
				1	Electrical Engineer/Master Electrician		
				1	Sanitary Engineer/Master Plumber		
ITEM NO.	DESCRIPTION		% WEIGHT	QUANTITY	UNIT	UNIT COST	TOTAL COST
I.	GENERAL REQUIREMENTS and SITE WORKS						
a.	Mobilization/Demobilization			1	lot		-
b.	Occupational Safety and Health Program			1	lot		-
c.	Temporary Facility and Utilities			12	m²		-
d.	Permits and Clearances (Building Permit,Geotechnical Exploration)			1	lot		-
e.	Project Billboard			1	lot		-
f.	Clearing, Grubbing and Cleaning			915	m²		-
g.	Structural Excavation - common earth			3,660	m³		-
h.	Embankment from Structure Excavation			3,660	m³		-
II.	PLAIN and REINFORCED CONCRETE WORKS						
a.	Gravel Bedding			91.50	m³		-
b.	Steel Works			146,564	kgs.		-
c.	Formworks			1,518.39	m²		-
d.	Concrete Works			663.33	m³		-
III.	ROOFING WORKS						
a.	Structural Steel Roof Framing			7,794.75	kgs.		-
b.	Roof Sheeting and Accessories			660	m²		-
IV.	MASONRY WORKS						
a.	CHB Laying (First floor perimeter wall and interior wall, comfort room;Second floor to Third (perimeter and comfort room)			841.07	m²		-
b.	Plastering (First floor perimeter wall-exterior and interior, comfort room;Second floor to Third (perimeter wall-exterior side and comfort room)			1,159.72	m²		-
c.	Floor Topping (First floor)			479.46	m²		-
V.	ELECTRICAL WORKS						
a.	Conduits and Boxes (First floor ; second floor and third floor-perimeter walls and comfort room)			1,662	ln.m.		-
b.	Wires and Wiring Devices (First floor;Second and Third floor-perimeter walls and comfort room)			4,200	ln.m.		-
c.	Electrical Fixtures (First Floor)			50	sets		-
d.	Panel Board/ Boxes/breakers (First floor;Second and Third Floor Perimeter wall and comfort rooms)			152	sets		-
VI.	PLUMBING WORKS						
a.	Pipe Lines (First floor to Third Comfort Rooms)			98.1	ln.m.		-

b.	Plumbing Fixtures (First floor Comfort rooms)		15	sets		-
c.	Septic Vault		2	units		-
VII.	ARCHITECTURAL FINISHING					
a.	Ceiling - 4.5mm Fiber Cement Board on Metal Frame		479.04	m²		-
b.	Panel Doors (First floor)		30	m²		-
c.	Steel Doors (First Floor)		6.80	m²		-
d.	Aluminum Doors (First Floor)		13.75	m²		-
e.	Aluminum Windows (First Floor exterior and interior; Second to Third Floor-exterior)		136.90	m²		-
f.	Painting Works (First floor exterior walls and interior walls and ceiling)		1,725.98	m²		-
g.	Dry Wall Partition (First floor)		576	m²		-
h.	Tileworks (Unglazed Tiles)- (First Floor Comfort room)		27	m²		-
i.	Tileworks (glazed Tiles)-(First floor Comfort Room)		72	m²		-
j.	Modular Partition (First Floor Comfort Room)		22.60	m²		-
k.	Handrail and Guardrails (Ramp-Entrance,Stairs-first floor to third floor)		209.50	ln.m.		-
l.	Carpentry Works (First Floor Raised Platforms)		16	m²		-
VIII.	SITE DEVELOPMENT		125	m²		-
IX.	FIRE SAFETY (First Floor)		15	sets		-

AMOUNT OF BID COST IN FIGURES:	0.00%		0.00
--------------------------------	-------	--	------

BREAKDOWN OF BID COST			TOTAL COST
A.	DIRECT COST		0.00
	EQUIPMENT		-
	LABOR		-
	MATERIALS		-
B.	INDIRECT COST		0.00
	OCM		-
	CONTRACTOR'S PROFIT		-
	TAXES		-
C.	PROJECT COST(TOTAL A+B)		0.00

AMOUNT OF BID COST IN FIGURES:	0.00
--------------------------------	------

TOTAL BID AMOUNT IN WORDS:	
----------------------------	--

I hereby submit the foregoing bid and that I understood the terms and conditions of the contract.

Name of Bidder/ Contractor:_____

(Signature over printed name)

Position:_____

Name of Company:_____

Date:_____

COMPANY LETTER HEAD

Project **CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I**
 Owner Benguet State University
 Location BSU La Trinidad Campus
 Date:
 Project Description:
 Project Duration: 275 C.D. inclusive of 39 unworkable days

DETAILED ESTIMATES

I. GENERAL REQUIREMENTS and SITE WORKS

a. Mobilization/Demobilization	1	lot				
1 labor	no.	daily rate		amount		
2 equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		-
Cargo/Service Truck (9-10 mt)	1	/day				-
3 material & description	quantity	unit cost		amount		
4 Total Direct Cost (1 + 2 + 3)						-
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4				-
6 Contractor's Profit		0% of item 4				-
7 Tax		5% of item 4 + 5 + 6				-
8 Total Unit Cost (4 + 5 + 6 + 7)		Php				cost per item

b. Occupational Safety and Health Program	1	lot				
1 labor	no.	daily rate	no of days	amount		-
a. Safety Officer / Practitioner (full time)		production rate		days to complete		-
2 equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		-
minor tools (10% of Labor Cost)		output rate		days to complete		-
3 material & description	quantity	unit cost		amount		-
assorted warning and safety signages	1 lot	/lot				-
canvass (for jobsite perimeter enclosure/fencing)	1 roll	/roll				-
vest	30 pcs.	/pc.				-
safety shoe/ boots	30 pcs.	/pc.				-
safety gloves	30 pcs.	/pc.				-
skull guard/ hard hat	30 pcs.	/pc.				-
safety harness	20 pcs.	/pc.				-
first aid kit	1 unit	/unit				-
fire extinguisher, 5lbs. (refill)	1 unit	/unit				-
4 Total Direct Cost (1 + 2 + 3)						-
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4				-
6 Contractor's Profit		0% of item 4				-
7 Tax		5% of item 4 + 5 + 6				-
8 Total Unit Cost (4 + 5 + 6 + 7)		Php				cost per item

c. Temporary Facility and Utilities	12	m ²				
1 labor	no.	daily rate	no of days	amount		-
		production rate		days to complete		-
lead man		m ² /manhour				0.00
skilled labor		/day				0.00
unskilled labor		/day				0.00
2 equipment (rental based on ACEL rates)		daily rental	no of days	amount		-
		output rate		days to complete		-
minor tools (10% of Labor Cost)						-
3 material & description	quantity	unit cost		amount		-
assorted construction materials	1 lot	/lot				-
Assorted CWN	2 kg	/kg				-
4 Total Direct Cost (1 + 2 + 3)						-
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4				-
6 Contractor's Profit		0% of item 4				-
7 Tax		5% of item 4 + 5 + 6				-
8 Total Unit Cost (4 + 5 + 6 + 7)		Php				cost per item

d. Permits and Clearances (Building Permit, Geotechnical Exploration)	1	lot				
1 labor	no.	daily rate	no of days	amount		-
		production rate		days to complete		-
Professional Electrical Engineer						-
Master Plumber / Sanitary Engineer						-
2 equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		-
	output rate			days to complete		-

Name of Bidder/ Contractor: _____
 (Signature over printed name)
 Position: _____
 Name of Company: _____
 Date: _____

3	material & description	quantity	unit cost	amount	-
	Zoning Clearance Fee	1 lot	- /lot	-	
	Fire Safety Clearance and Certificate	1 lot	- /lot	-	
	Geotechnical Exploration	3 holes	/hole	-	
4	Total Direct Cost (1 + 2 + 3)			-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0% of item 4		-	
6	Contractor's Profit	0% of item 4		-	
7	Tax	5% of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php		-	cost per item
e.	Project Billboard	1 lot			
1	labor	no.	daily rate	no of days	amount
	production rate	-	-	-	days to complete
	lead man		/day		-
	unskilled labor		/day		-
	unskilled labor		/day		-
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount
	output rate	-	-	-	days to complete
3	material & description	quantity	unit cost	amount	-
	Printed Tarpulin (8ft x 8ft)	64 sq.ft.	/sq.ft.	-	
	Ordinary Plywood	2 pcs	/pc	-	
	Good lumber	40.5 bd.ft.	/bd.ft	-	
	Assorted CWN	1 kg	/kg	-	
4	Total Direct Cost (1 + 2 + 3)			-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0% of item 4		-	
6	Contractor's Profit	0% of item 4		-	
7	Tax	5% of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php		-	cost per item
f.	Clearing, Grubbing and Cleaning	915 m²			
1	labor	no.	daily rate	no of days	amount
	***removal of existing trees	production rate	35.00 m²/manhour	3.268	days to complete
	lead man		/day		-
	unskilled labor		/day		-
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount
	output rate		m²/manhour		days to complete
	minor tools (10% of Labor Cost)				-
3	material & description	quantity	unit cost	amount	-
4	Total Direct Cost (1 + 2 + 3)			-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0% of item 4		-	
6	Contractor's Profit	0% of item 4		-	
7	Tax	5% of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php		-	cost per item
g.	Structural Excavation - common earth	3,660 m³			
1	labor	no.	daily rate	no of days	amount
	production rate		m³/manhour		days to complete
	lead man		/day		-
	skilled labor		/day		-
	unskilled labor		/day		-
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount
	output rate		m³/manhour		days to complete
	Excavator, .80m³		/day		-
	Dump Truck (12 yd³)		/day		-
	minor tools (10% of Labor Cost)				-
3	material & description	quantity	unit cost	amount	-
4	Total Direct Cost (1 + 2 + 3)			-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0% of item 4		-	
6	Contractor's Profit	0% of item 4		-	
7	Tax	5% of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php		-	cost per item
h.	Embankment from Structure Excavation	3,660 m³			
1	labor	no.	daily rate	no of days	amount
	production rate		m³/manhour		days to complete
	lead man		/day		-
	skilled labor		/day		-
	unskilled labor		/day		-

Name of Bidder/ Contractor:_____
(Signature over printed name)
Position:_____
Name of Company:_____
Date:_____

2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ³ /manhour		days to complete	
	Excavator, .80m ³	1	/day		-	
	plate compactor (0.50hr / 1.20m ³)	1	/day		-	
	minor tools (10% of Labor Cost)				-	
3	material & description	quantity	unit cost		amount	-
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4		-	
6	Contractor's Profit		0% of item 4		-	
7	Tax		5% of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)		Php		-	cost per item
II. PLAIN and REINFORCED CONCRETE WORKS						
a.	Gravel Bedding	91.50	m ³			
1	labor -place	no.	daily rate	no of days	amount	-
		production rate	m ³ /manhour		days to complete	
	lead man		/day		-	
	unskilled labor		/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ³ /unithour		days to complete	
	plate compactor (0.50hr / 1.20m ³)	1	/day		-	
	minor tools (10% of Labor Cost)				-	
3	material & description	quantity	unit cost		amount	-
	Gravel Bedding - G1	96.08 m ³	/m ³		-	
	(1.05m ³ per m ² w/ 5% shrinkage)					
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4		-	
6	Contractor's Profit		0% of item 4		-	
7	Tax		5% of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)		Php		-	cost per item
b.	Steel Works	146,564.00	kgs.			
1	labor - cut, bend & place up to 5 storeys	no.	daily rate	no of days	amount	-
		production rate	kgs/manhour		days to complete	
	lead man		/day		-	
	skilled labor		/day		-	
	unskilled labor		/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	kgs/unithour		days to complete	
	bar cutter	1	/day		-	
	bar bender	1	/day		-	
	minor tools (10% of Labor Cost)				-	
3	material & description	quantity	unit cost		amount	-
	Deformed Reinforcing Steel GRADE 40	99,966.00 kgs.	/kgs.		-	
	Deformed Reinforcing Steel GRADE 60	46,598.00 kgs.	/kgs.		-	
	#16 Galvanized Iron Wire	2,198.46 kgs.	/kgs.		-	
	Consumables (5% of material cost)				-	
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4		-	
6	Contractor's Profit		0% of item 4		-	
7	Tax		5% of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)		Php		-	cost per item
c.	Formworks	1518.39	m ²			
1	labor - fabricate, install & strip up to 5 storeys	no.	daily rate	no of days	amount	-
		production rate	m ² /manhour		days to complete	
	install					
	lead man		/day		-	
	skilled labor		/day		-	
	unskilled labor		/day		-	
	stripping					
	lead man		/day		-	
	unskilled labor		/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ² / 14days		days to complete	
	Area 205.01m ²					
	H-Frame 1.7m x 1.2m, set	40 sets			-	
	(2pcs. H-Frames, 4pcs diagonal cross braces, 4pcs horizontal					
	Shoring Jack, 3.8m full extension	124 pcs.			-	
	Adjustable U-head Jack, 0.60m	160 pcs.			-	

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	Adjustable Base Jack, 0.60m	160	pcs.	-	
	1-½" G.I. Pipe x 6.0m	124	pcs.	-	
	1-½" G.I. Pipe x 4.0m	64	pcs.	-	
	1-½" G.I. Pipe x 3.0m	32	pcs.	-	
	1-½" G.I. Pipe x 1.0m	432	pcs.	-	
	Tie Rod x 0.60m	556	pcs.	-	
	Round Wing Nut	1116	pcs.	-	
3	material & description	quantity	unit cost	amount	-
	19mm x 1.2m x 2.4m Phenolic Board (5 uses)	435	/pc	-	
	Good Lumber (3 uses)	5924	/bd.ft.	-	
	consumables (2% of Material Cost)			-	
4	Total Direct Cost (1 + 2 + 3)			-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4	-	
6	Contractor's Profit	0%	of item 4	-	
7	Tax	5%	of item 4 + 5 + 6	-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php		-	cost per item
d.	Concrete Works	663.33	m³		
1	labor - mix, place & cure	no.	daily rate	no of days	amount
	footing and slab on fill class A, 3000psi @ 28days	production rate	m³/manhour	days to complete	
	lead man		/day	-	
	skilled labor		/day	-	
	unskilled labor		/day	-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount
		output rate	m³/unithour	days to complete	
	Pumpcrete	1	/day	-	
	Concrete Vibrator	2	/day	-	
	minor tools (10% of Labor Cost)			-	
3	material & description	quantity	unit cost	amount	-
	(structural concrete Class AA, 3000psi @ 28days)				
	Ready Mix Concrete (3000 psi at 28 days)	91.03 m³	/m³	-	
	Ready Mix Concrete (4000 psi at 28 days)	480.80 m³	/m³	-	
	Lean Concrete (Ready Mix, 1000 psi at 28 days)	91.50 m³	/m³	-	
4	Total Direct Cost (1 + 2 + 3)			-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4	-	
6	Contractor's Profit	0%	of item 4	-	
7	Tax	5%	of item 4 + 5 + 6	-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php		-	cost per item
III. ROOFING WORKS					
a.	Structural Steel Roof Framing	7,794.75	kgs.		
1	labor - fabrication, assembly & erection	no.	daily rate	no of days	amount
	fabrication and assembly	production rate	kgs/manhour	days to complete	
	leadman		/day	-	
	skilled labor		/day	-	
	unskilled labor		/day	-	
	erection and installation		set/manhour		
	skilled labor		/day	-	
	unskilled labor		/day	-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount
		output rate	kgs/unithour	days to complete	
	welding machine	2	/day	-	
	cutting outfit	2	/day	-	
	minor tools (10% of Labor Cost)		lot	-	
3	material & description	quantity	unit cost	amount	-
	6mmx 75mmx75mmx6m angle bar structural steel framing	135	pcs	/pc	-
	refer to plan				
	50mm x 75mm x 1.2mm C-Purlins	205	pcs	/pc	-
	Standard trunbuckle	16	pcs	/pc	-
	16mm plain bar cross bracing	16	pcs	/pc	-
	acetylene	86	kgs.	/kgs.	-
	oxygen	172	kgs.	/kgs.	-
	welding rod	156	kgs.	/kgs.	-
	consumables (5% of Material Cost)		lot	-	
4	Total Direct Cost (1 + 2 + 3)			-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4	-	
6	Contractor's Profit	0%	of item 4	-	
7	Tax	5%	of item 4 + 5 +	-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php		-	cost per item

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b.	Roof Sheetting and Accessories	660	m ²				
1	labor (cut, installation)	no.	daily rate	no of days	amount		-
		production rate	m ² /manhour		days to complete		
	leadman		/day		-		
	skilled labor		/day		-		
	unskilled labor		/day		-		
	Fabricated Metal Roofing Accessory (Ridge/Hip	72	m				-
		production rate	m/manhour		days to complete		
	leadman		/day		-		
	skilled labor		/day		-		
	unskilled labor		/day		-		
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		-
		output rate	m ² /unithour		days to complete		
	power tools (10% of Labor Cost)	1	/day		-		
	minor tools (10% of Labor Cost)	1	/day		-		
3	material & description	quantity	unit cost		amount		-
	0.4mm x 1.22m rib-type long span metal roofing, dark green	550 ln.m.	/ln.m.		-		
	0.4mm x 2.44 ridge cap, dark green	74 ln.m.	/pc.		-		
	1.4mm end flashing 0.45m x 2.44m, dark green	105 ln.m.	/ln.m.		-		
	foam insulation, two- sided aluminum (0.5mm)	14 rolls	/roll		-		
	Texscrew	14332 pcs.	/pc.		-		
	consumables (3% of Material Cost)				-		
4	Total Direct Cost (1 + 2 + 3)				-		
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4		-		
6	Contractor's Profit		0% of item 4		-		
7	Tax		5% of item 4 + 5 + 6		-		
8	Total Unit Cost (4 + 5 + 6 + 7)		Php		-		cost per item

IV. MASONRY WORKS

a.	CHB Laying (First floor perimeter wall and interior wall, comfort room;Second floor to Third (perimeter and comfort room)	841.07	m ²				
1	labor	no.	daily rate	no of days	amount		-
		production rate	m ² /manhour		days to complete		
	leadman		/day		-		
	skilled labor		/day		-		
	unskilled labor		/day		-		
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		-
		output rate	3.825 kgs/unithour	27.49	days to complete		
	minor tools (10% of Labor Cost)				-		
3	material & description	quantity	unit cost		amount		-
	100mm thk. CHB	10,514 pcs.	/pc.		-		
	cement	440 bags	/bag		-		
	course aggregates	36.59 m ³	/m ³		-		
	10mm dia reinforcing steel	2,725.07 kgs.	/kgs.		-		
	#16 G.I. tie wire	42.05 kgs.	/kgs.		-		
4	Total Direct Cost (1 + 2 + 3)				-		
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4		-		
6	Contractor's Profit		0% of item 4		-		
7	Tax		5% of item 4 + 5 + 6		-		
8	Total Unit Cost (4 + 5 + 6 + 7)		Php		-		cost per item

b.	Plastering (First floor perimeter wall-exterior and interior, comfort room;Second floor to Third (perimeter wall-exterior side and comfort room)	1,159.72	m ²				
	***First floor-perimeter wall-exterior and interior, comfort room						
	***Second floor (perimeter wall-exterior side and comfort room)						
	***Third floor (perimeter wall-exterior side and comfort room)						
1	labor	no.	daily rate	no of days	amount		-
	plastering	production rate	m ² /manhour		days to complete		
	leadman		/day		-		
	skilled labor		/day		-		
	unskilled labor		/day		-		
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		-
		output rate	m ² /unithour		days to complete		
	H-Frame 1.7m x 1.2m, set	40 sets			-		
	minor tools (10% of Labor Cost)				-		
3	material & description	quantity	unit cost		amount		-
	cement	348 bags	/bag		-		
	sand	28.99 m ³	/m ³		-		

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4	Total Direct Cost (1 + 2 + 3)					-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4			-	
6	Contractor's Profit	0%	of item 4			-	
7	Tax	5%	of item 4 + 5 + 6			-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php				-	cost per item
c.	Floor Topping (First floor)	479.46	m ²				
1	labor	no.		daily rate	no of days	amount	-
		production rate		m ² /manhour		days to complete	
	leadman			/day		-	
	skilled labor			/day		-	
	unskilled labor			/day		-	
	equipment (rental based on ACEL rates)	unit		daily rental	no of days	amount	-
		output rate		m ² /unithour		days to complete	
	minor tools (10% of Labor Cost)			/day		-	
	material & description	quantity		unit cost		amount	-
	cement	326	bags	/bag		-	
	sand	63.78	m ³	/m ³		-	
	Total Direct Cost (1 + 2 + 3)					-	
	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4			-	
	Contractor's Profit	0%	of item 4			-	
	Tax	5%	of item 4 + 5 + 6			-	
	Total Unit Cost (4 + 5 + 6 + 7)	Php				-	cost per item
V.	ELECTRICAL WORKS						
a.	Conduits and Boxes (First floor ; second floor and third floor-perimeter walls and comfort room)	1662	ln.m.				-
1	labor	no.		daily rate	no of days	amount	-
	*** Conduit	production rate		lm/manhour		days to complete	
	leadman			/day		-	
	skilled labor			/day		-	
	unskilled labor			/day		-	
	labor	no.		daily rate	no of days	amount	-
	***Junction Box and Utility box, PVC	88					
		production rate		pc/manhour		days to complete	
	leadman			/day		-	
	skilled labor			/day		-	
	unskilled labor			/day		-	
2	equipment (rental based on ACEL rates)	unit		daily rental	no of days	amount	-
		output rate		lm/manhour		days to complete	
	minor tools (10% of Labor Cost)			/day		-	
3	material & description	quantity		unit cost		amount	-
	20mm PVC pipes	274	pcs.	/pc.		-	
	25mm PVC pipes	280	pcs.	/pc.		-	
	Utility Box, PVC, deep type	41	pcs.	/pc.		-	
	Junction Box, PVC, deep type	47	pcs.	/pc.		-	
	conduit fittings	1	lot	/lot		-	
	consumables (5% of material cost)		lot	/lot		-	
	Total Direct Cost (1 + 2 + 3)					-	
	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4			-	
	Contractor's Profit	0%	of item 4			-	
	Tax	5%	of item 4 + 5 + 6			-	
	Total Unit Cost (4 + 5 + 6 + 7)	Php				-	cost per item
b.	Wires and Wiring Devices (First floor;Second and Third floor-perimeter walls and comfort room)	4200	ln.m.				
1	labor	no.		daily rate	no of days	amount	-
	*** Wires	production rate		lm/manhour		days to complete	
	*** First floor						
	***Second floor to third floor (First to third floor-perimeter walls and comfort room)						
	leadman			/day		-	
	skilled labor			/day		-	
	unskilled labor			/day		-	
	***Switches	26					
	*** First floor	production rate		pc/manhour		days to complete	
	***Second floor to third floor (First to third floor-perimeter walls and comfort room)						
	leadman			/day		-	
	skilled labor			/day		-	
	unskilled labor			/day		-	

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***Convenience Outlet		61				
*** First floor		production rate	pc/manhour	days to complete		
***Second floor to third floor (First to third floor-perimeter walls and comfort room)						
leadman			/day	-		
skilled labor			/day	-		
unskilled labor			/day	-		
2 equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		
minor tools (10% of Labor Cost)		output rate	pc/manhour	days to complete		
			/day	-		
3 material & description	quantity	unit cost	amount			
# 14 THHN Stranded Wire	13 boxes	/box	-			
# 12 THHN Stranded Wire	15 boxes	/box	-			
#10 THHN Stranded Wire	1 box	/box	-			
Single Switch Element, 10amp	15 sets	/set	-			
Two-gang Switch Element,10 amp	10 sets	/set	-			
Thee-way Switch Element, 10amp	1 sets	/set	-			
Two- gang weatherproof outlet	17 sets	/set	-			
Duplex Convenience Outlet	44 sets	/set	-			
Service entry connection and assembly (service drop, spools & consumables (5% of material cost)	1 lot	/lot	-			
4 Total Direct Cost (1 + 2 + 3)			-			
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			0% of item 4	-		
6 Contractor's Profit			0% of item 4	-		
7 Tax			5% of item 4 + 5 + 6	-		
8 Total Unit Cost (4 + 5 + 6 +7)	Php		-	cost per item		
c. Electrical Fixtures (First Floor)	50	sets				
1 labor	no.	daily rate	no of days	amount		
skilled labor		production rate	set/manhour	days to complete		
unskilled labor			/day	-		
			/day	-		
2 equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		
H-Frame 1.7m x 1.2m, set		output rate	set/manhour	days to complete		
minor tools (10% of Labor Cost)		2	/day	-		
			/day	-		
3 material & description	quantity	unit cost	amount			
2- T8 LED tubes with 1ft x 4 ft louver housing	47 sets	/set	-			
308mm x 141mm Rechargeable Twin Head LED Automatic	3 sets	/set	-			
6" dia Led Light, Surface type	1 sets	/set	-			
consumables (5% of material cost)			-			
4 Total Direct Cost (1 + 2 + 3)			-			
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			0% of item 4	-		
6 Contractor's Profit			0% of item 4	-		
7 Tax			5% of item 4 + 5 + 6	-		
8 Total Unit Cost (4 + 5 + 6 +7)	Php		-	cost per item		
d. Panel Board/ Boxes/breakers (First floor;Second and Third Floor Perimeter wall and comfort rooms)	152	sets				
***First floor (Perimeter wall and interior walls)						
***Second floor (Perimeter wall and comfort rooms)						
***Third floor (Perimeter wall and comfort rooms)						
1 labor	no.	daily rate	no of days	amount		
5.50hrs/ panel board		production rate	set/manhour	days to complete		
leadman			/day	-		
skilled labor			/day	-		
unskilled labor			/day	-		
2 equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount		
minor tools (10% of Labor Cost)		output rate	unit/manhour	days to complete		
			/day	0.00		
3 material & description	quantity	unit cost	amount			
10 holes Panel Board with Main Breaker and 10 Branches	3 set	/set	-			
Circuit breakers element, plug-in(60 amp, best quality)	1 unit	/unit	-			
Circuit breakers element, plug-in (20 amp, best quality)	100 units	/unit	-			
Circuit breaker element, plug-in (15 amp, best quality)	48 units	/unit	-			
consumables (3% of material cost)		lot	-			

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4 Total Direct Cost (1 + 2 + 3)			-		
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0%	of item 4	-	
6 Contractor's Profit		0%	of item 4	-	
7 Tax		5%	of item 4 + 5 + 6	-	
8 Total Unit Cost (4 + 5 + 6 + 7)		Php		-	cost per item

VI. PLUMBING WORKS

a. Pipe Lines (First floor to Third Comfort Rooms)		98.1	ln.m.		
1 labor		no.	daily rate	no of days	amount
		production rate	lm/manhour	days to complete	
leadman			/day		-
skilled labor			/day		-
unskilled labor			/day		-
2 equipment (rental based on ACEL rates)		unit	daily rental	no of days	amount
		output rate	lm/manhour	days to complete	
H-Frame 1.7m x 1.2m, set		4	/day		-
minor tools (10% of Labor Cost)			/day		-
3 material & description		quantity	unit cost	amount	-
2"Ø PVC Pipe , S-1000		33	pc	/pc	-
3"Ø PVC Pipe , S-1000		36	pc	/pc	-
4"Ø PVC Pipe , S-1000		15	pc	/pc	-
1"Ø PPR Pipe Water Line		10	pc	/pc	-
1/2"Ø PPR Pipe Water Line		42	pc	/pc	-
assorted fittings		1	lot	/lot	-
consumables (5% of material cost)			lot	/lot	-
4 Total Direct Cost (1 + 2 + 3)				-	
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0%	of item 4	-	
6 Contractor's Profit		0%	of item 4	-	
7 Tax		5%	of item 4 + 5 + 6	-	
8 Total Unit Cost (4 + 5 + 6 + 7)		Php		-	cost per item

b. Plumbing Fixtures (First floor Comfort rooms)		15	sets		
1 labor		no.	daily rate	no of days	amount
		production rate	set/manhour	days to complete	
leadman			/day		-
skilled labor			/day		-
unskilled labor			/day		-
2 equipment (rental based on ACEL rates)		unit	daily rental	no of days	amount
		output rate	1	unit/manhour	1.88
minor tools (10% of Labor Cost)			/day		-
3 material & description		quantity	unit cost	amount	-
Elongated Water Closet,HGC American standard or equivalent with necessary fittings and accessories		5	sets	/set	-
Countertop Lavatory,HGC American Standard or equivalent with faucet , necessary fittings and accessories		6	sets	/set	-
Urinal , HGC American Standard or equivalent with complete accessories		4	sets	/set	-
stainless floor drain with insect proof and odor trap		6	set	/set	-
6mmx 0.70mx 1.00m frameless mirror with necessary		3	sets	/set	-
Stainless Grab bar		4	sets	/set	-
consumables (5% of material cost)			lot	/lot	-
4 Total Direct Cost (1 + 2 + 3)				-	
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0%	of item 4	-	
6 Contractor's Profit		0%	of item 4	-	
7 Tax		5%	of item 4 + 5 + 6	-	
8 Total Unit Cost (4 + 5 + 6 + 7)		Php		-	cost per item

c. Septic Vault		2	units		
1 labor		no.	daily rate	no of days	amount
		production rate	unit/manhour	days to complete	
leadman			/day		-
skilled labor			/day		-
unskilled labor			/day		-
2 equipment (rental based on ACEL rates)		unit	daily rental	no of days	amount
		output rate	1	unit/manhour	0.25
minor tools (10% of Labor Cost)			/day		-

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3	material & description	quantity		unit cost	amount	-
3000 liters capacity Septic Tank (Medium Density Polyethylene)						
	3040 mm Length x 1010mm Width x 1185mm Height Plastic Septic Tank; 5mm thick; with complete fittings (102mm dia inlet/outlet;102 mm dia. suction port; 51mm dia. gas vent; manhole 475. dia.)	2	units	/unit	-	
	Cement	11	bags	/bags	-	
	Sand	2.52	m³	/m³	-	
	3/4" Gravel	2.4	m³	/m³	-	
	consumables (5% of material cost)	1	lot	lot	-	
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)				0% of item 4	-
6	Contractor's Profit				0% of item 4	-
7	Tax				5% of item 4 + 5 + 6	-
8	Total Unit Cost (4 + 5 + 6 + 7)				Php	- cost per item
VII. ARCHITECTURAL FINISHING						
a.	Ceiling - 4.5mm Fiber Cement Board on Metal Frame (First Floor)	479.04 m²				
1	labor	no.	daily rate	no of days	amount	-
		production rate	m²/manhour	days to complete		
	leadman		/day	-		
	skilled labor		/day	-		
	unskilled labor		/day	-		
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m²/manhour	days to complete		
	H-Frame 1.7m x 1.2m, set	20	/day	-		
	minor tools (10% of Labor Cost)		/day	-		
3	material & description	quantity		unit cost	amount	-
	*** First Floor	479.04	sq.m.			
	4.5mm Fiber Cement Board	167	pcs	/pc	-	
	0.5mm thick x 19mm x 50mm Carrying Channel (5m length)	83	pcs	/pc	-	
	0.5mm thick x 19mm x 50mm Double Metal Furring (5meters)	169	pcs	/pc	-	
	0.5mm thick x 25mm x 25mm, Wall Angle (3m length)	60	pcs	/pc	-	
	Double metal Furring Clip	609	pcs	/pc	-	
	Standard Rod Hanger and Rod Joiner	609	sets	/pc	-	
	consumables (5% of material cost)				-	
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)				0% of item 4	-
6	Contractor's Profit				0% of item 4	-
7	Tax				5% of item 4 + 5 + 6	-
8	Total Unit Cost (4 + 5 + 6 + 7)				Php	- cost per item
b.	Panel Doors (First floor)	30 m²				
1	labor	no.	daily rate	no of days	amount	-
		production rate	m²/manhour	days to complete		
	leadman		/day	-		
	skilled labor		/day	-		
	unskilled labor		/day	-		
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m²/manhour	days to complete		
	minor tools (10% of Labor Cost)		/day	-		
3	material & description	quantity		unit cost	amount	-
	D-100,2.50m x 1.0m, Pre-fabricated Panel Door, Full Swing with Jamb, door knobs, hinges and other necessary hardwares (Lever-type door knob), with vision panel and transom ***refer to plan	8	sets	/set	-	
	D-101,2.50m x1.0m, Pre-fabricated Panel Door Single Full Swing with Jamb,door knobs, hinges and other necessary hardware (Lever-type door knob), with transom****refer to plan	4	sets	/set	-	
	consumables (5% of material cost)		lot	lot	-	

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Position:_____

Name of Company:_____

Date:_____

4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4		-	
6	Contractor's Profit	0%	of item 4		-	
7	Tax	5%	of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php			-	cost per item

c.	Steel Doors (First Floor)	6.8	m ²			
***First Floor (D-102)						
***First Floor to Third Floor (D-FE)						
1	labor	no.	daily rate	no of days	amount	-
		production rate	m ² /manhour		days to complete	
	leadman		/day		-	
	skilled labor		/day		-	
	unskilled labor		/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ² /manhour		days to complete	
	minor tools (10% of Labor Cost)		/day		-	
3	material & description	quantity	unit cost		amount	-
	D-102,2.50m x 1.0m, Pre-fabricated Steel Door, Full Swing with Jamb, door knobs, hinges and other necessary hardwares (Lever-type door knob), with transom ***refer to plan	1	sets	/set	-	
	D-FE,2.10m x0.90m, Pre-fabricated Fire Exit with panic bar,jamb and complete accessories (factory made)	3	sets	/set	-	
	consumables (5% of material cost)		lot	lot	-	
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4		-	
6	Contractor's Profit	0%	of item 4		-	
7	Tax	5%	of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php			-	cost per item

d.	Aluminum Doors (First Floor)	13.75	m ²			
1	labor	no.	daily rate	no of days	amount	-
		production rate	m ² /manhour		days to complete	
	leadman	1	/day		-	
	skilled labor	1	/day		-	
	unskilled labor	2	/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ² /manhour		days to complete	
	minor tools (10% of Labor Cost)		/day		-	
3	material & description	quantity	unit cost		amount	-
	D-130,2.50mx 2.50m, Aluminum door with jamb, weather guard, hinges and other necessary hardware (Refer to plan)	1	set	/set	-	
	D-150,1.50mx 2.50m, Aluminum door with jamb, weather guard, hinges and other necessary hardware (Refer to plan)	2	sets	/set	-	
	consumables (5% of material cost)		lot	lot	-	
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4		-	
6	Contractor's Profit	0%	of item 4		-	
7	Tax	5%	of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php			-	cost per item

e.	Aluminum Windows (First Floor exterior and interior, Second to Third Floor-exterior)	136.9	m ²			
***First Floor (Perimeter wall and interior wall)						
***Second Floor to Third floor (Perimeter wall)						
1	labor	no.	daily rate	no of days	amount	-
		production rate	m ² /manhour		days to complete	
	leadman		/day		-	
	skilled labor		/day		-	
	unskilled labor		/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ² /manhour		days to complete	
	minor tools (10% of Labor Cost)		/day		-	

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3 material & description	quantity		unit cost	amount	-
W1, 4.00m x 1.70m, White Powder Coated Aluminum Framed window with 6mm thick glass, weatherproof,complete accessories and hardware (refer to plan)	16	sets	/set	-	
W2, 2.25m x 0.70m, White Powder Coated Aluminum Framed window with 6mm thick glass, weatherproof,complete accessories and hardware (refer to plan)	8	sets	/set	-	
W3, 4.25 m x 0.7m, White Powder Coated Aluminum Framed window with 6mm thick glass, weatherproof,complete accessories and hardware (refer to plan)	4	sets	/set	-	
W4,2.00m x0.70m, White Powder Coated Aluminum Framed window with 6mm thick glass, weatherproof,complete accessories and hardware (refer to plan)	3	sets	/set	-	
W5,4.00m x0.60m, White Powder Coated Aluminum Framed window with 6mm thick glass, weatherproof,complete accessories and hardware (refer to plan)	8	sets	/set	-	
W6,4.00m x3.10m, White Powder Coated Aluminum Framed window with 6mm thick glass, weatherproof,complete accessories and hardware (refer to plan)	1	sets	/set	-	
consumables (5% of material cost)		lot	lot	-	
4 Total Direct Cost (1 + 2 + 3)				-	
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)		0% of item 4		-	
6 Contractor's Profit		0% of item 4		-	
7 Tax		5% of item 4 + 5 + 6		-	
8 Total Unit Cost (4 + 5 + 6 + 7)		Php		-	cost per item
f. Painting Works (First floor exterior walls and interior walls and ceiling)	1,725.98 m ²				
*** Masonry	244.48 m ²				
*** Drywall and Ceiling	1,013.50 m ²				
***Polished Concrete Flooring	468.00 m ²				
1 labor (surface preparation, paint application)	no.	daily rate	no of days	amount	-
	production rate	m ² /manhour		days to complete	
		m ² /manhour			
		m ² /manhour			
	leadman	/day		-	
	skilled labor	/day		-	
	unskilled labor	/day		-	
2 equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
	output rate	m ² /manhour		days to complete	
H-Frame 1.7m x 1.2m, set	40	sets		-	
minor tools (10% of Labor Cost)				-	
3 material & description	quantity		unit cost	amount	-
***Masonry Exterior					
Plexibond waterproofing	50	gal.	/gal	-	
Primer, (Acrytex)	10	gal.	/gal	-	
Masonry Putty, (Spot)	10	gal.	/gal	-	
Topcoat (Acrytex)	20	gals	/gal	-	
Thinning Solvent for Putty(Acryterxt, Reducer)	2	gals	/gal	-	
Thinning Solvent for Primer and Topcoat (Acrytex, Reducer)	8	gals	/gal	-	
***Masonry Interior					
Skimcoat,permaplast high performance Acrylic	25	gals	/gal	-	
Primer, (Flat Latex)	10	gals	/gal	-	
Masonry Putty, (Spot)	10	gals	/gal	-	
Topcoat (Acrytex)	17	gals	/gal	-	
***Drywall and Ceiling					
Primer, Flat Latex	43	gals	/gal	-	
Topcoat,(Flat Latex)	71	gals	/gal	-	
Gypsum Tape	90	roll	/roll	-	

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***Polished Concrete Flooring		468							
Polyurethane floor coating (Clear gloss)		30	gals		/gal			-	
consumables (5% of material cost)		1	lot		/lot			-	
4 Total Direct Cost (1 + 2 + 3)								-	
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)				0%	of item 4			-	
6 Contractor's Profit				0%	of item 4			-	
7 Tax				5%	of item 4 + 5 + 6			-	
8 Total Unit Cost (4 + 5 + 6 + 7)				Php				-	cost per item
g. Dry Wall Partition (First floor)		576	m²						
1 labor		no.		daily rate		no of days		amount	-
		production rate		m ² /manhour		days to complete			
leadman				/day				-	
skilled laborer				/day				-	
unskilled labor				/day				-	
2 equipment (rental based on ACEL rates)		unit		daily rental		no of days		amount	-
		output rate		kgs/unitour		days to complete			
minor tools (10% of Labor Cost)				/day				-	
3 material & description		quantity		unit cost		amount			
4.5 mm thick Fiber Cement Board		200	pcs.	/pc.					
0.4mm thick x 50mm x 75mm x 3m metal track		136	pcs.	/pc.					
0.4mm thick x 50mm x 75mm x 3m metal studs and runners		190	pcs.	/pc.					
consumables (5% of material cost)		1	lot	/lot					
4 Total Direct Cost (1 + 2 + 3)								-	
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)				0%	of item 4			-	
6 Contractor's Profit				0%	of item 4			-	
7 Tax				5%	of item 4 + 5 + 6			-	
8 Total Cost (4 + 5 + 6 + 7)				Php				-	cost per item
h. Tileworks (Unglazed Tiles)- (First Floor Comfort room)		27	m²						
***First Floor									
1 labor		no.		daily rate		no of days		amount	-
		production rate		m ² /manhour		days to complete			
leadman				/day				-	
skilled labor				/day				-	
unskilled labor				/day				-	
2 equipment (rental based on ACEL rates)		unit		daily rental		no of days		amount	-
		output rate		kgs/unitour		days to complete			
minor tools (10% of Labor Cost)				/day				-	
3 material & description		quantity		unit cost		amount			
(cr floor) 0.3mx 0.30m unglazed tiles, Porcelain Tiles		300	pcs	/pc					
cement		9	bags	/bag					
sand		1	m ³	/m ³					
tile grout		4	bags	/bag					
Tile Adhesive (25kg)		3	bags	/bag					
Consumables 3% of Material Cost									
4 Total Direct Cost (1 + 2 + 3)								-	
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)				0%	of item 4			-	
6 Contractor's Profit				0%	of item 4			-	
7 Tax				5%	of item 4 + 5 + 6			-	
8 Total Unit Cost (4 + 5 + 6 + 7)				Php				-	cost per item
i. Tileworks (glazed Tiles)- (First floor Comfort Room)		72	m²						
1 labor		no.		daily rate		no of days		amount	-
		production rate		m ² /manhour		days to complete			
leadman				/day				-	
skilled labor				/day				-	
unskilled labor				/day				-	
2 equipment (rental based on ACEL rates)		unit		daily rental		no of days		amount	-
		output rate		kgs/unitour		days to complete			
minor tools (10% of Labor Cost)				/day				-	
3 material & description		quantity		unit cost		amount			
(cr walls) 0.3mx 0.30m glazed tiles, Porcelain Tiles		800	pcs	/pc					
Granite slab (cr wash area)		24	m ²	/m ²					
cement		24	bags	/bag					
sand		2	m ³	/m ³					
Tile Grout		9	bags	/bag					
Tile Adhesive (25kg)		8	bags	/bag					
Consumables 3% of Material Cost									

Name of Bidder/ Contractor: _____
 (Signature over printed name)
 Position: _____
 Name of Company: _____
 Date: _____

4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4		-	
6	Contractor's Profit	0%	of item 4		-	
7	Tax	5%	of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php			-	cost per item
j.	Modular Partition (First Floor Comfort Room)	22.60	m ²			
1	labor	no.	daily rate	no of days	amount	-
		production rate	m ² /manhour	days to complete		
	leadman		/day		-	
	skilled labor		/day		-	
	unskilled labor		/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ² /manhour	days to complete		
	minor tools (10% of Labor Cost)		/day		-	
3	material & description	quantity	unit cost	amount		-
	Compact Laminated Toilet Partition including fenestrations, consumables (3% of material cost)	22.60	sq.m. lot	/sq.m. lot	-	
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4		-	
6	Contractor's Profit	0%	of item 4		-	
7	Tax	5%	of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php			-	cost per item
k.	Handrail and Guardrails (Ramp-Entrance, Stairs-first floor to third floor)	209.5	ln.m.			
1	labor	no.	daily rate	no of days	amount	-
		production rate	ln.m./manhour	days to complete		
	leadman		/day		-	
	skilled labor		/day		-	
	unskilled labor		/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ² /manhour	days to complete		
	Welding Machine	2	/day		-	
	Cutting Outfit	1	/day		-	
	minor tools (10% of Labor Cost)		/day		-	
3	material & description	quantity	unit cost	amount		-
	1.5 mm x 50mm x 100mm tubular steel (g.i.)	75	pcs.	/pc	-	
	1.5 mm x 50mm x 50 mm tubular steel (g.i.)	26	pcs.	/pc	-	
	50mm Ø G.I. pipex 6	5	pcs.	/pc	-	
	Milled Steel Plate, 4'x 8' x 10mm thick	150	kgs	/kgs	-	
	Welding rod	25	kgs	/kgs	-	
	consumables (3% of material cost)		lot	lot	-	
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4		-	
6	Contractor's Profit	0%	of item 4		-	
7	Tax	5%	of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php			-	cost per item
l.	Carpentry Works (First Floor Raised Platforms)	16	m ²			
	*** Classroom Platform (First Floor)					
1	labor	no.	daily rate	no of days	amount	-
		production rate	unit/manhour	days to complete		
	leadman		/day		-	
	skilled labor		/day		-	
	unskilled labor		/day		-	
2	equipment (rental based on ACEL rates)	unit	daily rental	no of days	amount	-
		output rate	m ² /manhour	days to complete		
	minor tools (10% of Labor Cost)		/day		-	
3	material & description	quantity	unit cost	amount		-
	2" x 6" x 8' s4s lumber	256	bd.ft.	/pc	-	
	3/4" x 4' x 8' marine Plyboard	7	pcs	/pc	-	
	Carpet	19	sq.m.	/sq.m.	-	
	Projector Screen, 2.00m x 1.700m	4	units	/unit	-	
	Sliding White Board, 1.70m x 2.70m	4	units	/unit	-	
4	Total Direct Cost (1 + 2 + 3)				-	
5	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	0%	of item 4		-	
6	Contractor's Profit	0%	of item 4		-	
7	Tax	5%	of item 4 + 5 + 6		-	
8	Total Unit Cost (4 + 5 + 6 + 7)	Php			-	cost per item

Name of Bidder/ Contractor:_____

(Signature over printed name)

Position:_____

Name of Company:_____

Date:_____

VIII. SITE DEVELOPMENT		125		m ²							
1 labor		no.		daily rate		no of days		amount			
*** Concreting of walkway to building, plantboxes		production rate		sq.m./manhour		days to complete					
leadman				/day							
skilled labor				/day							
unskilled labor				/day							
2 equipment (rental based on ACEL rates)		unit		daily rental		no of days		amount			
		output rate		m ² /manhour		days to complete					
Concrete Vibrator		1		/day							
Transit Mixer (5-6 yd ³)		1		/day							
minor tools (10% of Labor Cost)				/day							
3 material & description		quantity		unit cost		amount					
***Walkway											
cement		63	bags	/bags							
sand		3.45	cu.m.	/cu.m.							
3/4" Gravel		6.9	cu.m.	/cu.m.							
10mm dia reinforcing steel		201	kgs.	/kg.							
G1 gravel (gravel bedding)		6.9	cu.m.	/cu.m.							
#16 G.I. tie wire		10.54	kgs.	/kg.							
***Drainage											
8" dia Black pipe		18	pcs	/pc							
assorted fittings		1	lot	/lot							
***catch basin											
cement		10	bags	/bags							
sand		0.64	cu.m.	/cu.m.							
3/4" Gravel		0.3	cu.m.	/cu.m.							
chb		160	pcs	/pcs							
10mm dia reinforcing steel		420	kgs.	- /kgs.							
G1 gravel (gravel bedding)		0.25	cu.m.	- /cu.m.							
***Plantbox											
100mm thk. CHB		265	pcs	/pcs							
cement		12	bags	- /bags							
sand		2	cu.m.	- /cu.m.							
10mm dia reinforcing steel		54	kgs.	- /kgs.							
#16 G.I. tie wire		1.06	kgs.	- /kgs.							
4 Total Direct Cost (1 + 2 + 3)						-					
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)				0% of item 4		-					
6 Contractor's Profit				0% of item 4		-					
7 Tax				5% of item 4 + 5 + 6		-					
8 Total Unit Cost (4 + 5 + 6 + 7)				Php		-		cost per item			
IX. FIRE SAFETY (First Floor)		15		sets							
1 labor		no.		daily rate		no of days		amount			
		production rate		set/manhour		days to complete					
leadman				/day							
skilled labor				/day							
unskilled labor				/day							
2 equipment (rental based on ACEL rates)		unit		daily rental		no of days		amount			
		output rate		m ² /manhour		days to complete					
minor tools (10% of Labor Cost)				/day							
3 material & description		quantity		unit cost		amount					
Hardwired Photoelectric Smoke Detector		8	sets	/set							
Fire Alarm Bell with switch manual pull station		2	sets	/set							
Luminous Fire Safety Signages		3	sets	/set							
10lbs Fire Extinguisher		2	sets	/set							
consumables (3% of material cost)											
4 Total Direct Cost (1 + 2 + 3)						-					
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)				0% of item 4		-					
6 Contractor's Profit				0% of item 4		-					
7 Tax				5% of item 4 + 5 + 6		-					
8 Total Unit Cost (4 + 5 + 6 + 7)				Php		-		cost per item			
TOTAL BID AMOUNT											

I hereby submit the foregoing bid and that I understood the terms and conditions of the contract.

Name of Bidder/ Contractor:_____

(Signature over printed name)

Position:_____





Name of Company:_____

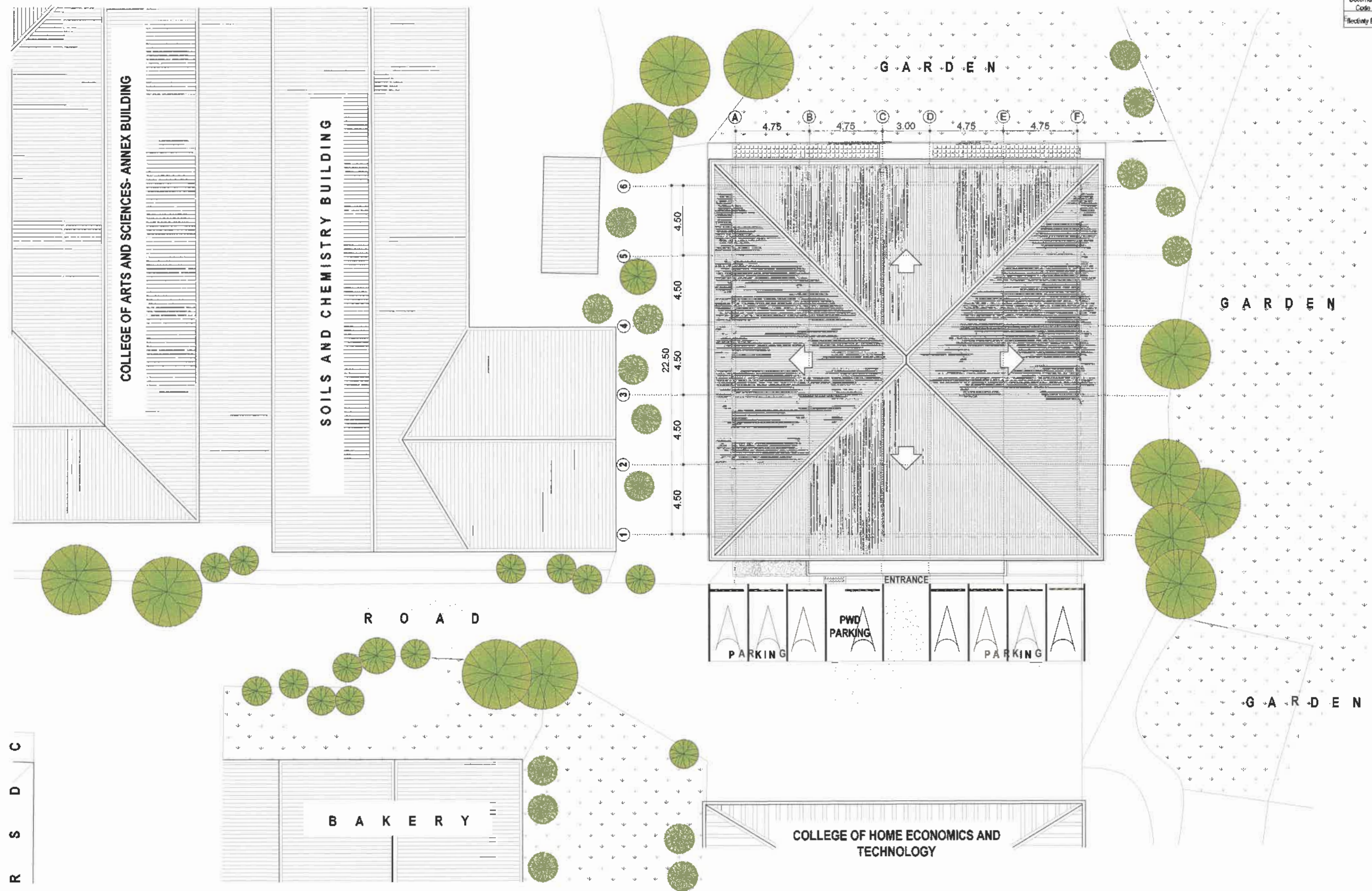
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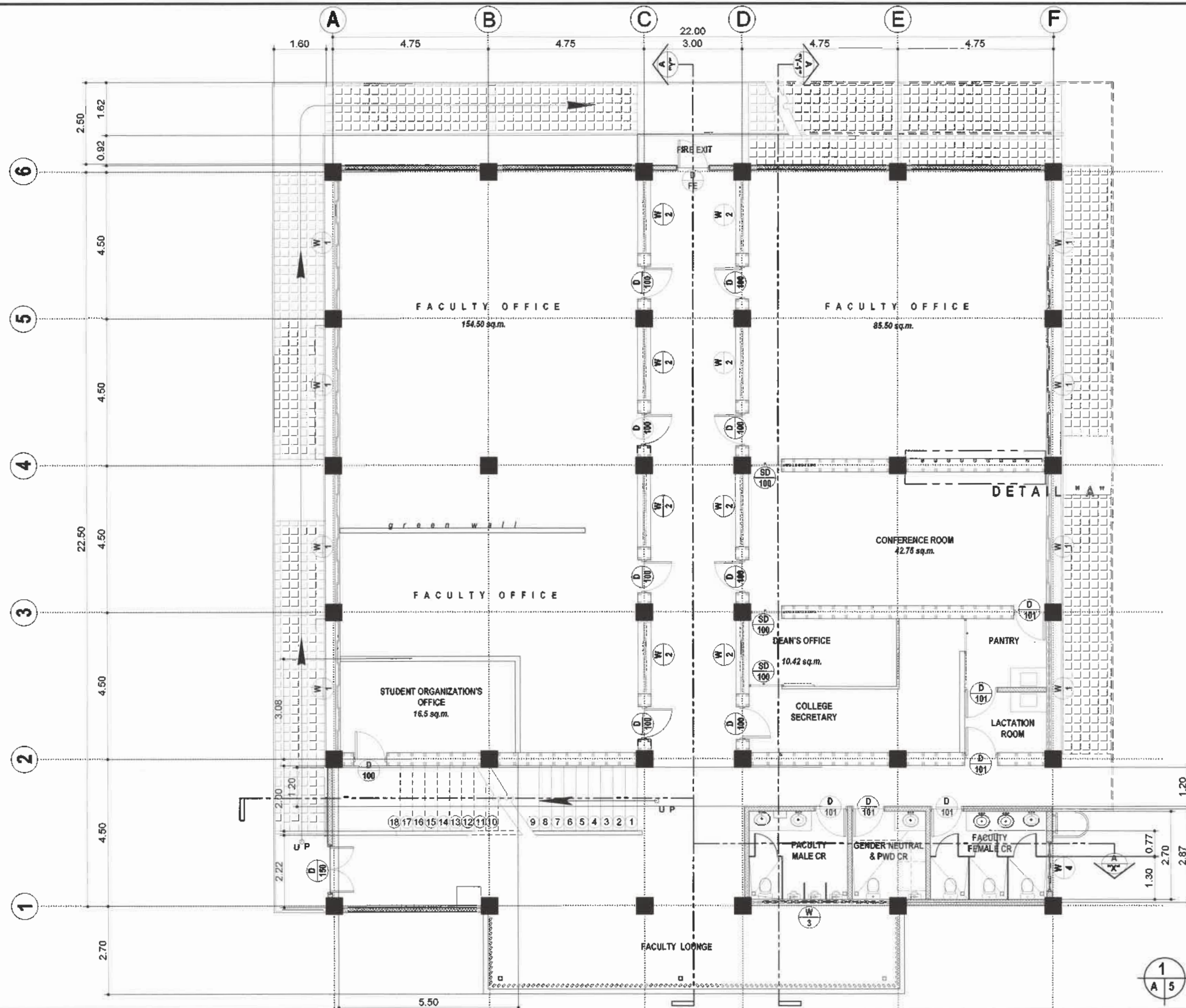
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<div>ARCH. HAZELINE N. TIBANGAY, UAP</div> <div>PRC REG. NO. 028540 - NOV.18, 2024</div> <div>PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025</div> <div>ARCHITECT</div>		<div>ENGINEER</div>		<div>DRAFTED BY:</div> <div>ENSMUNISIN, JAN.2025</div> <div></div> <div>OWNER/ PROJECT TITLE/ LOCATION</div> <div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I</div> <div>BSU - LA TRINIDAD CAMPUS</div>		<div>CONFORME:</div> <div></div> <div>RONDA BATACLAO TULLAY</div> <div>END-USER- DEAN</div>		<div>RECOMMENDING APPROVAL:</div> <div></div> <div>JANET PADAYLOS PABLO</div> <div>SECTOR VICE PRESIDENT</div>		<div>APPROVED:</div> <div></div> <div>KENNETH ALIP LARUAN</div> <div>PRESIDENT</div>	
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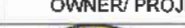





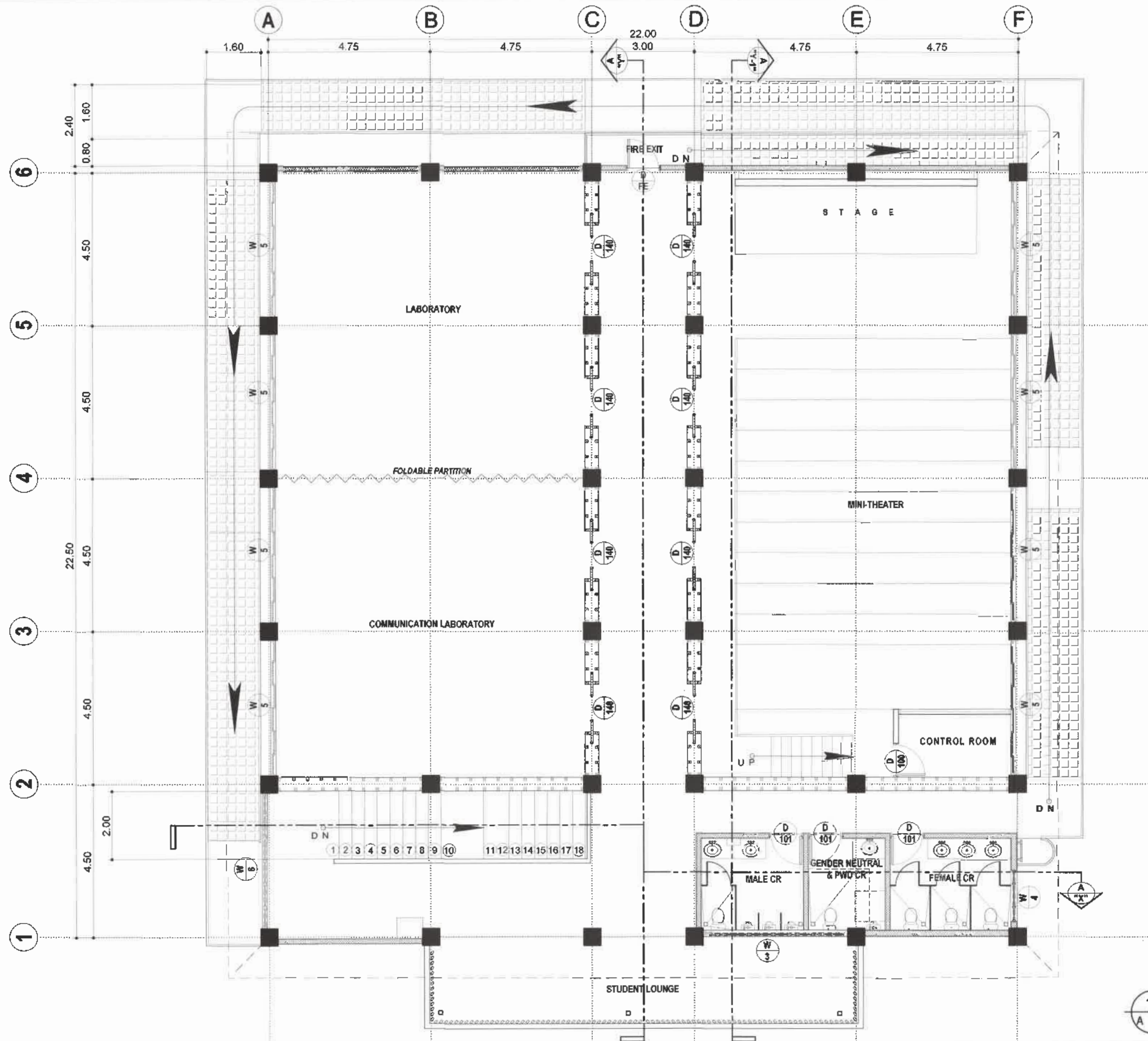
1 SITE DEVELOPMENT PLAN
A 3 SCALE 1:250M78

<div> ARCH. HAZEL N. N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9256412- LA TRINIDAD -JANUARY 31, 2025</div>		DRAFTED BY: ENSMINSIN, JAN 2025	OWNER/ PROJECT TITLE/ LOCATION	CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT: AS SHOWN	SHEET <div><div>A-327</div><div>365</div></div>
			<div> CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div> RONDA BATACLAO TULLAY</div> <div>END-USER- DEAN</div>	<div> JANET P. DA Y. CS PABLO</div> <div>SECTOR VICE PRESIDENT</div>	<div> KENNE THALIP LARUAN</div> <div>PRESIDENT</div>		
ARCHITECT	ENGINEER							



1 SECOND FLOOR PLAN
A 5 SCALE 1:125 MTS

<div> ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025</div>		DRAFTED BY: EMBUNINSIN, JAN 2025	<div> CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT: AS SHOWN	SHEET <div><div>A-527</div><div>565</div></div>
				<div> RONDA BATACLAO TULLAY END-USER- DEAN</div>	<div> JANET PADAYOS PABLO SECTOR VICE PRESIDENT</div>	<div> KENNETH ALIP LARUAN PRESIDENT</div>		
ARCHITECT	ENGINEER							



1 THIRD FLOOR PLAN
A 6 SCALE 1:125 MTS

ARCH. HAZELI N. TIBANGAY, UAP
PRC REG. NO. 028540 - NOV. 18, 2024
PTR NO. 0256412- LA TRINIDAD - JANUARY 31, 2025

ARCHITECT

ENGINEER

DRAFTED BY:
ENAMUNISIN, JAN. 2025



OWNER/ PROJECT TITLE/ LOCATION

**CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS**

CONFORME:

RONDA BATACLAO TULLAY

END-USER- DEAN

RECOMMENDING APPROVAL:

JANET PADAY-OS PABLO

SECTOR VICE PRESIDENT

APPROVED:

KENNETH ALIP LARUAN

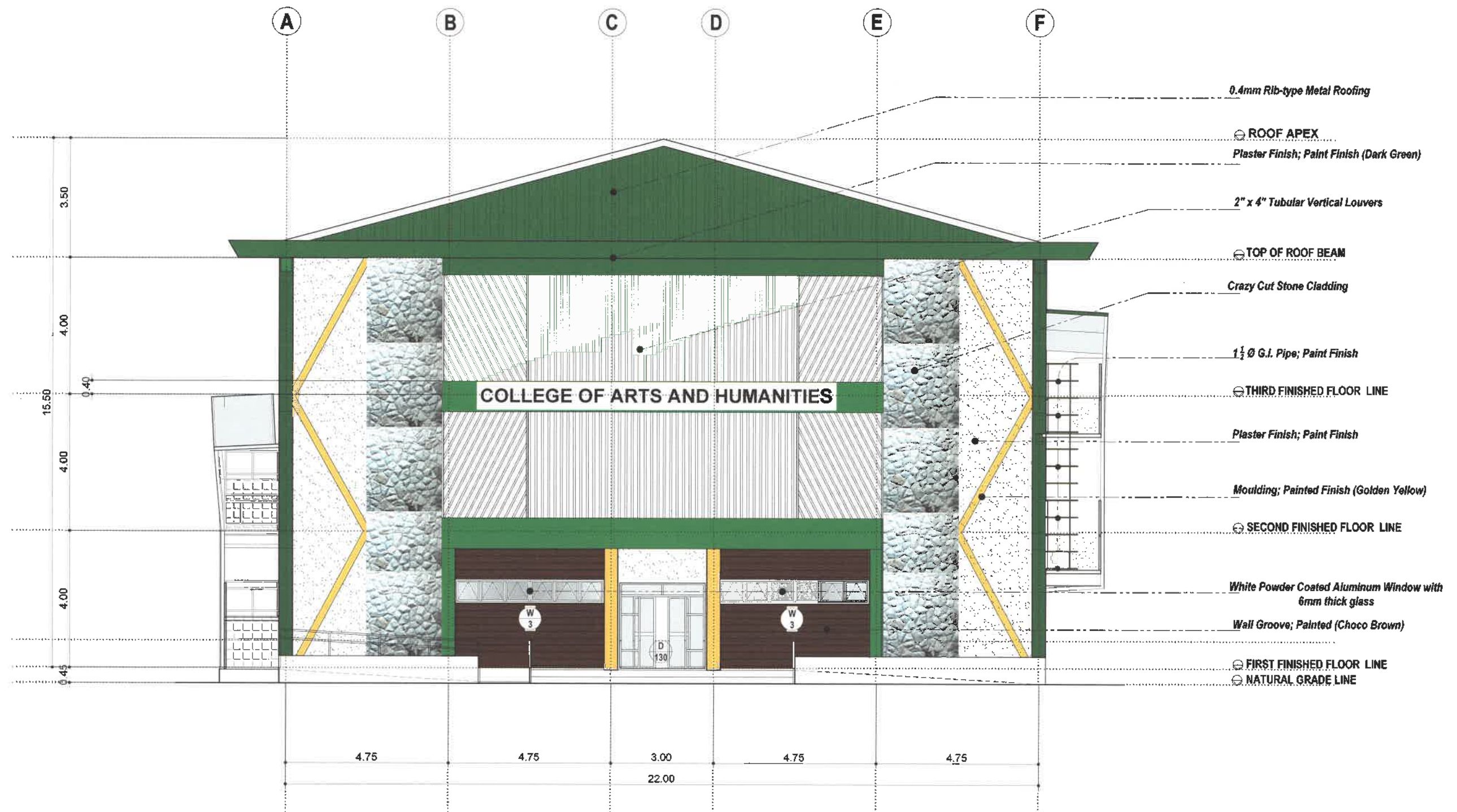
PRESIDENT

SHEET CONTENT:






AS SHOWN

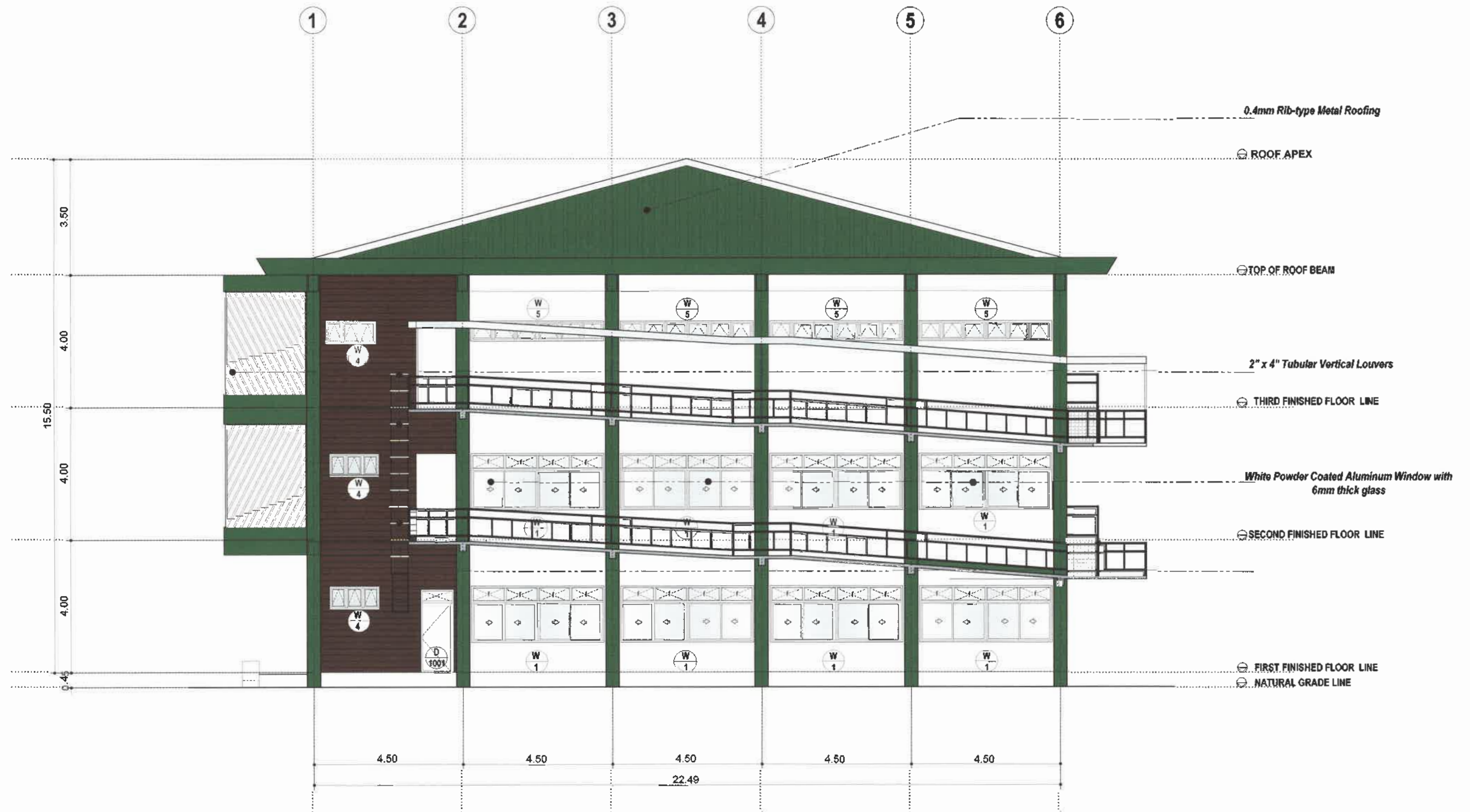
SHEET

A-6 27
6 65








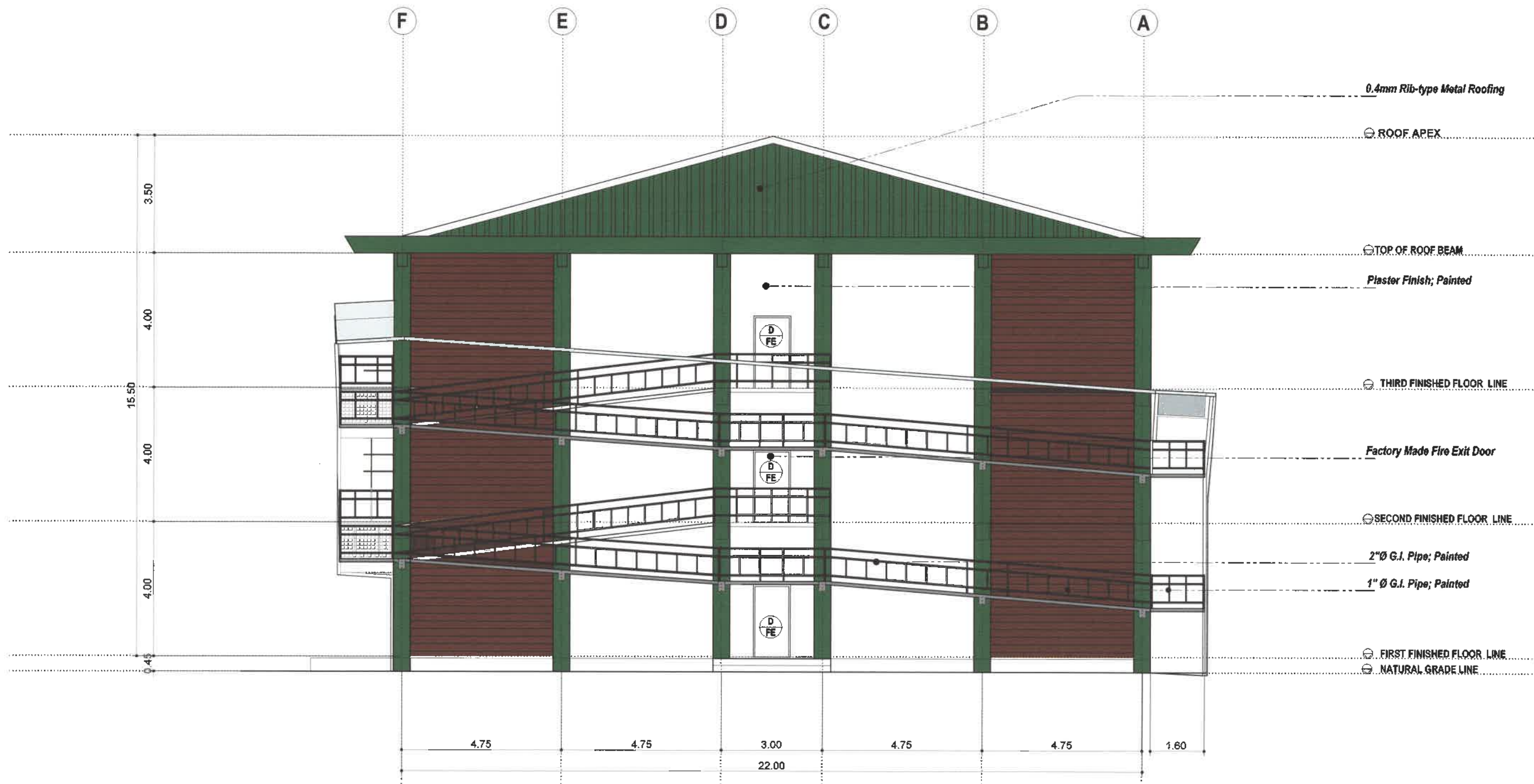
1 FRONT ELEVATION
A 8 SCALE 1:125 MTS

<div></div> <div>ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025</div> <div>ARCHITECT</div>	<div></div> <div>ENGINEER</div>	<div>DRAFTED BY: ENRUMINSIN, JAN 2025</div> <div></div> <div>OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div>CONFORME:</div> <div></div> <div>RONDA BATACLAO TULLAY</div> <div>END-USER- DEAN</div>	<div>RECOMMENDING APPROVAL:</div> <div></div> <div>JANET PADOY OS PABLO</div> <div>SECTOR VICE PRESIDENT</div>	<div>APPROVED:</div> <div></div> <div>KENNETH ALIP LARUAN</div> <div>PRESIDENT</div>	<div>SHEET CONTENT:</div> <div>AS SHOWN</div>	<div>SHEET</div> <div><table><tr><td>A-8</td><td>27</td></tr><tr><td>8</td><td>65</td></tr></table></div>	A-8	27	8	65
A-8	27										
8	65										








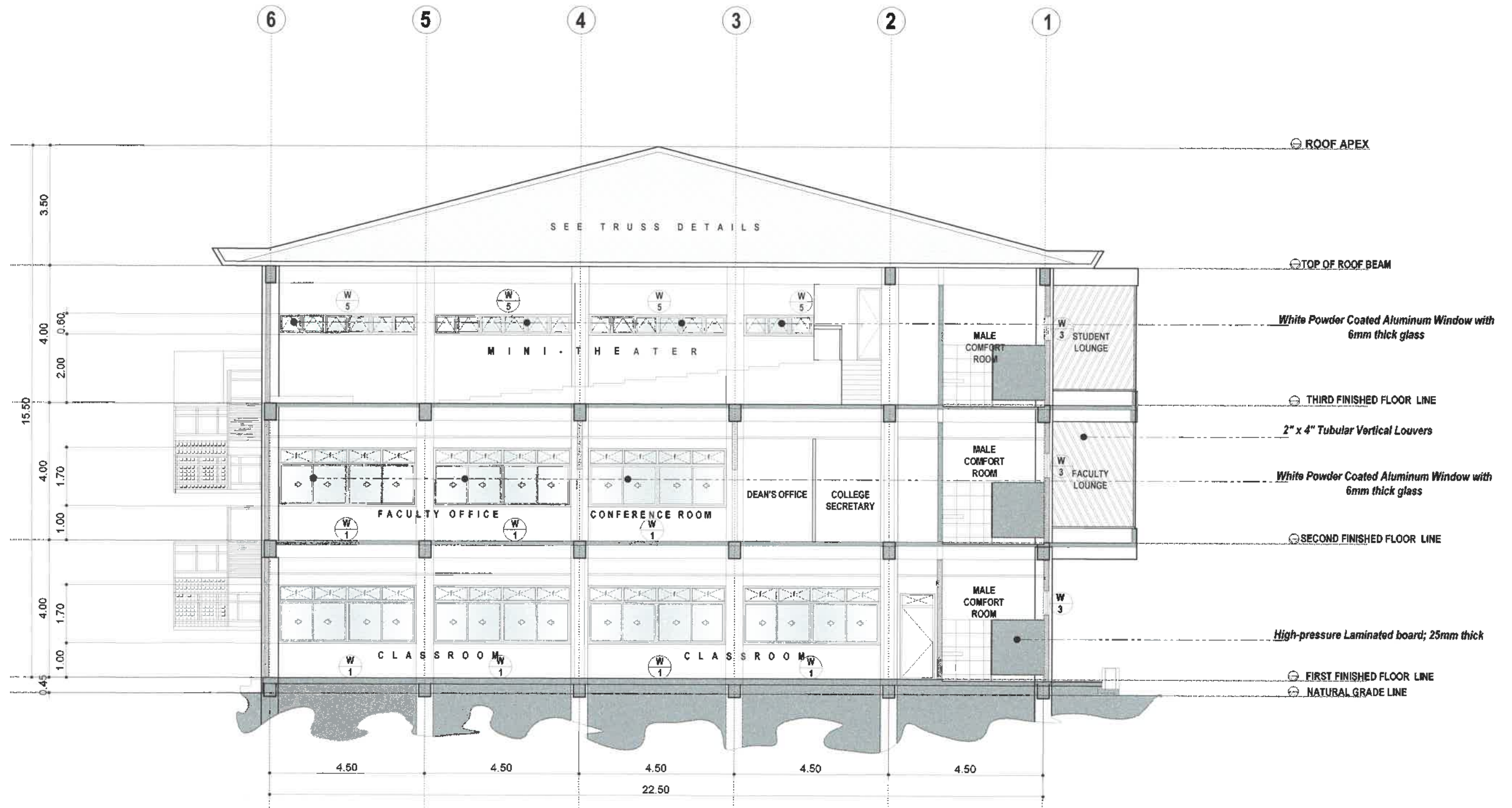
1 RIGHT ELEVATION
A 9 SCALE 1:125 MTS

<div> ARCH. HAZELI NEN TIBANGAY, UAP PRC REG. NO. 03540 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025</div>		DRAFTED BY: ENRUMIN JAN 2025	<div> OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div> CONFORME: RONDA BATA LAO TULLAY</div>	<div> RECOMMENDING APPROVAL: JANE TPADA YOS PABLO</div>	<div> APPROVED: KENNET HALIP LARUAN</div>	<div>SHEET CONTENT: AS SHOWN</div>	<div><table><tr><td>A-9</td><td>27</td></tr><tr><td>9</td><td>65</td></tr></table></div>	A-9	27	9	65
A-9	27											
9	65											
ARCHITECT	ENGINEER			END-USER- DEAN	SECTOR VICE PRESIDENT	P RESIDENT						



1 REAR ELEVATION
A 10 SCALE 1:125 MTS


 ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025 ARCHITECT		DRAFTED BY: ENRUMUNGIN, JAN 2025	 OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:  RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL:  JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	APPROVED:  KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET A-10 27 10 65



SECTION THRU "Y-1"

SCALE

1:125 MTS.


ARCH. HAZELINE N. TIBANGAY, UAP
PRC REG. NO. 078540 - NOV.18, 2024
PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025

ARCHITECT

ENGINEER

DRAFTED BY:
EMSUNING JAN 2025



OWNER/ PROJECT TITLE/ LOCATION

CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:


RONDA BATACLAO TULLAY
END-USER- DEAN

RECOMMENDING APPROVAL:


JANET PADAYOS PABLO
SECTOR VICE PRESIDENT

APPROVED:

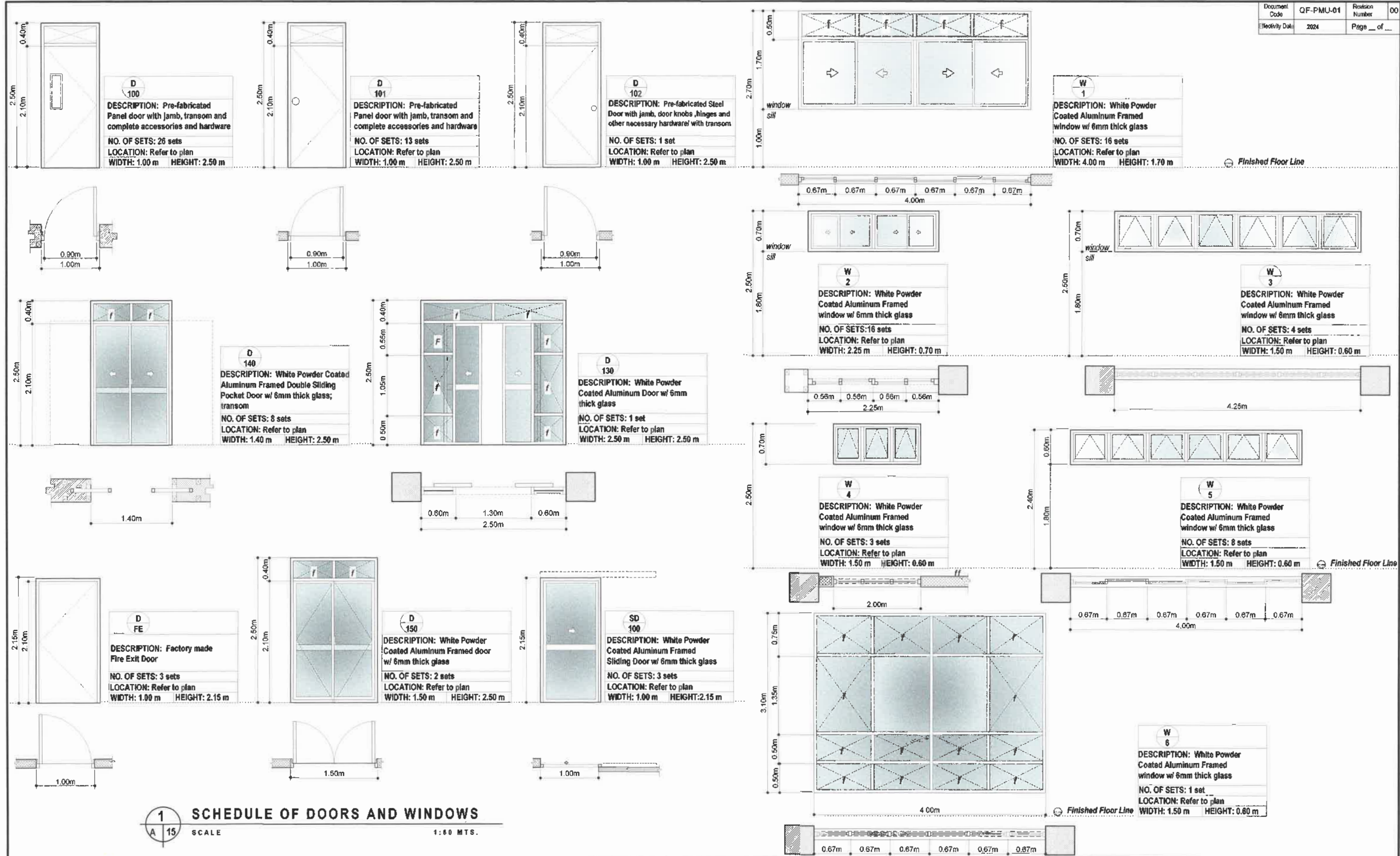

KENNETH ALIP LARUAN
PRESIDENT

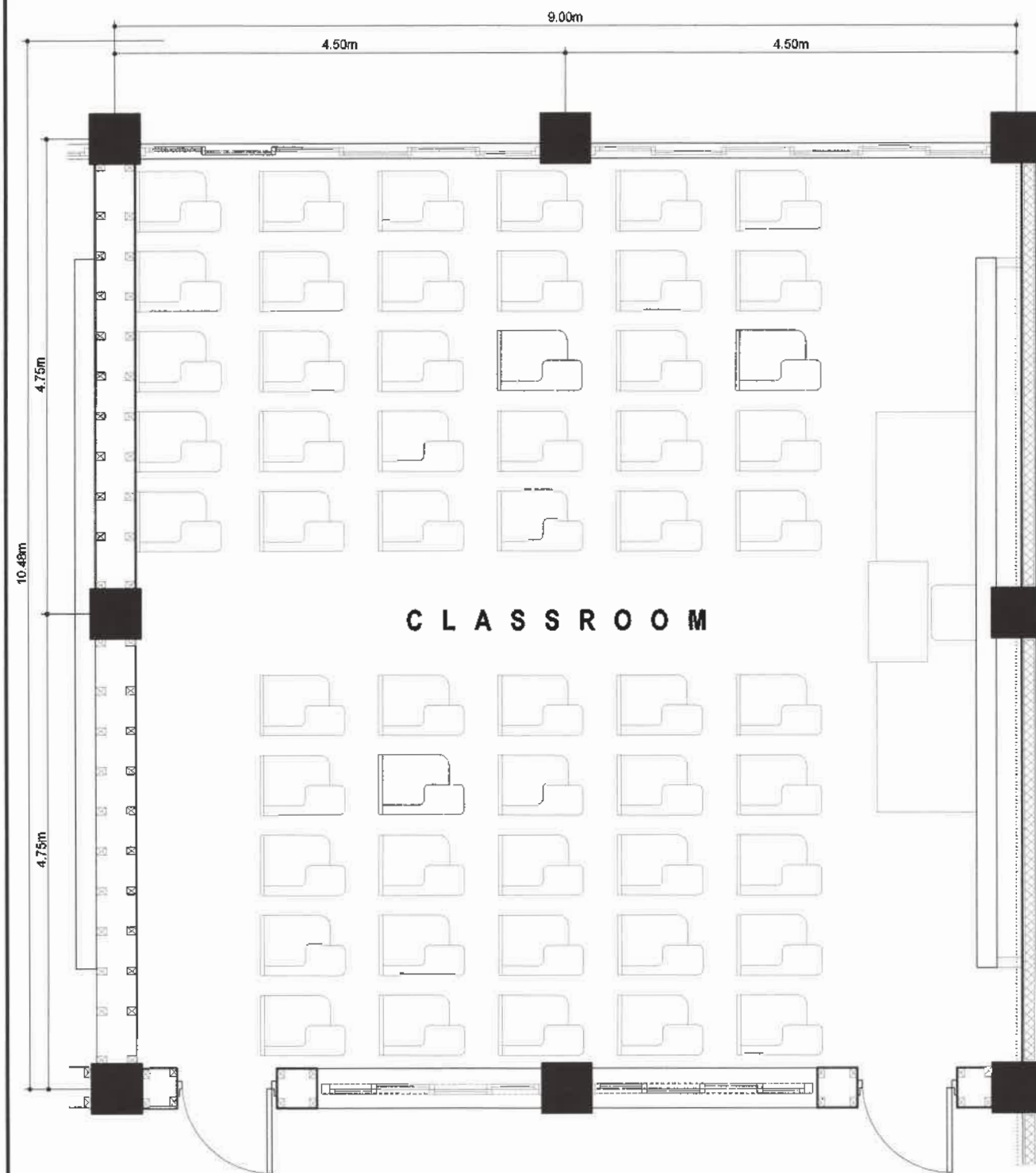
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AS SHOWN

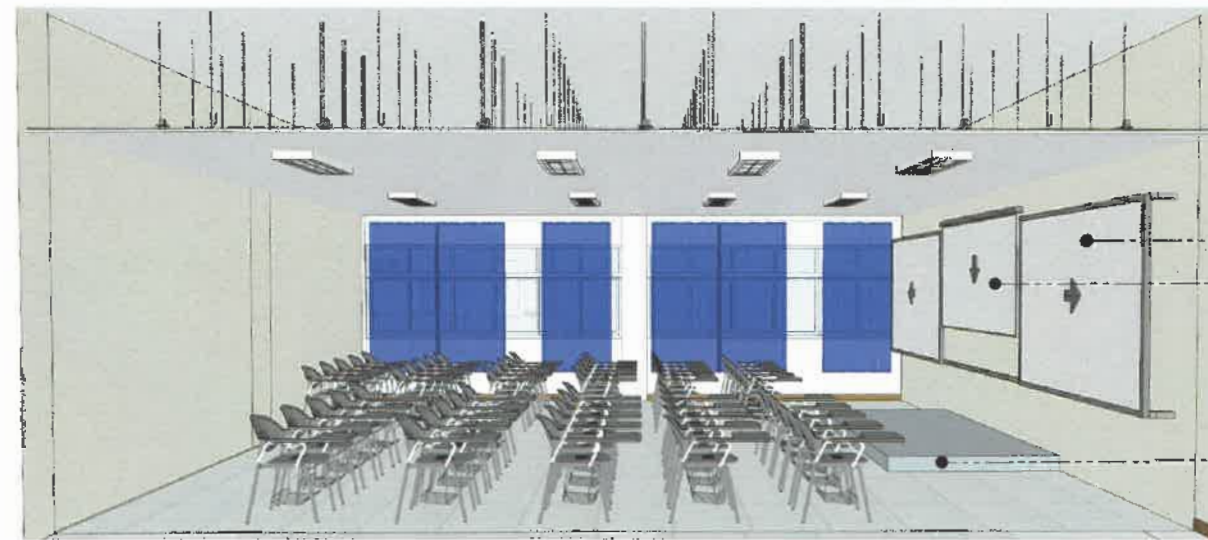
SHEET

A-12 27
12 65

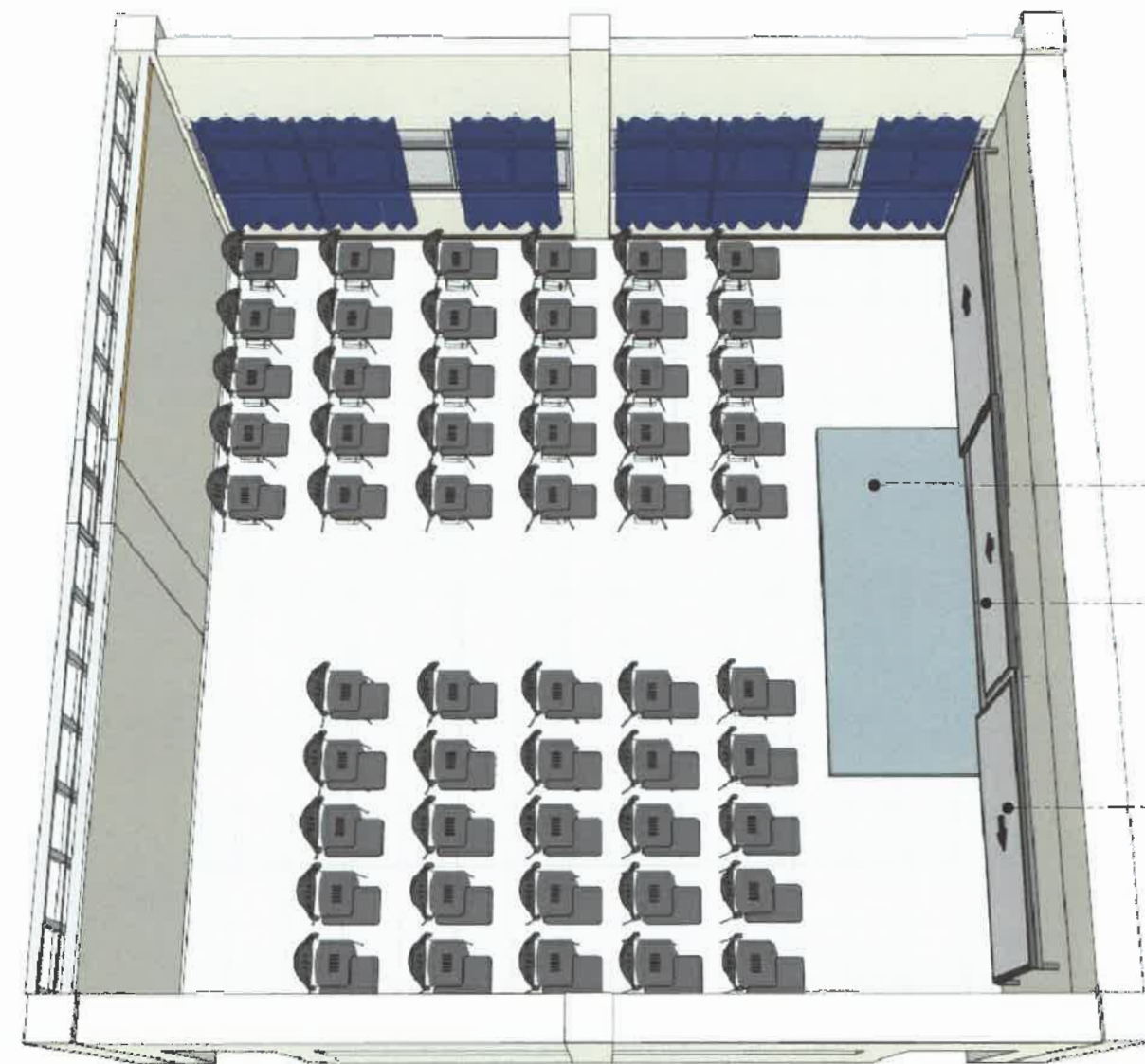




1 TYPICAL CLASSROOM (BLOW-UP "B")
A 16 SCALE 1:60 MTS.



1 P E R S P E C T I V E S
A 16 N O T T O S C A L E

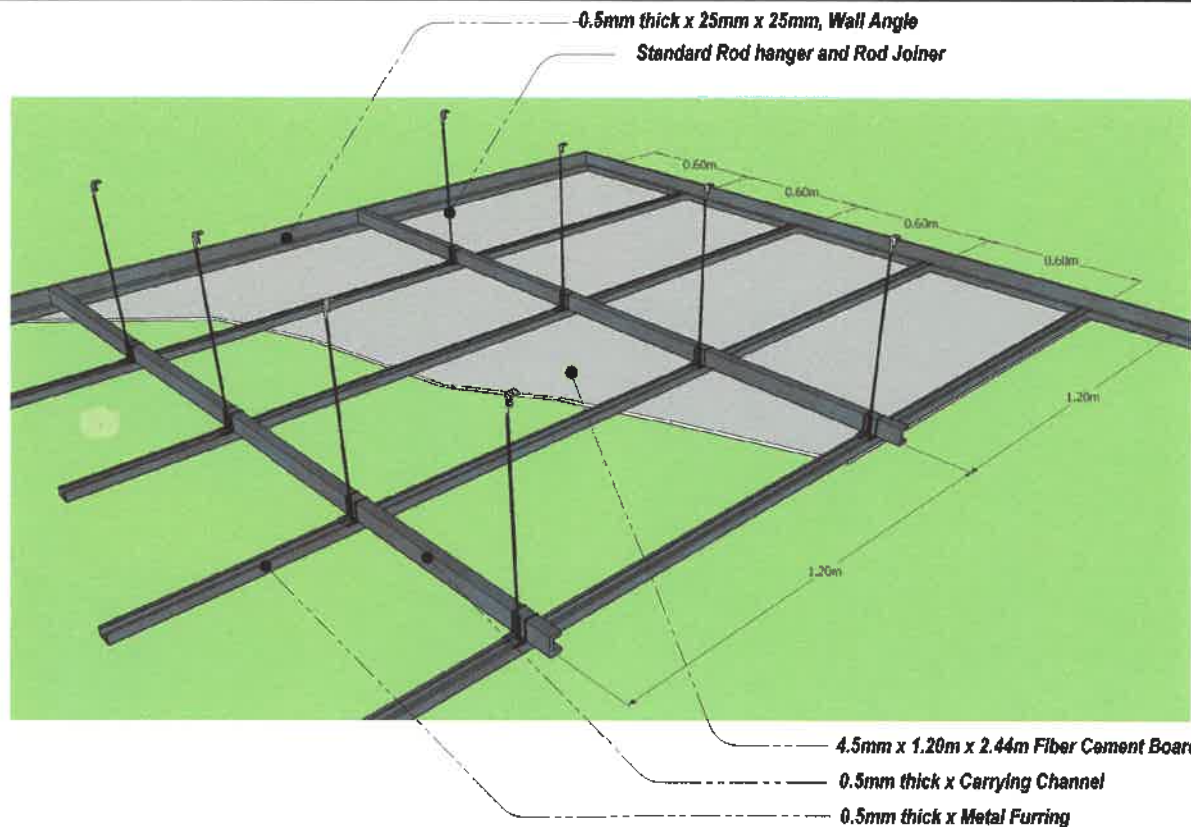


1.60m x 4.00m
 Wooden Platform
 (See Details)

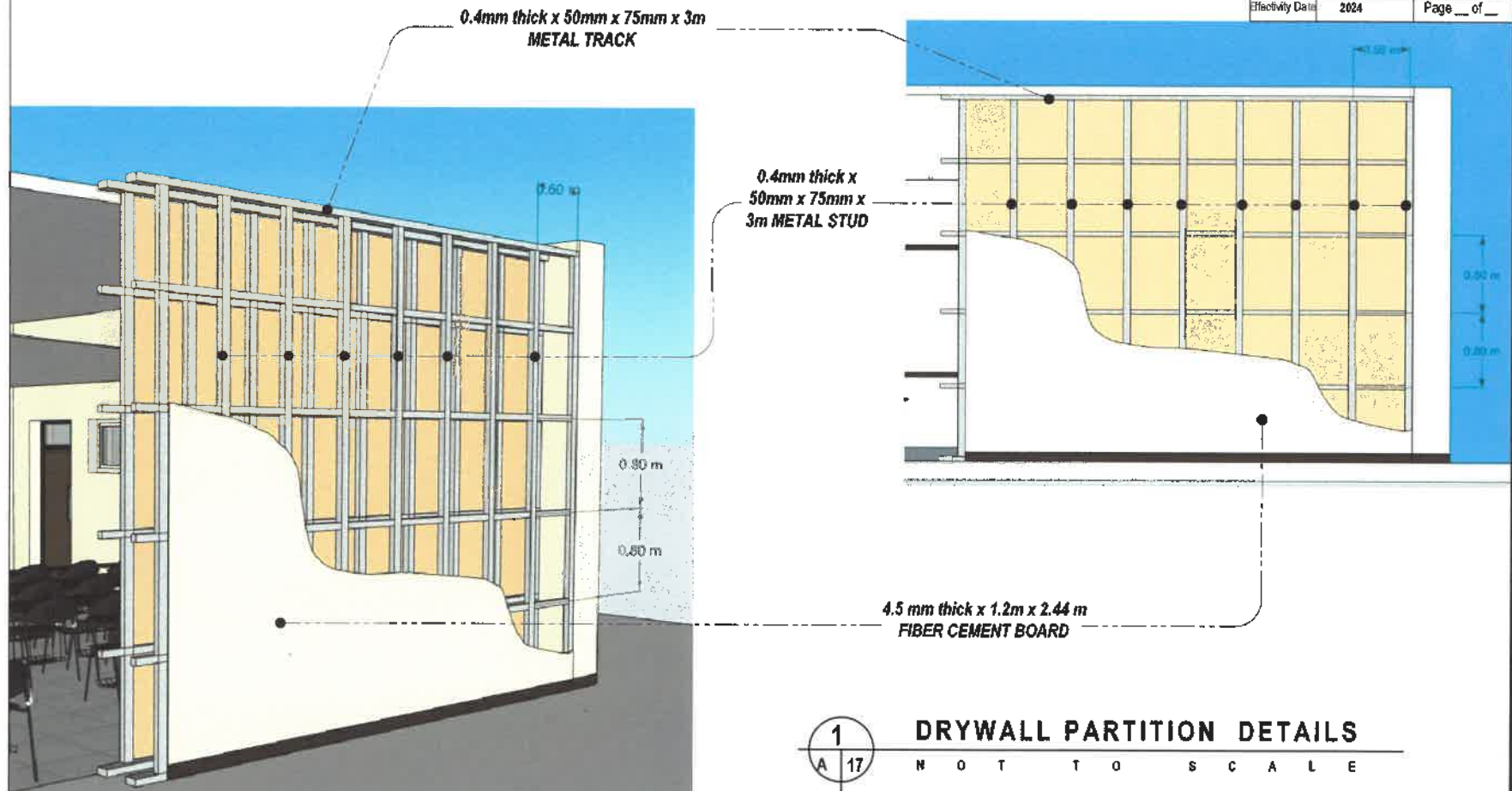
2.80m x 1.70m
 Projector Screen

2.70m x 1.70m White
 Board (Sliding)

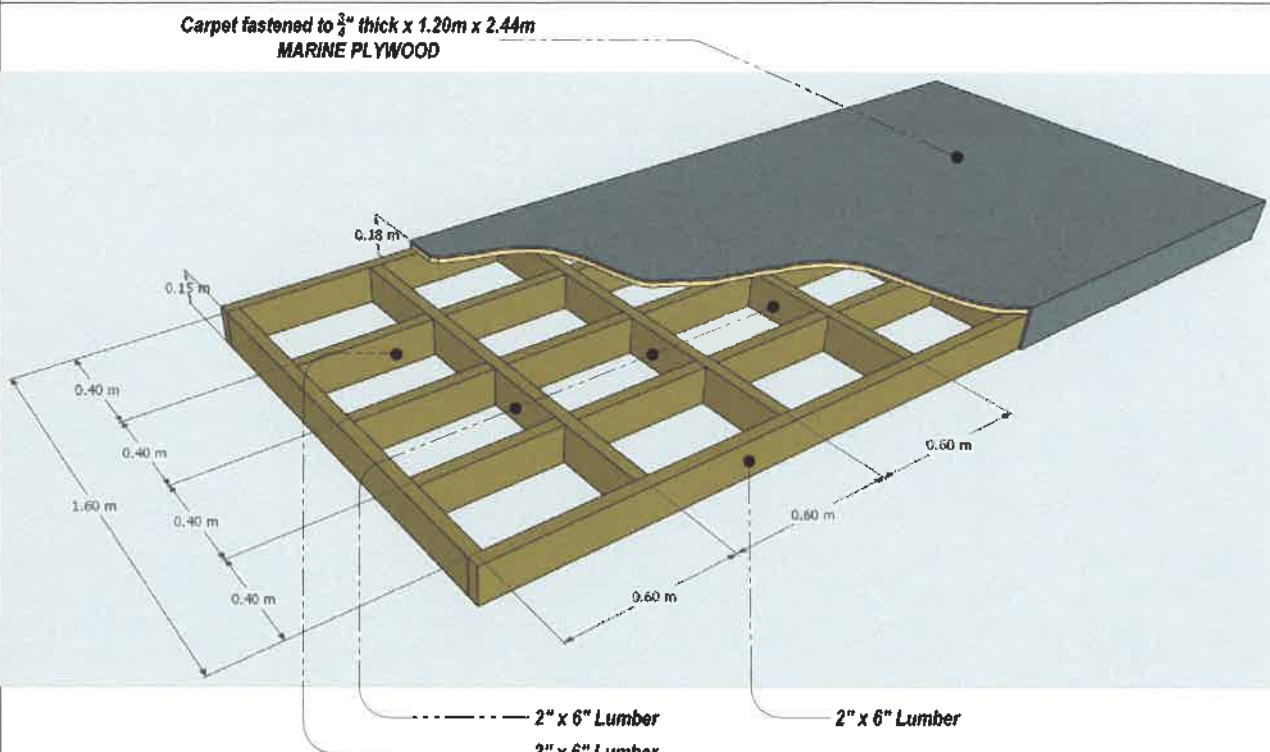
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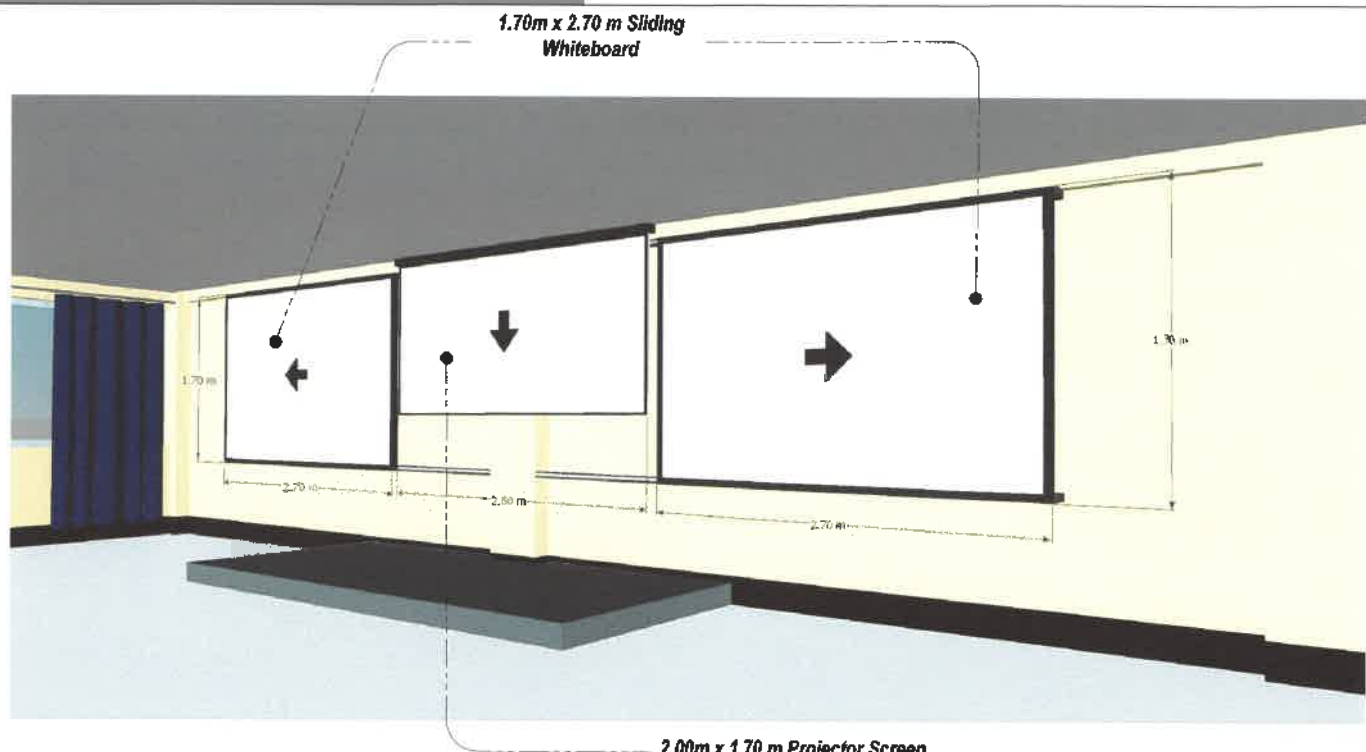
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A 17 **CEILING FURRING DETAILS**
N O T T O S C A L E



1
A 17 **DRYWALL PARTITION DETAILS**
N O T T O S C A L E

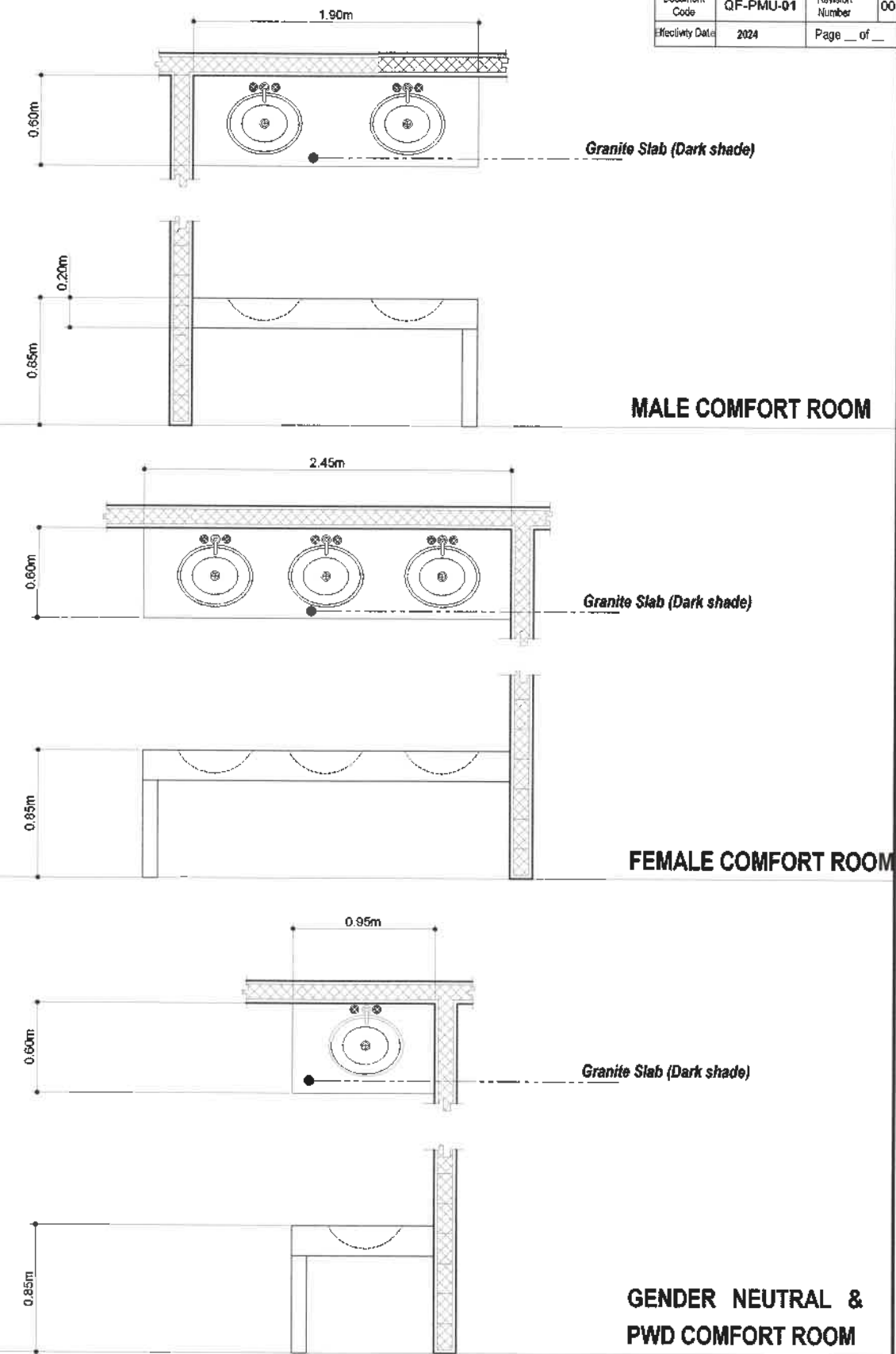
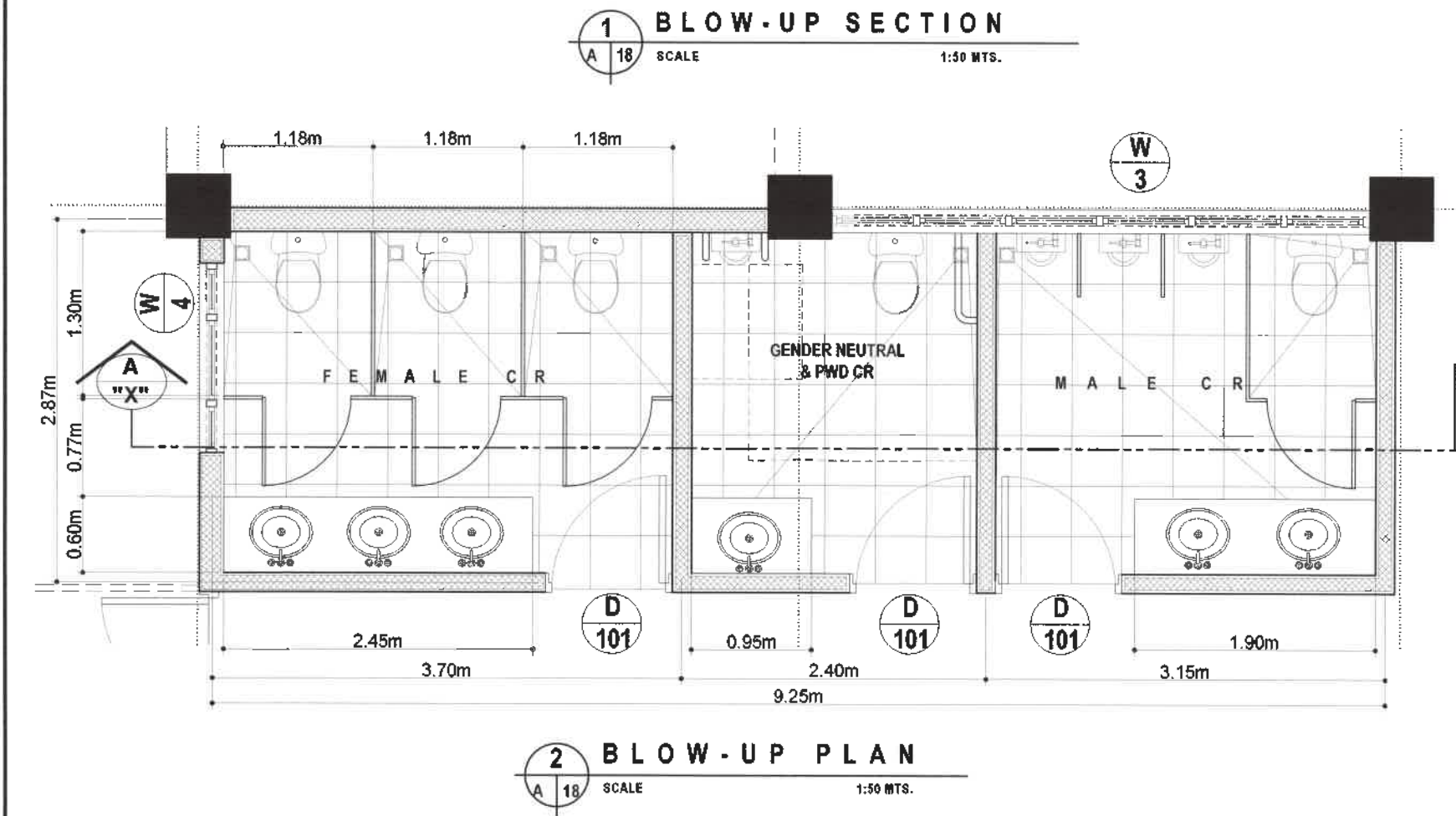
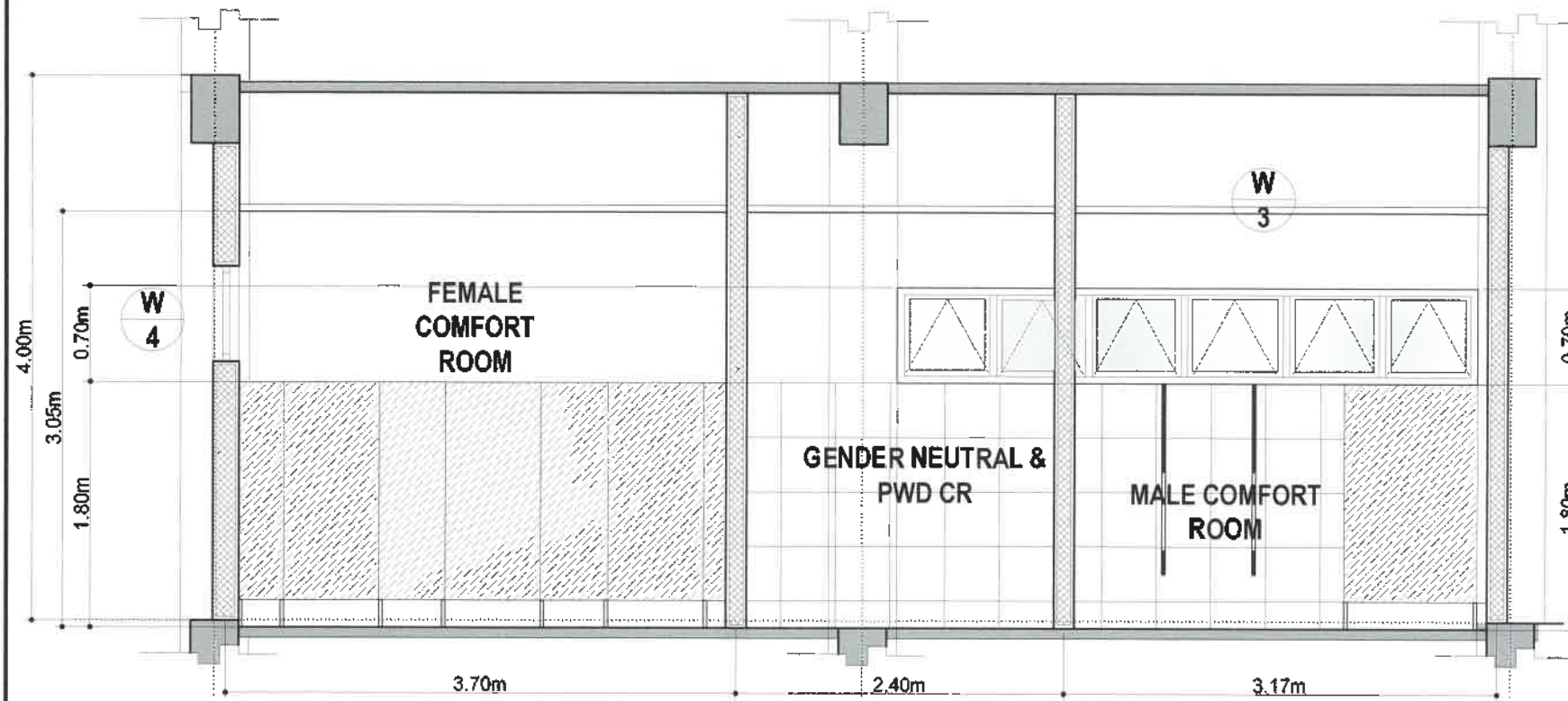


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A 17 **PLATFORM DETAILS**
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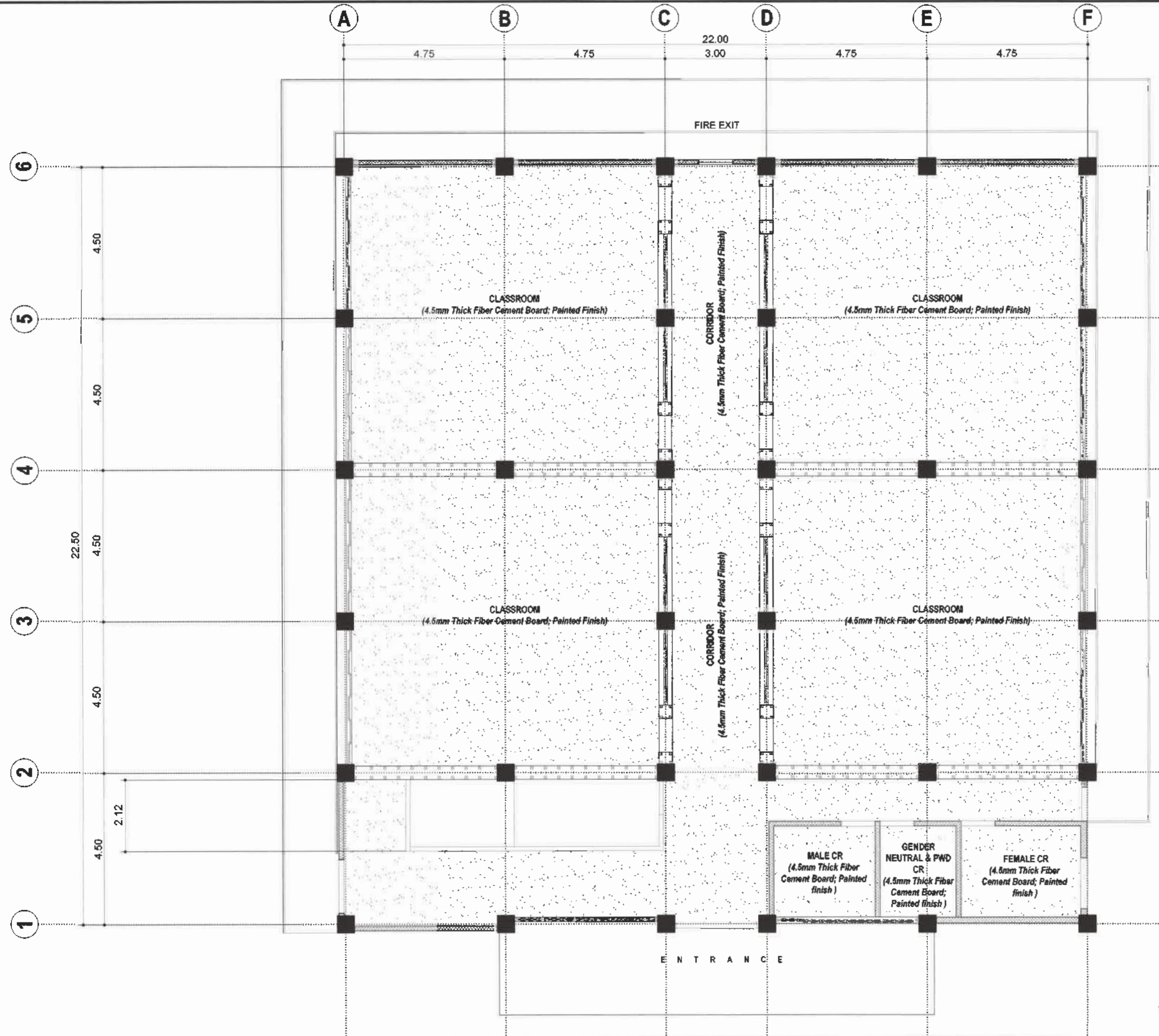


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A 17 **WHITE BOARD DETAILS**
N O T T O S C A L E





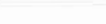
<p>ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025</p> <p>ARCHITECT</p>	<p>ENGINEER</p>	<p>OWNER/ PROJECT TITLE/ LOCATION</p> <p>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</p>	<p>CONFORME:</p> <p>RONDA BATACLAO TULLAY</p> <p>END-USER- DEAN</p>	<p>RECOMMENDING APPROVAL:</p> <p>JANET PADAYOS PABLO</p> <p>SECTOR VICE PRESIDENT</p>	<p>APPROVED:</p> <p>KENNETH ALIP LARUAN</p> <p>PRESIDENT</p>	<p>SHEET CONTENT:</p> <p>AS SHOWN</p>	<p>SHEET</p> <p>A-17 27 17 65</p>
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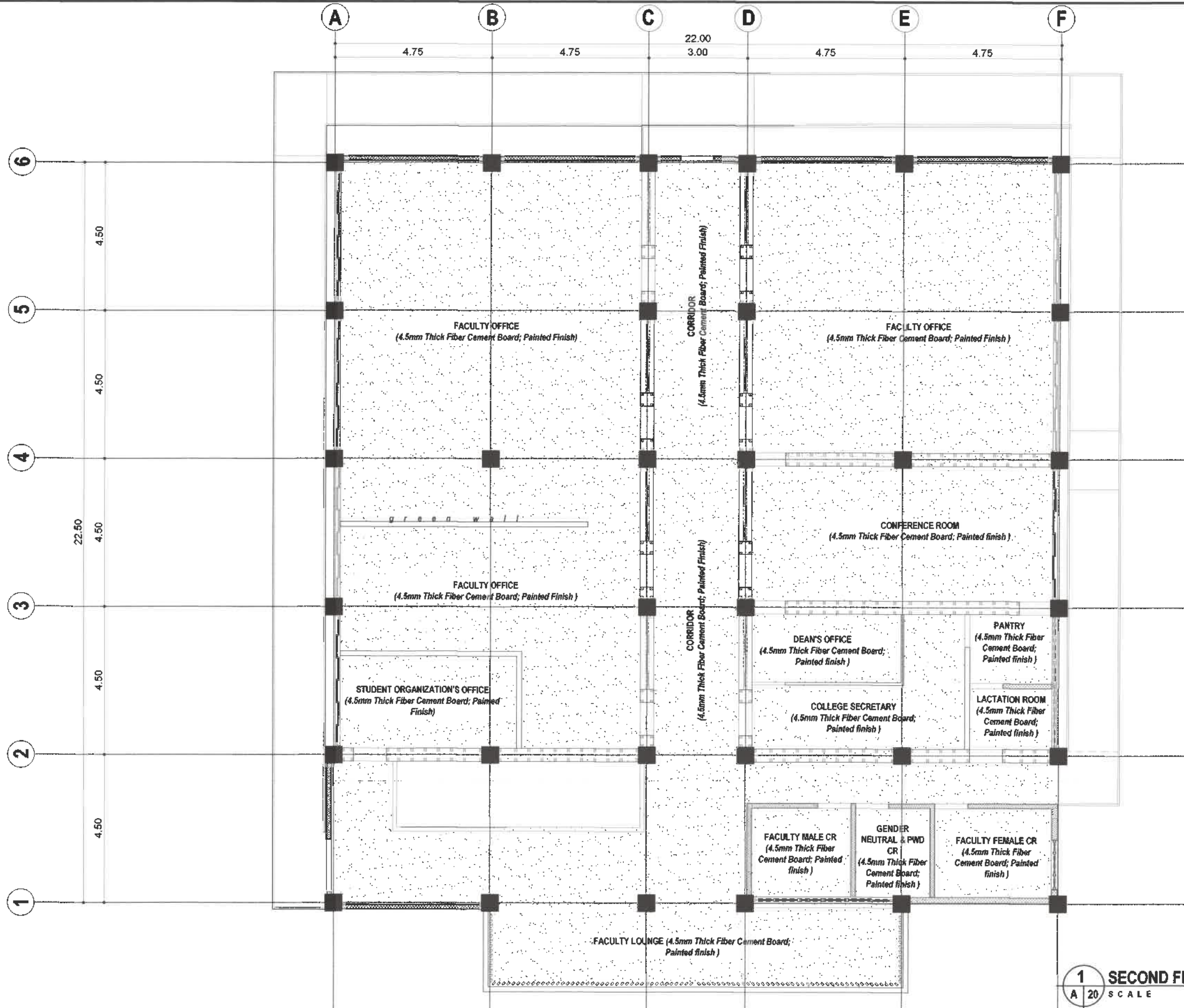


 ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 033440 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025 ARCHITECT	 ENGINEER	DRAFTED BY: ENSLIMINSIN, JAN.2025	 OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME: RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL: JANET PADO'S PABLO SECTOR VICE PRESIDENT	APPROVED: KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET A-18 27 18 65








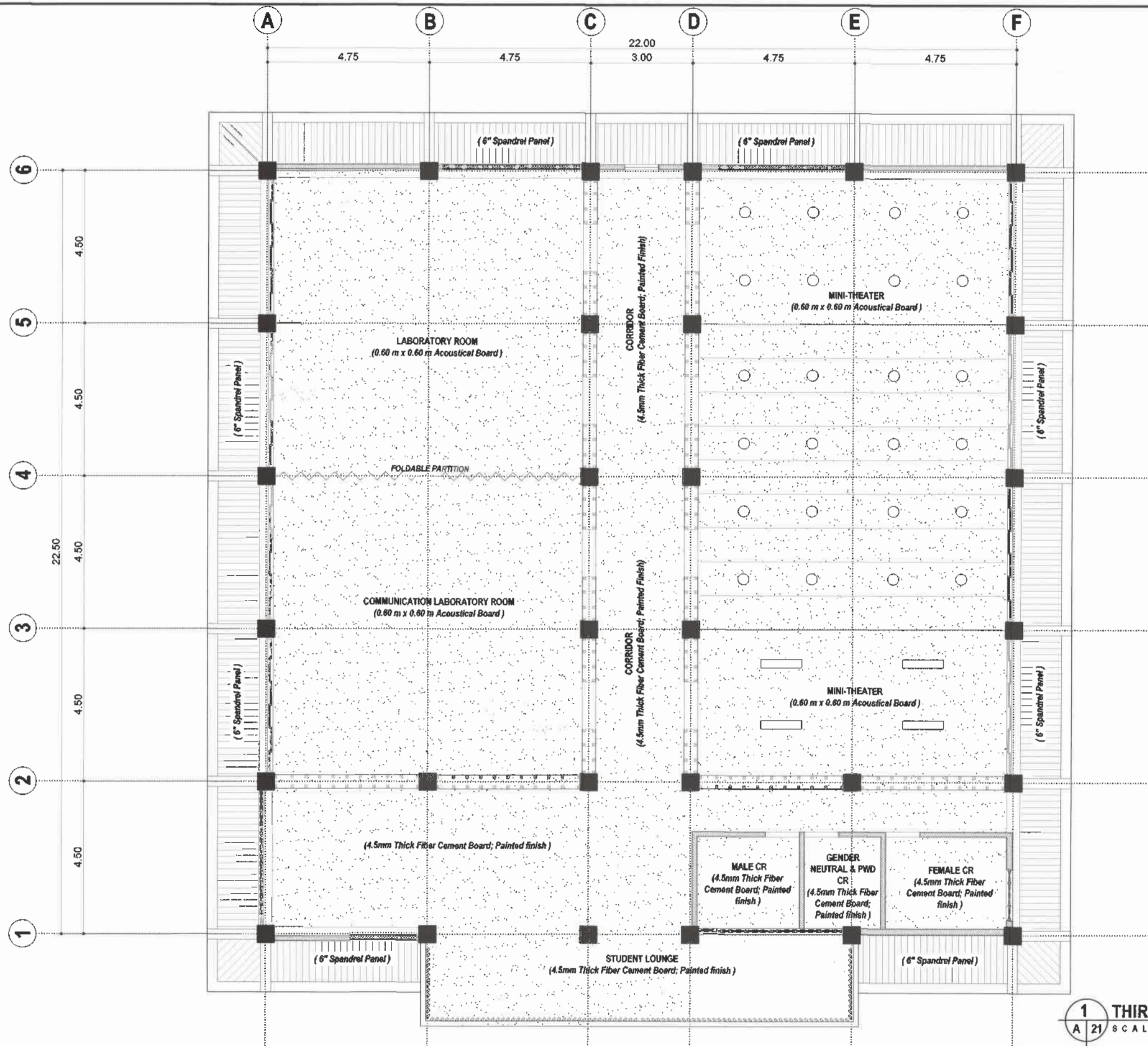
1 FIRST FLOOR REFLECTED CEILING PLAN
A 19 SCALE 1:125 MTS






<div></div> <div>ARCH. HAZELINE N. T. BANGAY, UAP</div> <div>PRC REG. NO. 028 140- NOV. 18, 2024</div> <div>PTR NO. 9256412- LA TRINIDAD -JANUARY 31, 2025</div>		DRAFTED BY: ENRIMANSIN, JAN 2025	<div></div> <div>OWNER/ PROJECT TITLE/ LOCATION</div> <div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div>CONFORME:</div> <div></div> <div>RONDA BATACLAO TULLAY</div> <div>END-USER- DEAN</div>	<div>RECOMMENDING APPROVAL:</div> <div></div> <div>JANET PADAY-SS PABLO</div> <div>SECTOR VICE PRESIDENT</div>	<div>APPROVED:</div> <div></div> <div>KENNETH ALIP LARUAN</div> <div>PRESIDENT</div>	<div>SHEET CONTENT:</div> <div>AS SHOWN</div>	<div>SHEET</div> <div><div>A-1927</div><div>1965</div></div>
ARCHITECT	ENGINEER							



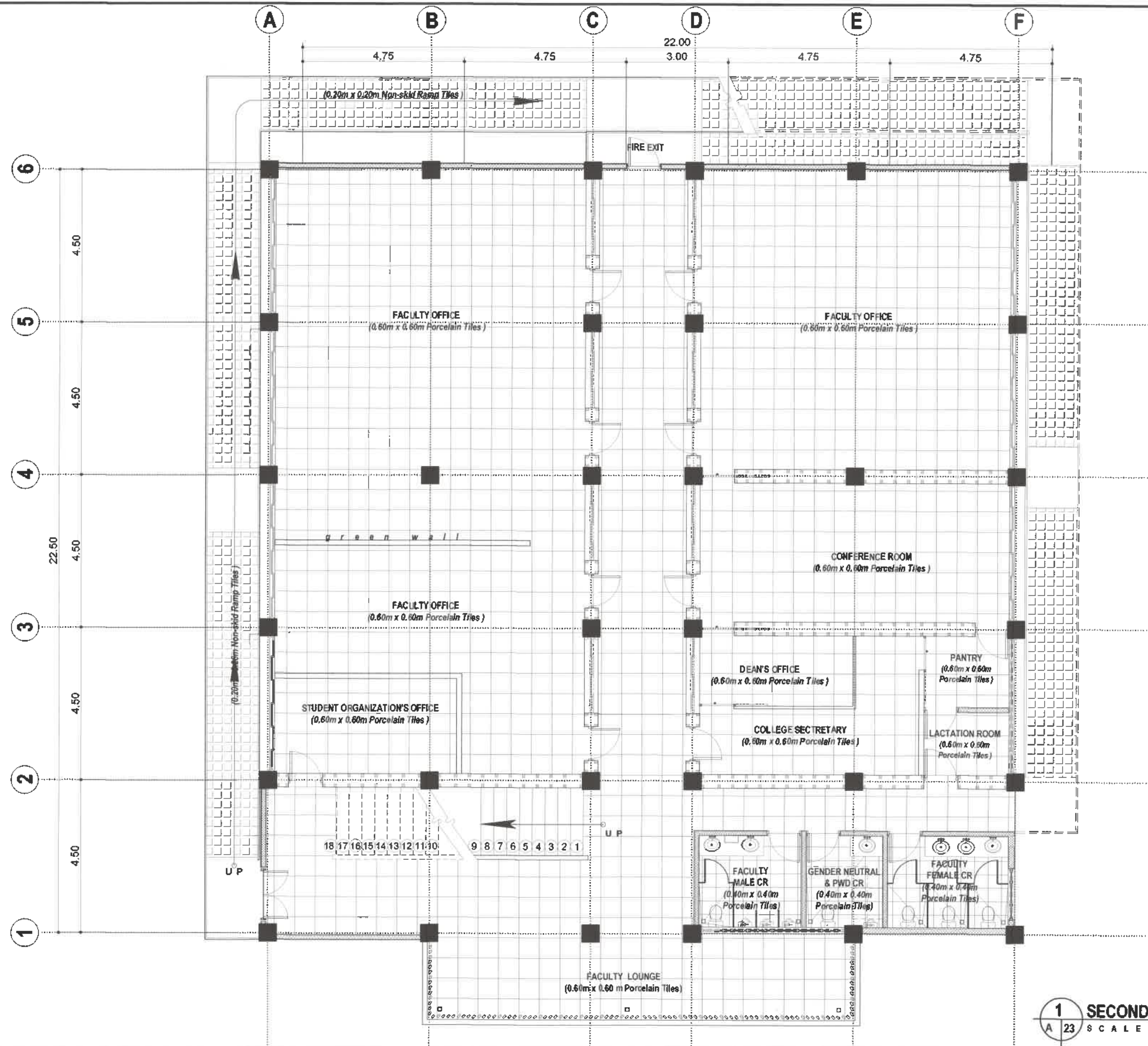
1 SECOND FLOOR REFLECTED CEILING PLAN
A 20 SCALE 1:125 MTS

<div> ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025</div> <div>ARCHITECT</div>	<div>ENGINEER</div>	DRAFTED BY: EMSUMINSIN, JAN. 2025	<div></div> <div>OWNER/ PROJECT TITLE/ LOCATION</div> <div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div> RONDA BATACLAO TULLAY</div> <div>END-USER- DEAN</div>	<div> JANET PADOY-OS PABLO</div> <div>SECTOR VICE PRESIDENT</div>	<div> KENNETH ALIP LARUAN</div> <div>PRESIDENT</div>	<div>SHEET CONTENT:</div> <div>AS SHOWN</div>	<div>SHEET</div> <div><div>A-2027</div><div>2065</div></div>



<div> ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025</div>		DRAFTED BY: ENSUMINSIN, JAN 2025	<div></div>	OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT: AS SHOWN	SHEET <div><div>A-2127</div><div>2165</div></div>
					<div> RONDA BATACLAO TULLAY END-USER- DEAN</div>	<div> JANET PADOY OS PABLO SECTOR VICE PRESIDENT</div>	<div> KENNETH ALIP LARUAN PRESIDENT</div>		
ARCHITECT	ENGINEER								

A-22	27
22	65



1 SECOND FLOOR ARCHITECTURAL FLOOR FINISHES PLAN
A-23 SCALE 1:125 MTS

ARCH. HAZELINE N. TIBANGAY, UAP
PRC REG. NO. 028540 - NOV. 18, 2024
PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025

ARCHITECT

ENGINEER

DRAFTED BY:
EMSUNJIN JAN 2025



OWNER/ PROJECT TITLE/ LOCATION

CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:

RONDA BATACLAO TULLAY
END-USER- DEAN

RECOMMENDING APPROVAL:

JANE PATALOS PABLO
SECTOR VICE PRESIDENT

APPROVED:

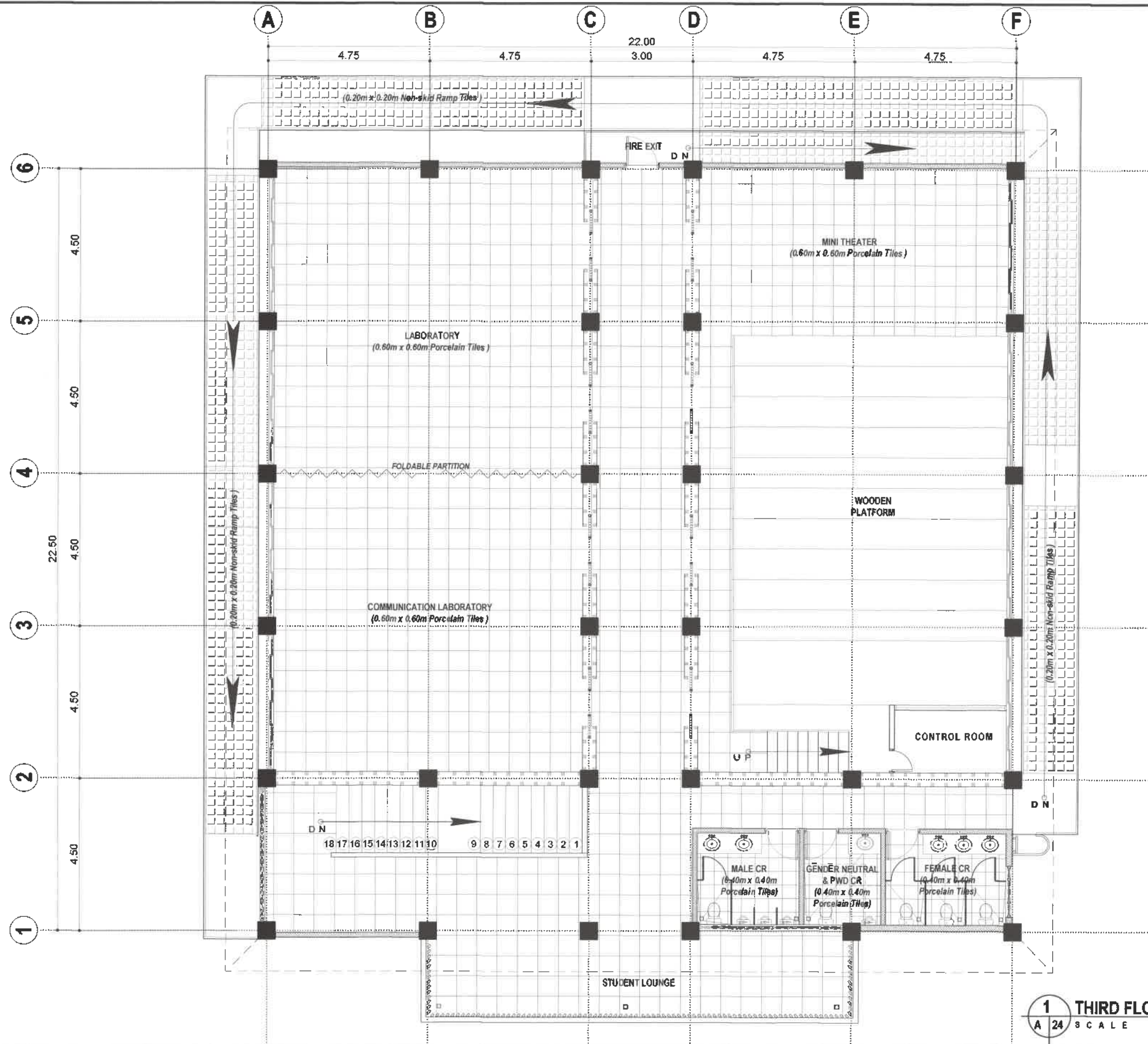
KENNETH ALIP LARUAN
PRESIDENT

SHEET CONTENT:

AS SHOWN

SHEET

A-23 27
23 65



1 THIRD FLOOR ARCHITECTURAL FLOOR FINISHES PLAN
A 24 SCALE 1:125 MTS

ARCH. HAZELINE N. TIBANGAY, UAP
PRC REG. NO. 028540 - NOV. 18, 2024
PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025

ARCHITECT

ENGINEER

DRAFTED BY:
EMSUNINSIN JAN 2025



OWNER/ PROJECT TITLE/ LOCATION

CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:

RONDA BATACLAO TULLAY

END-USER- DEAN

RECOMMENDING APPROVAL:

JANET PADAY-OS PABLO

SECTOR VICE PRESIDENT

APPROVED:

KENNETH ALIP LARUAN

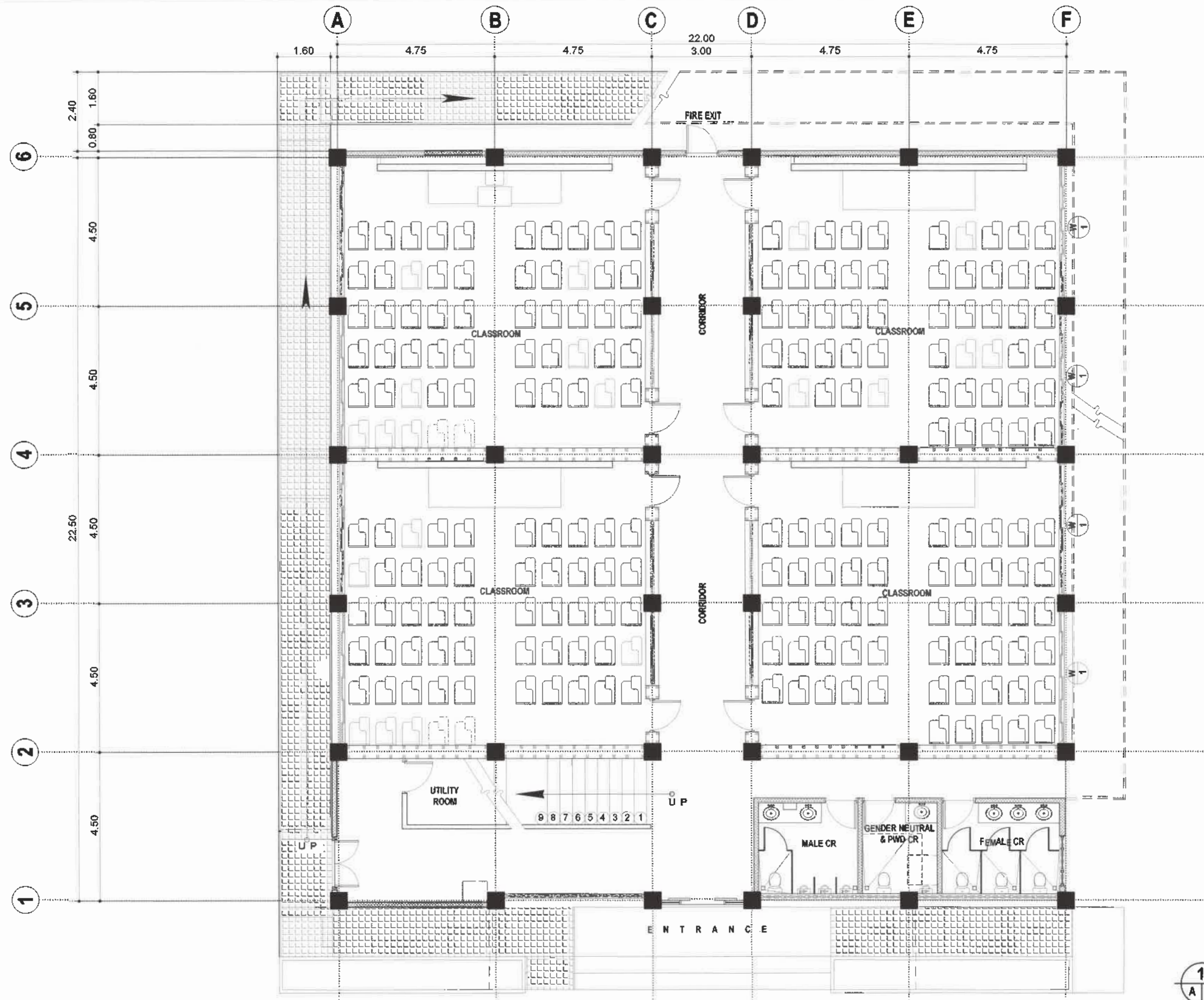
PRESIDENT

SHEET CONTENT:






AS SHOWN

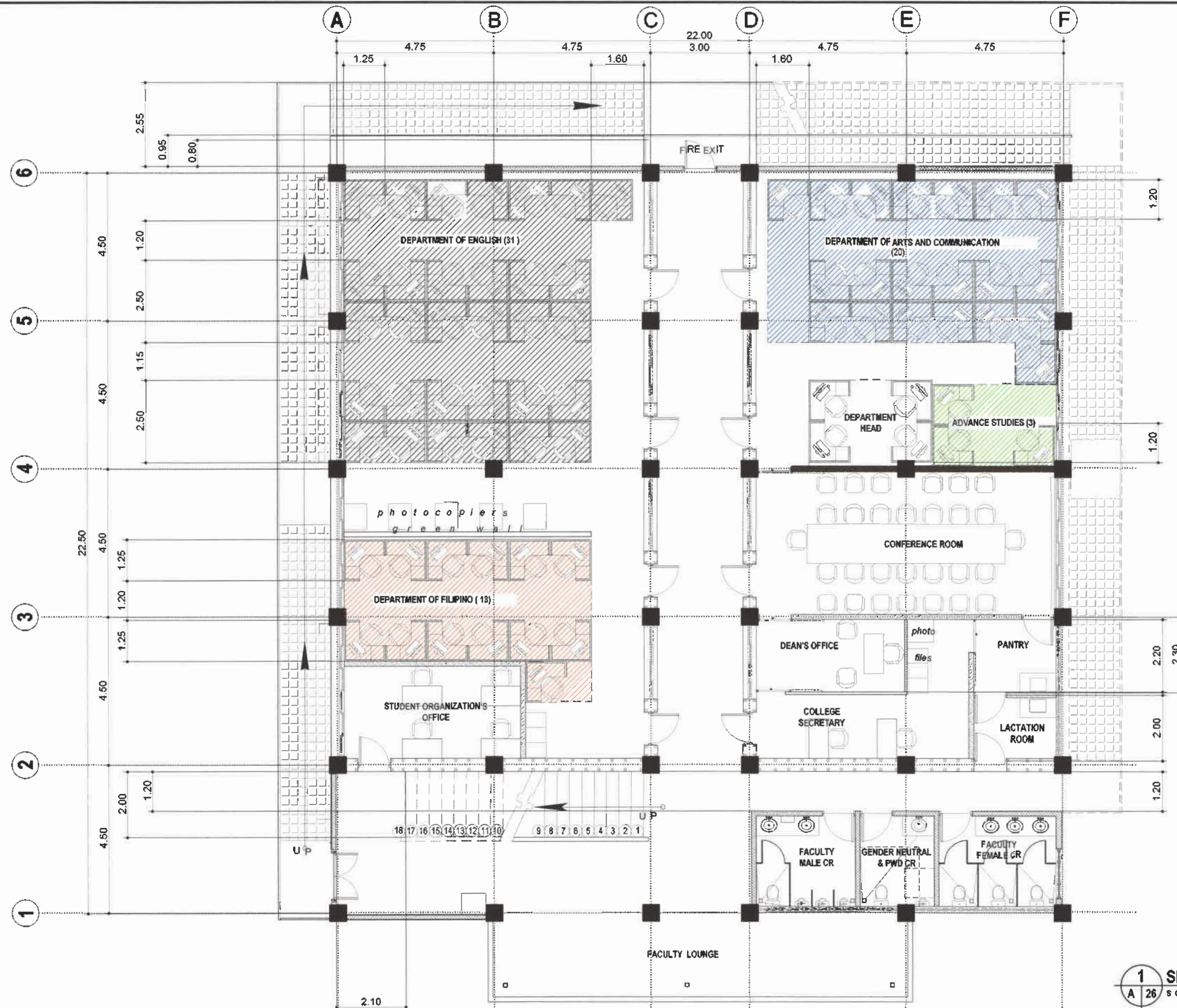
SHEET

A-24 27
24 65








1 FIRST FLOOR FURNITURE LAYOUT
A 25 SCALE 1:125 MTS

<div></div> <div>ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025</div> <div>ARCHITECT</div>		DRAFTED BY: ENRUMINSIN, JAN 2025	<div></div> <div>OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div>CONFORME:</div> <div></div> <div>RONDA BATACLAO TULLAY</div> <div>END-USER- DEAN</div>	<div>RECOMMENDING APPROVAL:</div> <div></div> <div>JANET PADAY-OS PABLO</div> <div>SECTOR VICE PRESIDENT</div>	<div>APPROVED:</div> <div></div> <div>KENNETH ALIP LARUAN</div> <div>PRESIDENT</div>	<div>SHEET CONTENT:</div> <div>AS SHOWN</div>	<div>SHEET</div> <div><table><tr><td>A-25</td><td>27</td></tr><tr><td>25</td><td>65</td></tr></table></div>	A-25	27	25	65
A-25	27											
25	65											



1 SECOND FLOOR FURNITURE LAYOUT
A 26 SCALE 1:125 MTS

<div> ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9256412- LA TRINIDAD -JANUARY 31, 2025</div>		DRAFTED BY: ENSMUNIRIN JAN 2025	OWNER/ PROJECT TITLE/ LOCATION		CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT: AS SHOWN	SHEET <div><div>A-2627</div><div>2665</div></div>
			<div> CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>		<div> RONDA BATACLAO TULLAY</div>	<div> JANET PADAYNOS PABLO</div>	<div> KENNETH ALIP LARUAN</div>		
ARCHITECT	ENGINEER				END-USER- DEAN	SECTOR VICE PRESIDENT	PRESIDENT		



GENERAL CONSTRUCTION NOTES

- IN THE INTERPRETATION OF THE DRAWING, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES AND SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
- IN REFERENCE TO THE OTHER DRAWINGS, SEE ARCHITECTURAL DRAWINGS FOR DEPRESSIONS IN FLOOR SLABS, OPENING IN THE WALLS AND SLABS, INTERIOR PARTITIONS, LOCATION OF DRAINS, ETC.
- IN CASE OF DISCREPANCIES AS TO THE LAYOUT, DIMENSIONS, AND ELEVATIONS BETWEEN THE STRUCTURAL PLANS, AND ARCHITECTURAL DRAWINGS, THE CONTRACTOR SHALL NOTIFY BOTH THE STRUCTURAL ENGINEER AND ARCHITECT.
- ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI.318 95 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ALL STRUCTURAL STEEL WORK ACCORDING WITH AISC SPECIFICATION (9th EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENT.
- ACI REFERS TO AMERICAN CONCRETE INSTITUTE, AISC TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AND ASTM TO AMERICAN SOCIETY FOR TESTING MATERIALS.
- CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED. MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
- SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEELS, MISCELLANEOUS IRON, PRE-CAST CONCRETE, ETC. SHALL BE SUBMITTED FOR ENGINEERS APPROVAL BEFORE FABRICATION.
- CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURBS, SILLS, STOOLS, EQUIPMENT'S AND MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS.
- ALL RESULTS OF MATERIAL TESTING FOR CONCRETE, REINFORCING BARS, AND STRUCTURAL STEEL MUST BE NOTED AND APPROVED BY THE STRUCTURAL DESIGNER.

NOTES ON CONCRETE MIXES & PLACING

- ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT THE END OF THE TWENTY EIGHTH (28) DAYS WITH CORRESPONDING MAXIMUM SIZE AGGREGATE AND SLUMPS AS FOLLOWS.

LOCATION	28 DAYS STRENGTH	MAX. SIZE OF AGG.	MAX. SLUMP
SLABS, STAIR	3000 PSI (20.70 MPa.)	20 mm	100 mm
COLUMNS	4000 PSI (27.58 MPa.)	20 mm	100 mm
BEAMS	4000 PSI (27.58 MPa.)	20 mm	100 mm
MAT FOOTING	4000 PSI (20.70 MPa.)	20 mm	100 mm

- MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS.

SUSPENDED SLABS	20mm
SLAB ON GRADE	40mm
WALLS ABOVE GRADE	25mm
BEAM STIRRUPS AND COLUMN TIES	40mm
WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS	50mm
WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH	75mm

- CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION. RE-HANDLING OR PLACING SHALL BE DONE PREFERABLY WITH BUGGIES, BUCKETS OR WHEELBORROWS, NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES, WHEELBORROWS OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED SIX (6) METERS IN AGGREGATE LENGTH.
- NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE DESIGNERS AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATIONS ARE EXTREMELY DIFFICULT TO ACCOMPLISH.
- ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED & SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
- ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP, FOG SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS.
- STRIPPING OF FORMS AND SHORES:

FOUNDATION	24 HRS.
SUSPENDED SLAB EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED	8 DAYS
WALLS	21 DAYS
BEAMS	14 DAYS
COLUMNS	21 DAYS
- THE CONTRACTOR SHALL SUBMIT THE SCHEDULE OF POURING AND THE LOCATION OF THE CONSTRUCTION JOINTS TO THE STRUCTURAL ENGINEER AT LEAST FOUR (4) DAYS PRIOR TO THE POURING FOR APPROVAL.

- THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE FORMS AND SHORING UNTIL THE CONCRETE MEMBERS HAVE ATTAINED THEIR WORKING CONDITION AND STRENGTH.

NOTES ON REINFORCEMENT

- UNLESS OTHERWISE NOTED IN THE PLANS, THE YIELD STRENGTH OF REINFORCING BARS SHALL BE:

MAT FOOTING	FY = 276 MPA (40,000 PSI) GRADE 40
COLUMNS	FY = 414 MPA (60,000 PSI) GRADE 60
COLUMNS (Lateral Ties)	FY = 276 MPA (40,000 PSI) GRADE 40
BEAMS	FY = 414 MPA (60,000 PSI) GRADE 60
BEAMS (Stirrups)	FY = 276 MPA (40,000 PSI) GRADE 40
SLABS / STAIRS	FY = 276 MPA (40,000 PSI) GRADE 40

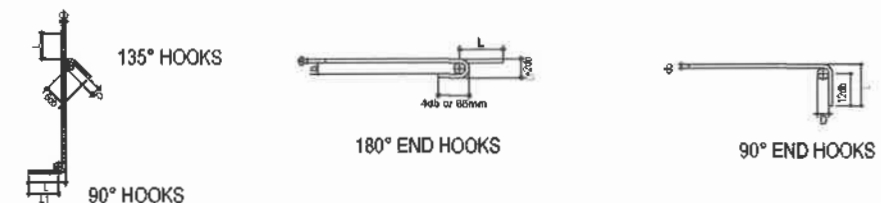
- NON-LOAD BEARING WALL PARTITIONS, BEDDED SLABS, FLOOR AND ROOF SLABS, PARAPETS, CATCH BASIN, SIDE WALK - FY = 276 MPA (40,000 PSI)
- ALL REINFORCING BARS SIZE 10MM OR LARGER SHALL BE DEFORMED IN ACCORDANCE WITH ASTM A 706. BARS SMALLER THAN 10MM MAY BE PLAIN.
- SPLICES SHALL BE SECURELY WIRED TOGETHER & SHALL LAP OR EXTEND IN ACCORDANCE WITH TABLE A AND TABLE B (TABLE OF LAP SPlice & ANCHORAGE LENGTH) UNLESS OTHERWISE SHOWN ON DRAWINGS, SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE AND NO SPlice SHALL BE MORE THAN 50%..

NOTES ON CONCRETE SLABS

- ALL SLAB REINFORCEMENTS SHALL BE 20MM CLEAR MINIMUM FROM BOTTOM AND FROM THE TOP OF SLAB.

NOTES ON STIRRUPS

- ALL REINFORCEMENT SHALL BE BENT COLD UNLESS OTHERWISE PERMITTED BY THE STRUCTURAL ENGINEER.
- REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FILLED BENT, EXCEPT AS SHOWN IN THE DESIGN DRAWINGS OR PERMITTED BY THE STRUCTURAL ENGINEER.
- TIES AND CLOSE STIRRUPS MUST BE BENT AT 135°.



MAIN BAR END HOOKS (ALL GRADES)				
BAR SIZE (DEFORMED)	DIAMETER (mm)	180° HOOK		90° HOOK
		D+2db	L	L
10mm Ø	60	75	125	150
12mm Ø	75	100	150	200
16mm Ø	95	125	175	250
20mm Ø	115	150	200	300
25mm Ø	150	200	230	450
28mm Ø	240	300	350	550
32mm Ø	300	335	450	600

STIRRUP AND TIE HOOKS (ALL GRADES)				
BAR SIZE (DEFORMED)	DIAMETER (mm)	180° HOOK		90° HOOK
		D+2db	L	L
10mm Ø	40	125	85	100
12mm Ø	50	165	115	115
16mm Ø	65	200	140	150
20mm Ø	115	250	165	300
25mm Ø	150	365	230	405

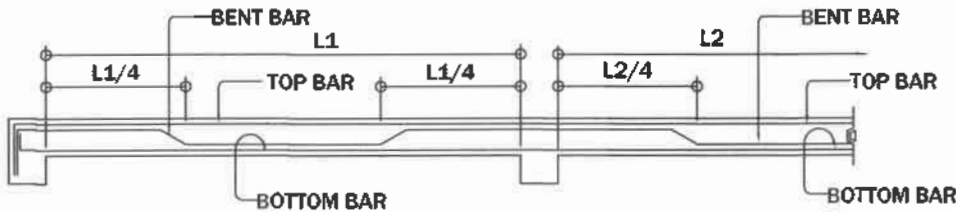
 SHERIFF JOHN C. LA MADRID PRC LIC. No. 0120339 PTR No. 9094869 CIVIL ENGINEER		 OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME: RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL: JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	APPROVED: KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET S-1 20 28 65
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NOTES ON FOOTINGS

- 1. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 50 KPA. THE CONTRACTOR SHALL REPORT TO THE ENGINEER, IN WRITING, THE ACTUAL SOIL CONDITIONS UNCOVERED AND CONFIRM ACTUAL BEARING CAPACITY OF SOIL BEFORE DEPOSITING CONCRETE.
- 2. FOOTING SHALL REST AT LEAST 2750MM BELOW NATURAL GRADE LINES UNLESS OTHERWISE INDICATED IN THE PLANS. NO FOOTING SHALL REST OF FILL.
- 3. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENTS SHALL BE 75MM CLEAR FOR CONCRETE DEPOSITED THE GROUND AND 50MM FOR CONCRETE DEPOSITED AGAINST A FORMWORK.

NOTES ON CONCRETE SLABS

- 1. ALL SLAB REINFORCEMENTS SHALL BE 20MM CLEAR MINIMUM FROM BOTTOM AND FROM THE TOP OF SLAB.
- 2. UNLESS OTHERWISE SHOWN, REINFORCEMENT IN CONTINUOUS ELEVATED SLAB SHALL BE CUT AS FOLLOWS:

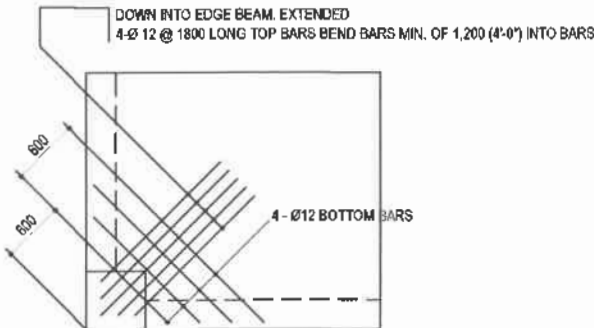


TYPICAL BAR BENDING AND CUTTING DETAILS FOR SLABS

- 3. IF SLABS ARE REINFORCED BOTH WAYS BARS ALONG THE SHORTER SPAN SHALL BE PLACED BELOW THOSE ALONG THE LONG SPAN AT THE CENTER AND OVER THE LONGER SPAN FOR REINFORCING BARS NEAR THE SUPPORTS. THE SPACING OF THE BARS AT THE COLUMN STRIPS SHALL NOT BE MORE THAN ONE AND A HALF (1 1/2) SLAB THICKNESS.
- 4. TEMPERATURE BARS FOR SLAB SHALL BE GENERALLY PLACED NEAR THE FACE IN TENSION AND SHALL NOT BE LESS THAN 0.0025 X GROSS CROSS-SECTIONAL AREA (Ag) OF THE SLAB (SEE SCHEDULE BELOW):

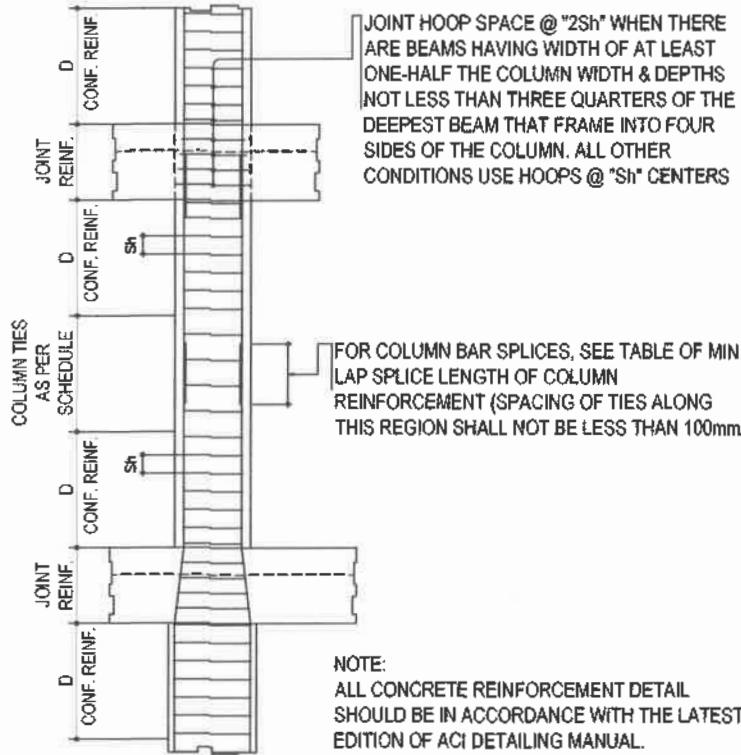
SCHEDULE OF MINIMUM SLAB REINFORCEMENT	
THICKNESS	MINIMUM TEMPERATURE BARS
100 mm	10 mm Ø 250mm EACH WAY
125 mm	10 mm Ø 225mm EACH WAY
150 mm	10 mm Ø 185mm EACH WAY
175 mm	10 mm Ø 150mm EACH WAY
200 mm	10 mm Ø 140mm EACH WAY

- 5. UNLESS OTHERWISE NOTED IN THE PLANS, ALL BEDDED SLABS SHALL BE REINFORCED WITH 10mm Ø AT 250mm O.C. EACH WAY TO CENTER OF SLAB AND CONSTRUCTION JOINTS FOR SAME SHALL NOT BE LESS THAN 3.65 METERS APART.
- 6. PROVIDE EXTRA REINFORCEMENTS FOR CORNER SLAB (TWO ADJACENT DISCONTINUOUS EDGES) AS SHOWN BELOW.
- 7. CONCRETE SLAB REINFORCEMENTS SHALL BE PROPERLY SUPPORTED WITH 10MM Ø STEEL CHAIR OR APPROVED EQUIVALENT SPACED AT 1.0 METER ON CENTER BOTH WAYS.



NOTES ON COLUMNS

- 1. PROVIDE EXTRA SETS OF TIES AT 100MM O.C. FOR TIED COLUMN REINFORCEMENT ABOVE AND BELOW BEAM-COLUMN CONNECTIONS FOR A DISTANCE FROM FACE OF CONNECTION EQUAL TO THE GREATER OF THE OVERALL THICKNESS OF COLUMN, 1/3 THE CLEAR HEIGHT OF COLUMN OR 450MM.
- 2. COLUMN TIES SHALL BE PROTECTED EVERYWHERE BY A COVERING OF CONCRETE CAST MONOLITHICALLY WITH THE CORE WITH THE MINIMUM THICKNESS OF 40MM AND NOT LESS THAN 40 TIMES THE MAXIMUM SIZE OF COARSE AGGREGATE IN MILLIMETERS.
- 3. WHERE COLUMNS CHANGE IN SIZE, VERTICAL REINFORCEMENTS SHALL BE OFFSET AT A SLOPE OF NOT MORE THAN 1 IN 6 AND EXTRA 10MM TIES AT 100MM SHALL BE PROVIDED THROUGHOUT THE OFFSET REGION.
- 4. UNLESS OTHERWISE INDICATED IN THE PLANS, LAP SPLICES FOR VERTICAL COLUMN REINFORCEMENT SHALL BE MADE WITHIN THE CENTER HALF OF COLUMN HEIGHT, AND THE SPLICE LENGTH SHALL NOT BE LESS THAN 40 BAR DIAMETERS. WELDING OR APPROVED MECHANICAL DEVICES MAY BE USED PROVIDED THAT NOT MORE THAN ALTERNATE BARS ARE WELDED OR MECHANICALLY SPICED AT ANY LEVEL AND THE VERTICAL DISTANCES BETWEEN THESE WELDS OR SPLICES OF ADJACENT BARS IS NOT LESS THAN 600mm.



TYPICAL COLUMN ELEVATION SHOWING DOWELS AND TIES SPACING

NOTES ON BEAMS AND GIRDERS

- 1. UNLESS, OTHERWISE NOTED IN PLANS, CAMBER ALL BEAMS AND GIRDER AT LEAST 6MMØ FOR EVERY 4.5M OF SPAN. EXCEPT CANTILVERS FOR WHICH THE CAMBER SHALL BE AS NOTED IN PLANS OR AS ORDERED BY THE ENGINEER BUT IN NO CASE LESS THAN 20MM FOR EVERY 3.0M OF FREE SPAN.
- 2. TYPICAL BARS BENDING AND CUTTING DETAILS FOR BEAMS SHALL BE AS SHOWN IN FIGURE B-2.
- 3. IF THE BEAM REINFORCING BARS END IN A WALL, THE CLEAR DISTANCE FROM THE BAR TO THE FARTHER FACE OF THE WALL NOT BE LESS THAN 25MM. EMBEDMENT LENGTH SHALL BE AS SHOWN IN TABLE 'A' FOR TENSION BARS AND TABLE 'B' FOR COMPRESSION BARS UNLESS SPECIFIED IN PLAN. TOP BAR SHALL NOT BE SPICED WITHIN THE COLUMN OR WITHIN A DISTANCE TWICE THE MEMBER DEPTH FROM THE FACE OF THE COLUMN. AT LEAST TWO STIRRUPS SHALL BE PROVIDED AT ALL SPLICES.
- 4. IF THERE ARE TWO OR MORE LAYERS OF REINFORCING BARS, USE 25MMØ BAR SEPARATORS SPACED AT 1.0M ON CENTER. IN NO CASE SHALL THERE BE LESS THAN TWO (2) SEPARATORS BETWEEN TWO LAYERS OF BARS.
- 5. MINIMUM CONCRETE PROTECTION FOR REINFORCING BARS OR STEEL SHAPES SHALL BE AS SHOWN IN FIGURE B-1 UNLESS SPECIFIED ELSEWHERE.
- 6. WHEN A BEAM CROSSES A GIRDER, REST BEAM ON TOP OF GIRDER BARS, BEAM REINFORCING BAR SHALL BE SYMMETRICAL ABOUT CENTER LINE WHENEVER POSSIBLE.
- 7. GENERALLY, NO SPLICE SHALL BE PERMITTED AT POINTS WHERE CRITICAL BENDING STRESSES OCCUR. SPLICES WHERE SO PERMITTED SHALL BE INDICATED IN THE TABLE 'A' AND 'B'. WELDED SPLICES SHALL DEVELOP IN TENSION AT LEAST 125% OF THE SPECIFIED YIELD STRENGTH OF THE BAR. NOT MORE THAN 50% OF THE BARS AT ANY ONE SECTION IS ALLOWED TO BE SPICED THEREIN.

NOTES ON EMBEDDED PIPES

- 1. ALL EMBEDDED PIPES FOR UTILITIES, ETC., THAT PASS THROUGH BEAMS SHALL NOT EXCEED 100mm IN DIAMETER OR 1/3 BEAM DEPTH WHICHEVER IS LESS, UNLESS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.
- 2. NO PIPES SHALL BE ALLOWED TO PASS THROUGH BEAMS VERTICALLY.
- 3. NO PIPES SHALL BE EMBEDDED IN COLUMNS.

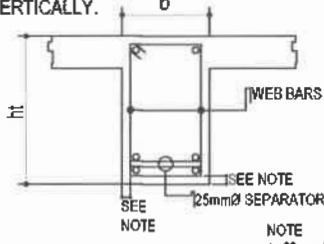


FIG. B-1

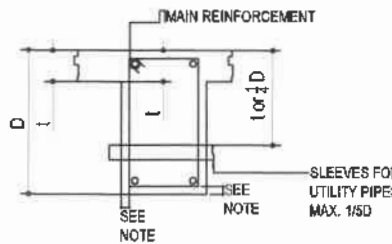


FIG. B-3

TYPICAL DETAILS FOR SLEEVES THRU CONCRETE BEAM

 SHERIFF JOHN C. LA MADRID PRC LIC. No. 0128359 PTR No. 9094869 CIVIL ENGINEER		OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME: RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL: JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	APPROVED: KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET S-2 20 29 65
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TABLE 'A' TENSION BARS EMBEDMENT LENGTHS AND LAPPED SPLICES IN MILLIMETERS				
BAR SIZE (DEFORMED)	f _c = 20.7MPa (3,000 psi)		f _c = 27.6MPa (4,000 psi)	
	EMBEDMENT	LAPPED	EMBEDMENT	LAPPED
10mm ϕ	300	300	300	300
12 mm ϕ	300	300	300	300
16 mm ϕ	300	400	300	400
20 mm ϕ	400	550	350	500
25 mm ϕ	600	800	550	750
28 mm ϕ	750	1000	650	850
32 mm ϕ	950	1300	850	1100

TABLE 'B' COMPRESSION BARS EMBEDMENT LENGTHS AND LAPPED SPLICES IN MILLIMETERS				
BAR SIZE (DEFORMED)	f _c = 20.7MPa (3,000 psi)		f _c = 27.6MPa (4,000 psi)	
	EMBEDMENT	LAPPED	EMBEDMENT	LAPPED
10mm ϕ	225	300	200	300
12 mm ϕ	275	300	250	300
16 mm ϕ	350	400	325	400
20 mm ϕ	450	500	475	500
25 mm ϕ	550	625	550	625
28 mm ϕ	625	675	625	675
32 mm ϕ	700	775	700	775

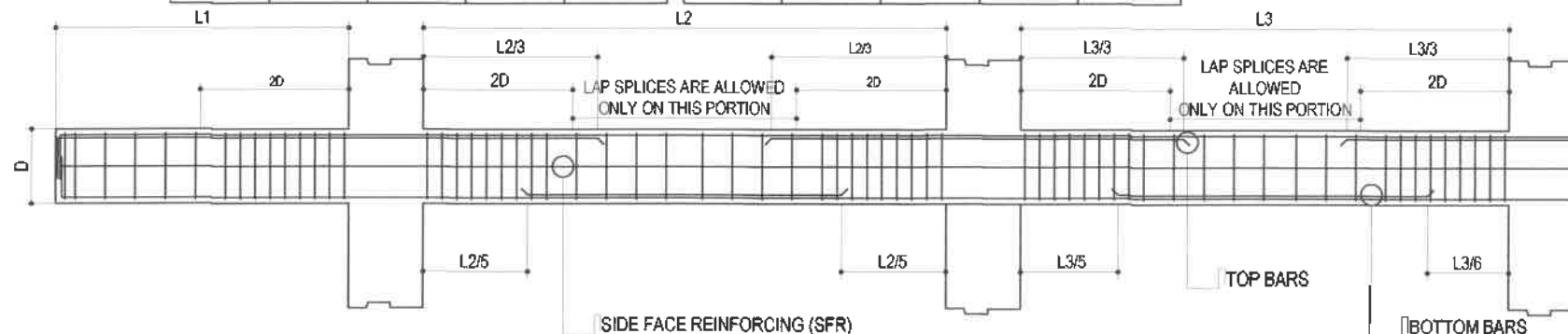


FIG. B-2
TYPICAL BEAM ELEVATION SHOWING DOWELS AND TIES SPACING

NOTES ON WELDS

- USE E70xx ELECTRODES FOR ALL MEMBERS WELDED.
- WELDS SHALL DEVELOP THE FULL STRENGTH OF MEMBERS JOINED UNLESS OTHERWISE SHOWN OR DETAILED IN THE DRAWINGS.

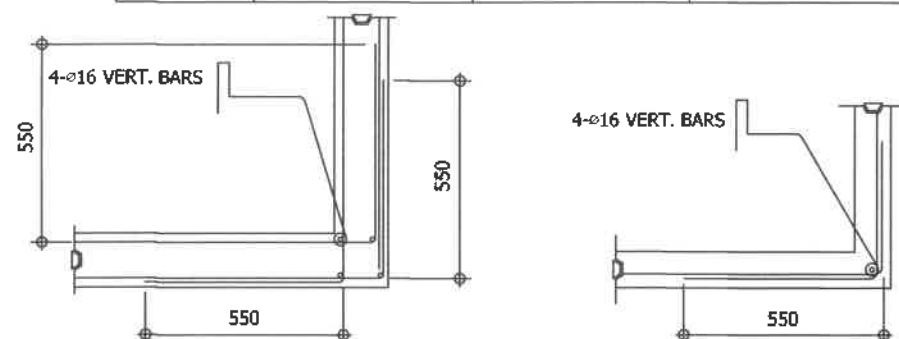
NOTES ON STRUCTURAL STEEL

- STRUCTURAL STEEL TO BE USED FOR FABRICATION AND ERECTION OF THIS STRUCTURE SHALL COMPLY WITH ALL THE PERTINENT PROVISIONS OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING LATEST EDITION.
- ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A36 STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
- ALL WELDED CONNECTIONS SHALL DEVELOP THE FULL STRENGTH OF THE MEMBERS CONNECTED.
- UNLESS OTHERWISE SPECIFIED, ALL WELDING RODS SHALL CONFORM AWS E60 ELECTRODES.
- ALL BOLTS USED UNLESS OTHERWISE SPECIFIED SHALL BE ASTM A 307 BOLTS.

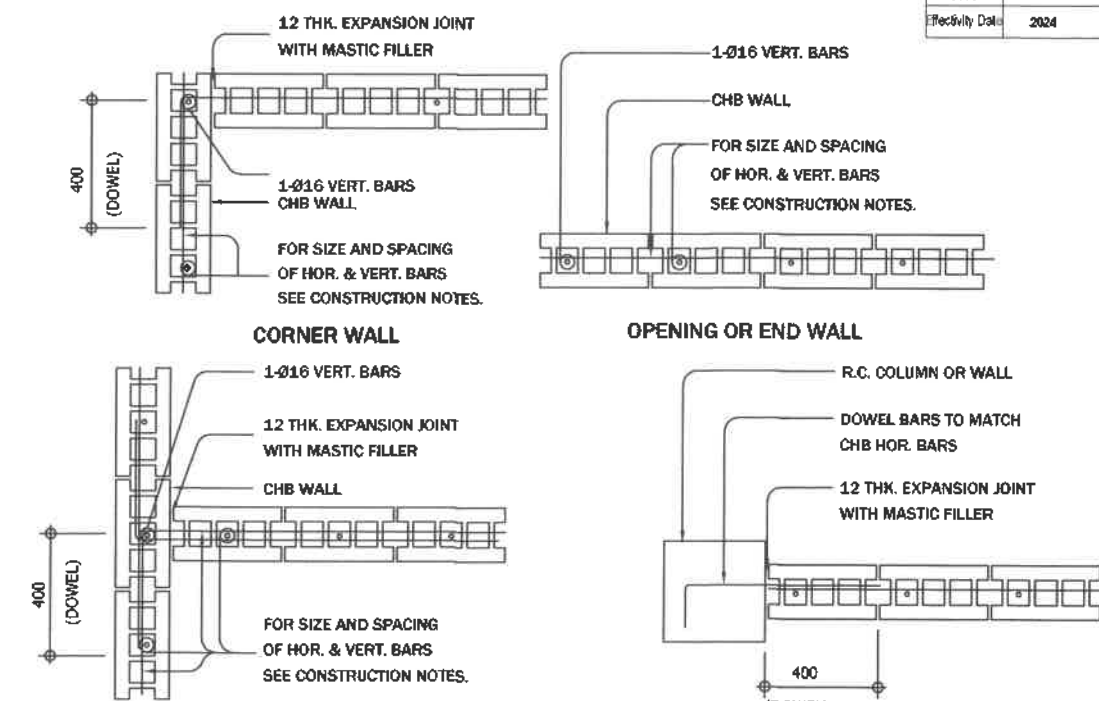
NOTES ON CONCRETE HOLLOW BLOCK WALLS

- UNLESS OTHERWISE SHOWN IN THE PLANS, ALL CONCRETE HOLLOW BLOCKS AND CERAMIC BLOCKS ARE REINFORCED AS SHOWN IN THE SCHEDULE OF CONCRETE HOLLOW BLOCKS AND CERAMIC BLOCK REINFORCEMENT.
- PROVIDE 150mm x 300mm STIFFENER COLUMN REINFORCED WITH 4-12mm WITH 6mm ϕ TIES AT 150mm ON CENTER WHERE CONCRETE HOLLOW BLOCK TERMINATES AND AT EVERY 3.0m LENGTH OF CONCRETE HOLLOW BLOCK WALLS UNLESS NOTED IN THE STRUCTURAL PLANS.

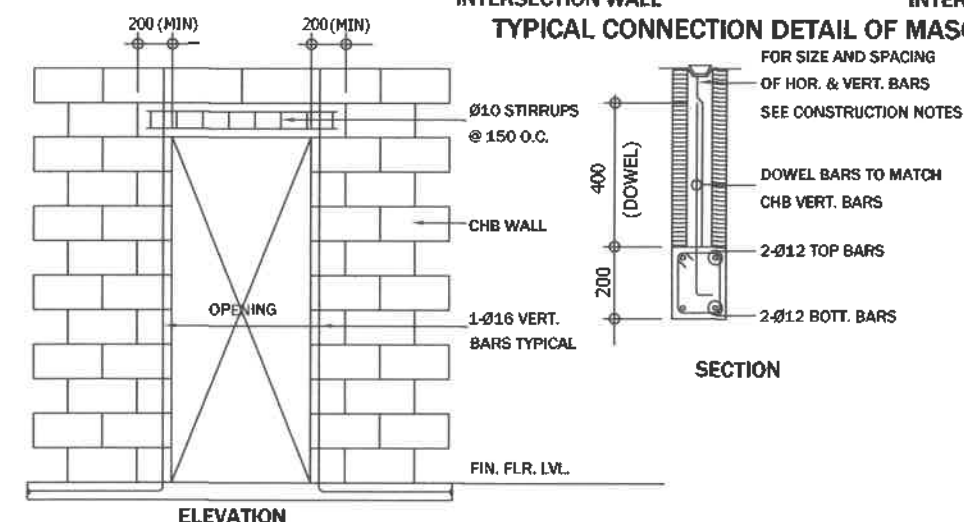
SCHEDULE OF CONCRETE HOLLOW BLOCK AND CERAMIC BLOCK REINFORCEMENT			
BLOCK THICKNESS	REINFORCEMENT		NOTES
	HORIZONTAL	VERTICAL	
75 mm	10mm ϕ @ 600mm O.C.	10mm ϕ @ 600mm O.C.	A. MINIMUM LAPS AT SPLICE = 0.25m B. PROVIDE RIGHT ANGLED REINFORCEMENT AT CORNERS 0.82m LONG C. WHERE CHB OR CERAMIC BLOCK WALL DOWELS JOIN COL. R.C. BEAMS AND WALL DOWELS WITH THE SAME SIZE AS VERTICAL OR HORIZONTAL REINFORCEMENT SHALL BE PROVIDED.
125 mm	10mm ϕ @ 600mm O.C.	10mm ϕ @ 600mm O.C.	
150 mm	10mm ϕ @ 600mm O.C.	10mm ϕ @ 600mm O.C.	
200 mm	12mm ϕ @ 600mm O.C.	12mm ϕ @ 600mm O.C.	



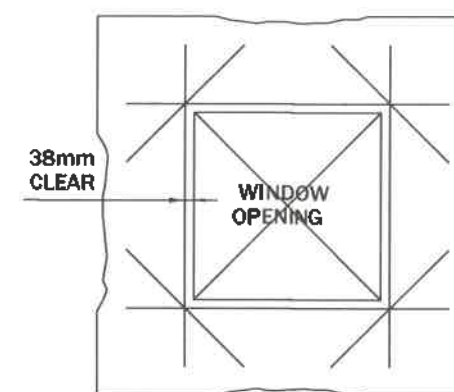
TYPICAL CONNECTION DETAIL OF R.C. WALL AT CORNERS



INTERSECTION WALL
TYPICAL CONNECTION DETAIL OF MASONRY WALL







TYP. DET. OF LINTEL BEAM AT CHB WALL OPENING



TYP. EXTERIOR WINDOW & DOOR OPENING

NOTE:
PROVIDE THESE ADDITIONAL BARS FOR ALL OPENINGS PLUS BARS (NOT SHOWN) PARALLEL TO SIDE OF OPENING EQUAL TO THE NUMBER OF TERMINATED BARS AT OPENING
SEE ARCHITECTURAL & MECHANICAL PLANS FOR SLAB OPENING LOCATION.

OWNER/ PROJECT TITLE/ LOCATION		CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT:	SHEET
 <p>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</p>		 <p>RONDA BATACLAO TULLAY END-USER- DEAN</p>	 <p>JANET PADOYOS PABLO SECTOR VICE PRESIDENT</p>	 <p>KENNETH ALIP LARUAN PRESIDENT</p>	AS SHOWN	<div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="text-align: center;"> <p>S-3</p> <p>20</p> <hr/> <p>30</p> <p>65</p> </div> </div>

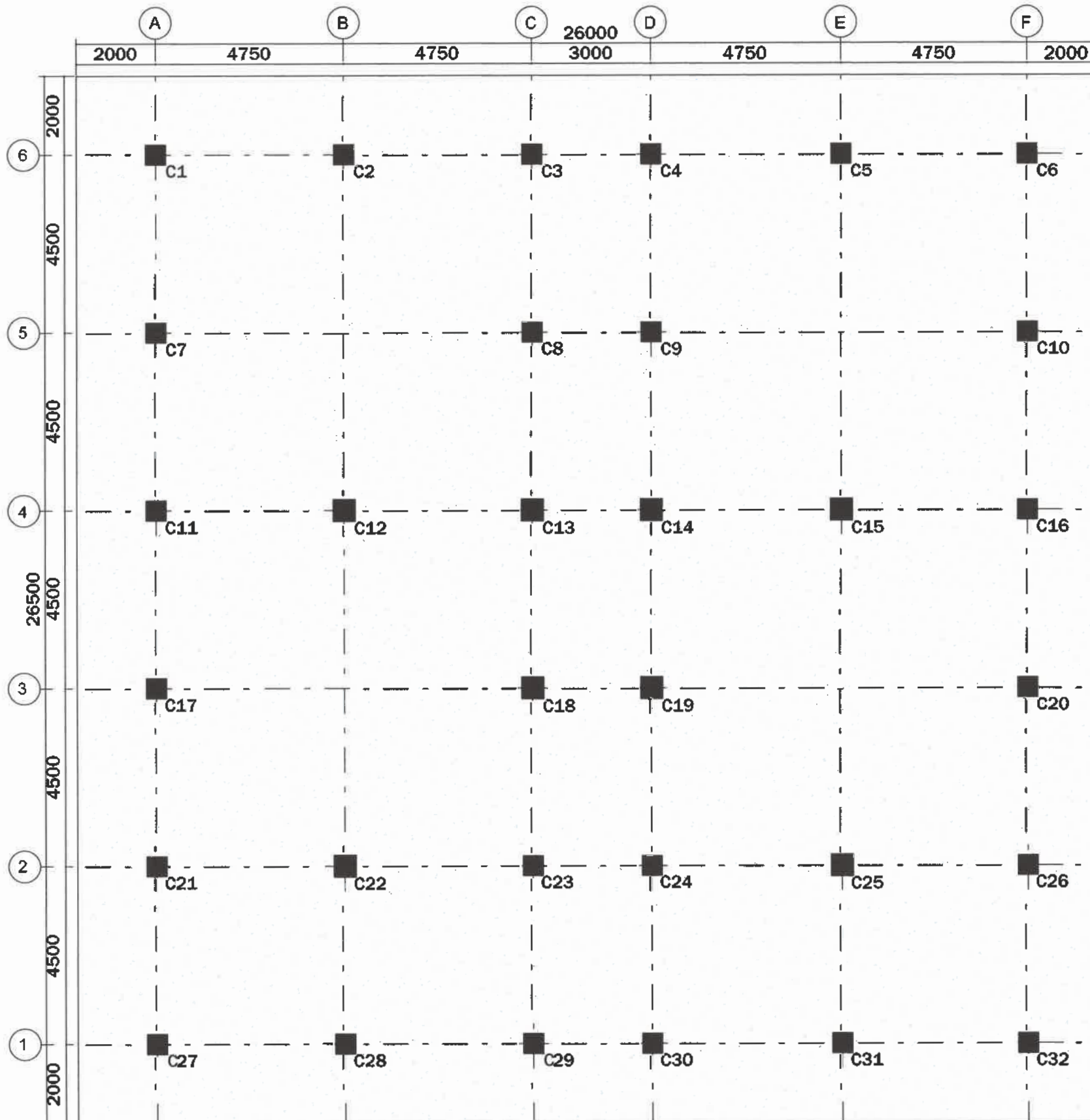
SHERIFF JOHN C. LA MADRID

PRC LIC. No. 0128339
PTR No. 9098989

VALIDITY: JULY 17, 2025
ISSUED: JANUARY 2, 2025






CIVIL ENGINEER

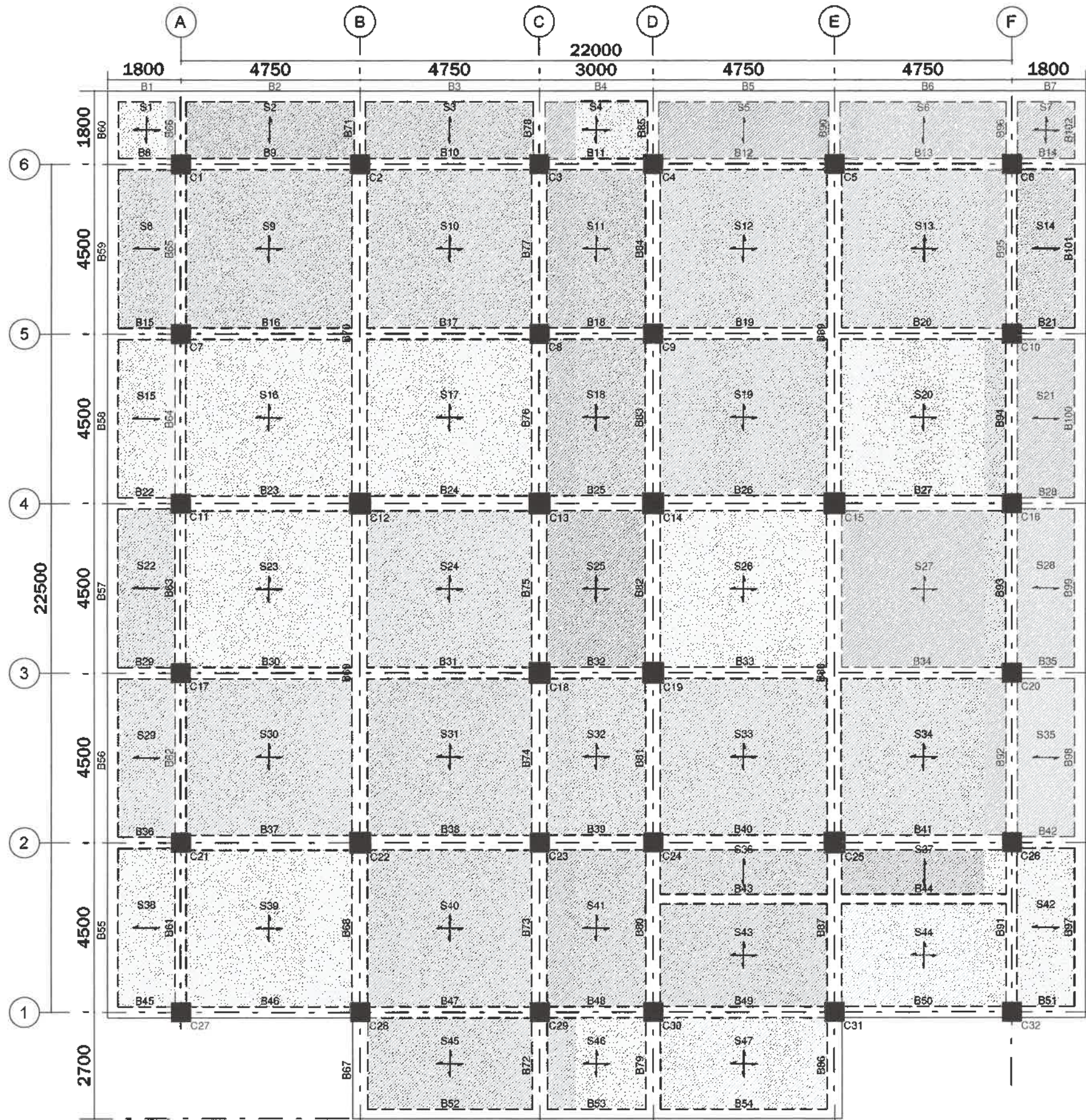
Transverse X
Longitudinal Z



PLAN AT 0.00 M



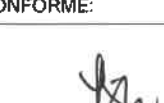


1 MAT FOUNDATION PLAN
S 4 SCALE AS SHOWN

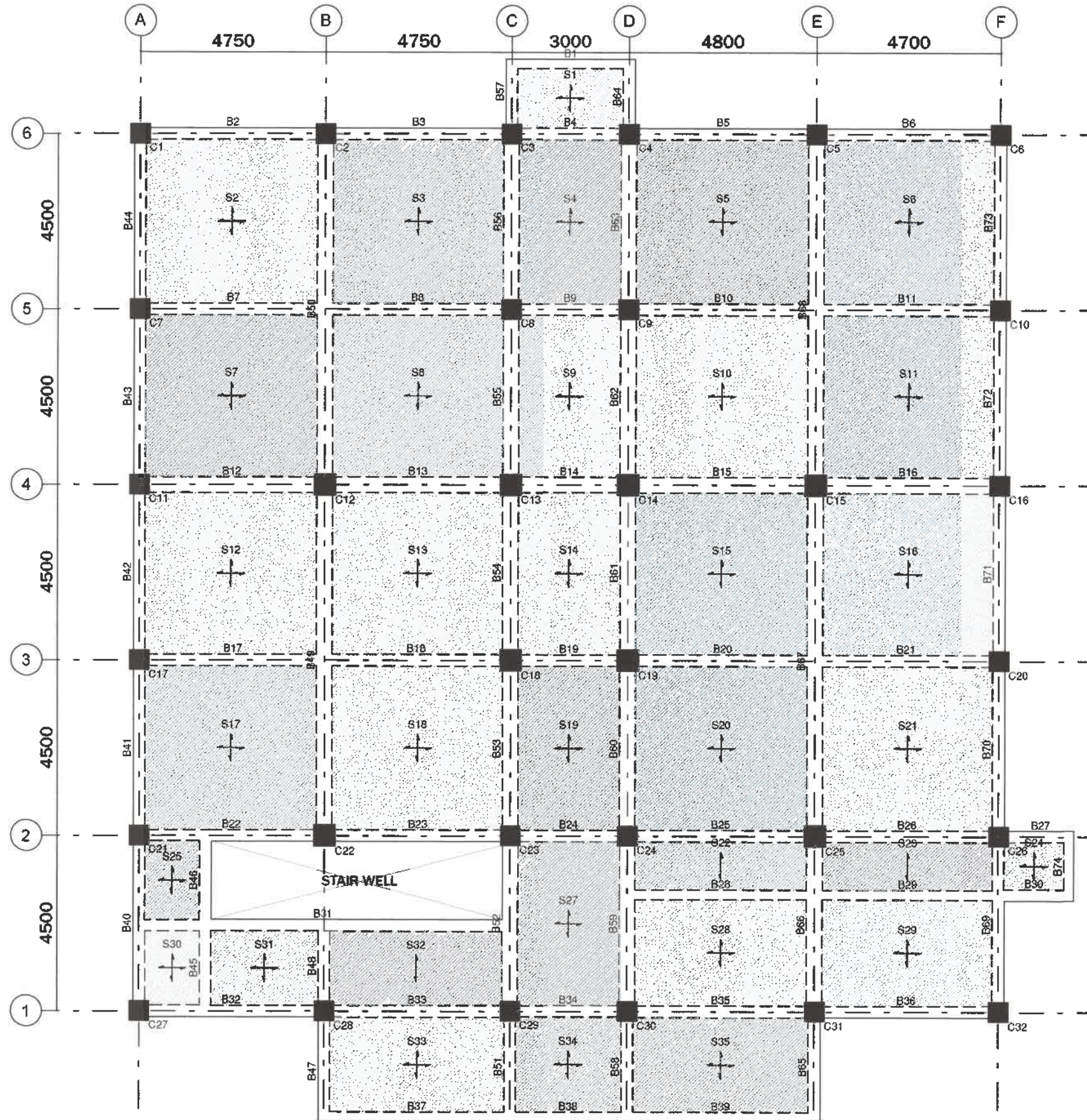
	<div> SHERIFF JOHN C. LA MADRID <div>PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 9998889 ISSUED: JANUARY 2, 2025</div> CIVIL ENGINEER</div>	<div><div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div></div>	<div>CONFORME:  RONDA BATACLAO TULLAY END-USER- DEAN</div>	<div>RECOMMENDING APPROVAL:  JANET PADAYOS PABLO SECTOR VICE PRESIDENT</div>	<div>APPROVED:  KENNET HALIP LARUAN PRESIDENT</div>	<div>SHEET CONTENT : AS SHOWN</div>	<div>SHEET <table><tr><td>S-4</td><td>20</td></tr><tr><td>31</td><td>65</td></tr></table></div>	S-4	20	31	65
S-4	20										
31	65										



PLAN AT 4.00 M

1 FIRST FLOOR FRAMING PLAN
S 5 SCALE AS SHOWN

	<div><div>SHERIFF JOHN C. LA MADRID</div><div>PRC LIC. No. 0126359 VALIDITY: JULY 17, 2025 PTR No. 9098969 ISSUED: JANUARY 2, 2025</div><div>CIVIL ENGINEER</div></div>	<div><div></div><div>OWNER/ PROJECT TITLE/ LOCATION</div><div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div></div>	<div><div>CONFORME:</div><div><div>RONDA BATACLAO TULLAY</div><div>END-USER- DEAN</div></div></div>	<div><div>RECOMMENDING APPROVAL:</div><div><div>JANET PADAY-OS PABLO</div><div>SECTOR VICE PRESIDENT</div></div></div>	<div><div>APPROVED:</div><div><div>KENNETH ALIP LARUAN</div><div>PRESIDENT</div></div></div>	<div><div>SHEET CONTENT:</div><div>AS SHOWN</div></div>	<div><div>SHEET</div><div><div>S-520</div><div>3265</div></div></div>
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PLAN AT 12.00 M

1 THIRD FLOOR FRAMING PLAN
S 7 SCALE AS SHOWN

OWNER/ PROJECT TITLE/ LOCATION



CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:

RONDA BATACLAO TULLAY
END-USER- DEAN

RECOMMENDING APPROVAL:

JANET PADAY-OS PABLO
SECTOR VICE PRESIDENT

APPROVED:

KENNETH ALIP LARUAN
PRESIDENT

SHEET CONTENT:

AS SHOWN

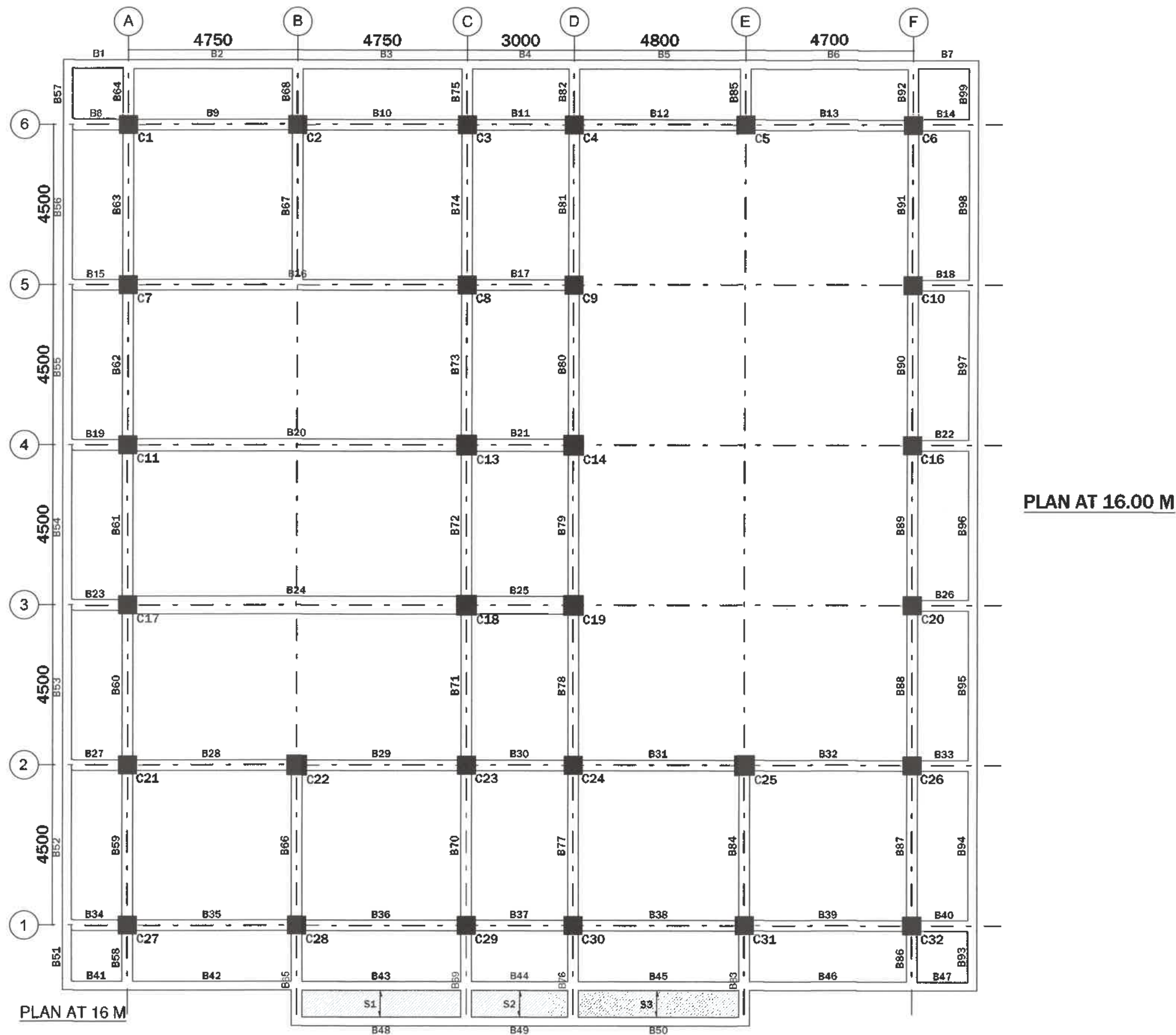
SHEET

S-7 20
34 65

SHERIFF JOHN C. LA MADRID

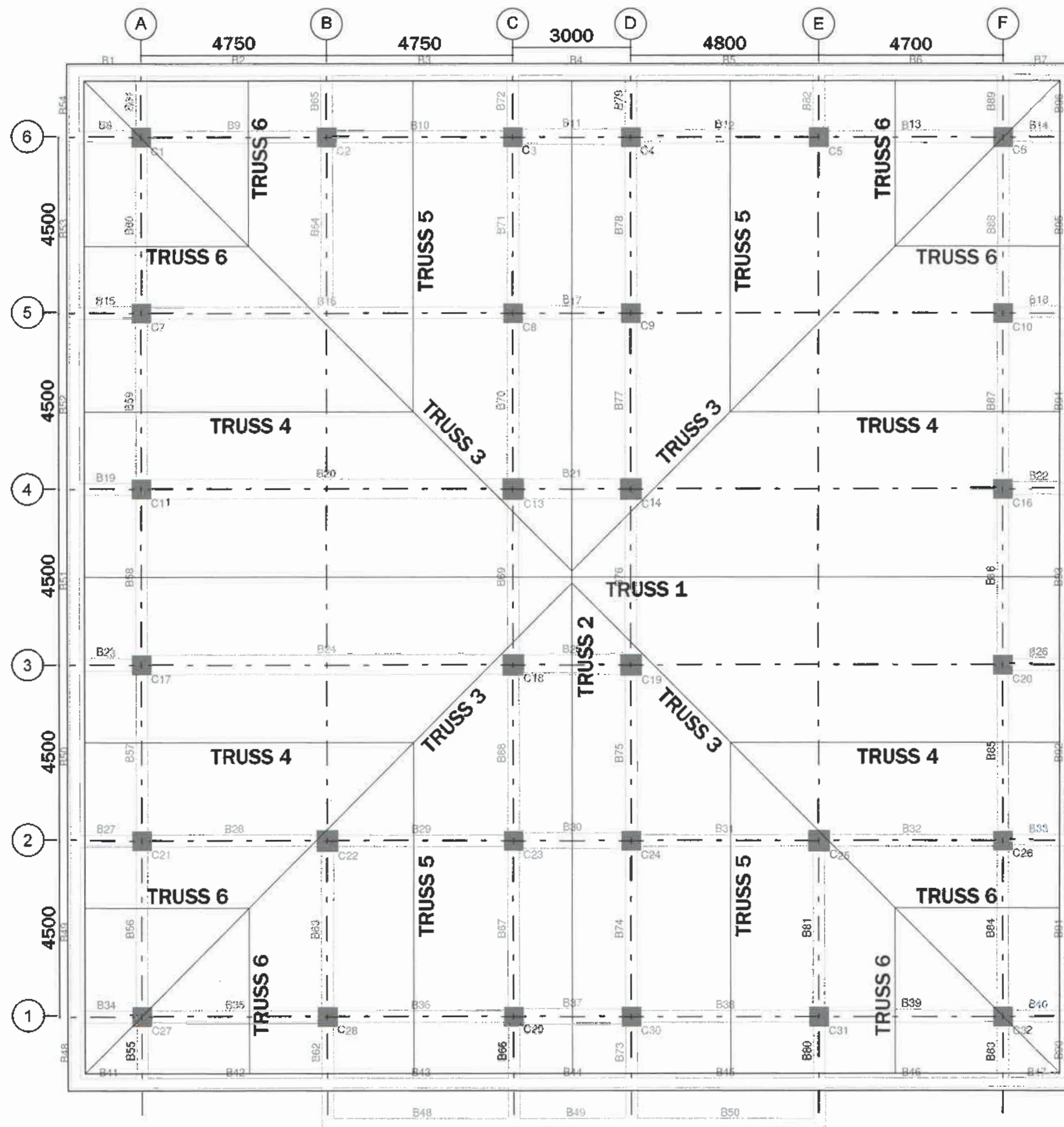
PRC LIC. No. 0126359 VALIDITY: JULY 17, 2025
PTR No. 9098869 ISSUED: JANUARY 2, 2025

CIVIL ENGINEER



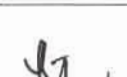

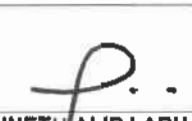


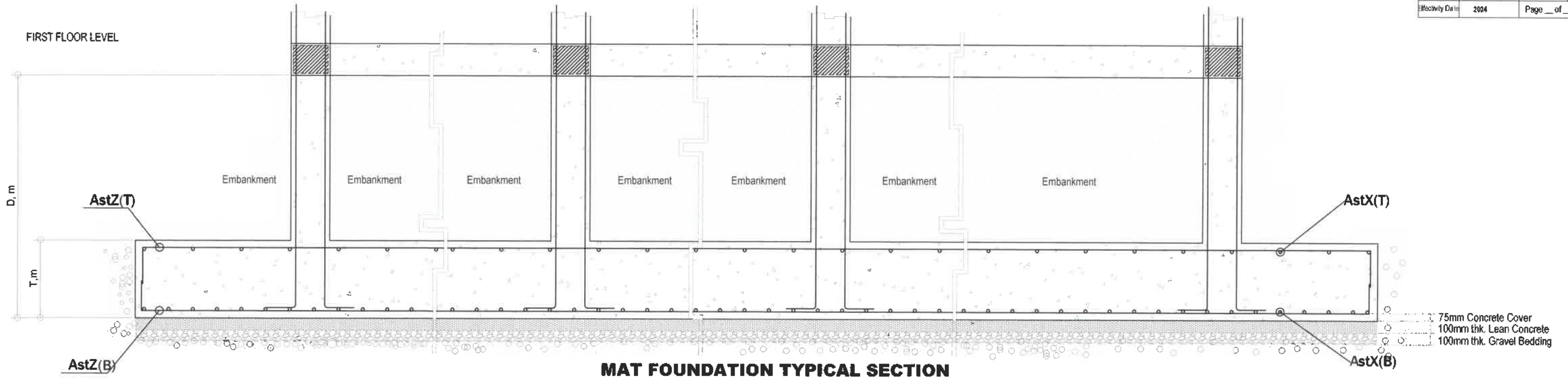
1 ROOF FRAMING PLAN @ BOTTOM CHORD LEVEL
S 8 SCALE AS SHOWN

 SHERIFF JOHN C. LA MADRID PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 9098909 CIVIL ENGINEER		 OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME: RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL: JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	APPROVED: KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET S-8 20 35 65
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1 ROOF FRAMING PLAN @ TOP CHORD LEVEL
 S 9 SCALE AS SHOWN

	<div> SHERIFF JOHN C. LA MADRID PRC LIC. No. 0126359 VALIDITY: JULY 17, 2025 PTR No. 9098869 ISSUED: JANUARY 2, 2025 CIVIL ENGINEER</div>	<div> CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div>CONFORME:  RONDA BATACLAO TULLAY END-USER- DEAN</div>	<div>RECOMMENDING APPROVAL:  JANET PADAY-OS PABLO SECTOR VICE PRESIDENT</div>	<div>APPROVED:  KENNETH ALIP LARUAN PRESIDENT</div>	<div>SHEET CONTENT: AS SHOWN</div>	<div>SHEET<table><tr><td>S-9</td><td>20</td></tr><tr><td>36</td><td>65</td></tr></table></div>	S-9	20	36	65
S-9	20										
36	65										



MARK	FOUNDATION					REINFORCEMENT			
	L (m)	W (m)	T (m)	D (m)	Cover (m)	AstX(T)	AstZ(T)	AstX(B)	AstZ(B)
MAT	26.00	26.50	0.60	4.00	0.075	Ø16 @ 110 mm Equally Spaced Center-to-Center	Ø16 @ 130 mm Equally Spaced Center-to-Center	Ø16 @ 100 mm Equally Spaced Center-to-Center	Ø16 @ 120 mm Equally Spaced Center-to-Center

MATERIAL SPECIFICATION:
CONCRETE ----- $F'_c = 4,000$ PSI (27.58 MPA) @ 28 DAYS
REINFORCING STEEL BAR ----- $F_y = 40,000$ PSI (276 MPA) GRADE 40 DEFORMED

SUMMARY : $F_y 276$

REBAR	16mm.Ø	TOTAL
LGT (M.)	26,234.10	26,234.10
WT (KG.)	41,449.88	41,449.88

SUMMARY : C27.58 MPA (4000psi @ 28 days)

CONCRETE	4,000 PSI	TOTAL
CUM.	413.40	413.40

MAT FOOTING BAR BENDING SCHEDULE

ELEMENT	BAR MARK	BAR NOS.	REBAR	BAR SHAPE	CUTTING LENGTH (MM)	DIMENSIONS					
						A	B	C	D	E	R
BOT1	B1	216	16		6000	300	5700				
BOT2	B2	649	16		6000	400	65	16	5535		
BOT3	B3	216	16		4500	300	4055	65	16	400	
BOT4	B4	255	16		6000	300	5700				
BOT5	B5	764	16		6000	400	65	16	5535		
BOT6	B6	255	16		4000	300	3255	65	16	400	
TOP1	B7	200	16		6000	250	5750				
TOP2	B8	600	16		6000	400	65	16	5535		
TOP3	B9	200	16		4500	250	3785	65	16	400	
TOP4	B10	231	16		6000	250	5750				
TOP5	B11	694	16		6000	400	65	16	5535		
TOP6	B12	231	16		4000	250	3285	65	16	400	

1 MAT FOUNDATION DETAILS
S 10 SCALE AS SHOWN

SHERIFF JOHN C. LA MADRID

PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025
PTR No. 9098869 ISSUED: JANUARY 2, 2025

CIVIL ENGINEER

OWNER/ PROJECT TITLE/ LOCATION



CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:

RONDA BATACLAO TULLAY

END-USER- DEAN

RECOMMENDING APPROVAL:

JANET PADAY-OS PABLO

SECTOR VICE PRESIDENT

APPROVED:

KENNETH ALIP LARUAN

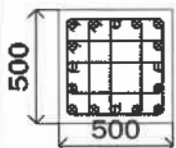
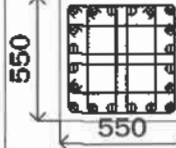
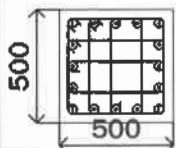
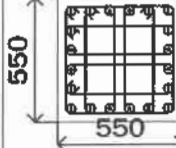
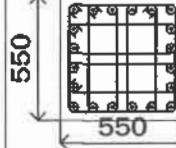
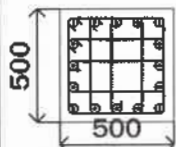
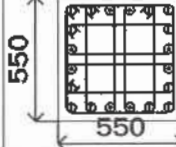
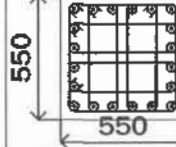
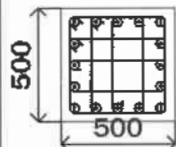
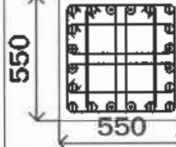
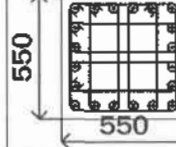
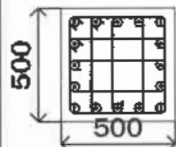
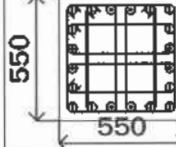
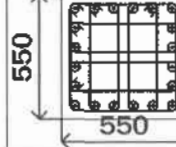
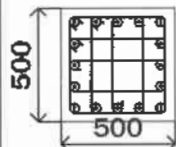
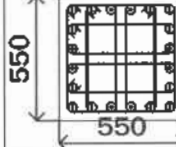
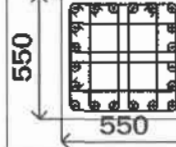
PRESIDENT

SHEET CONTENT:

AS SHOWN

SHEET



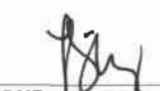

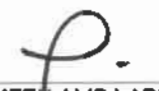
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37 65

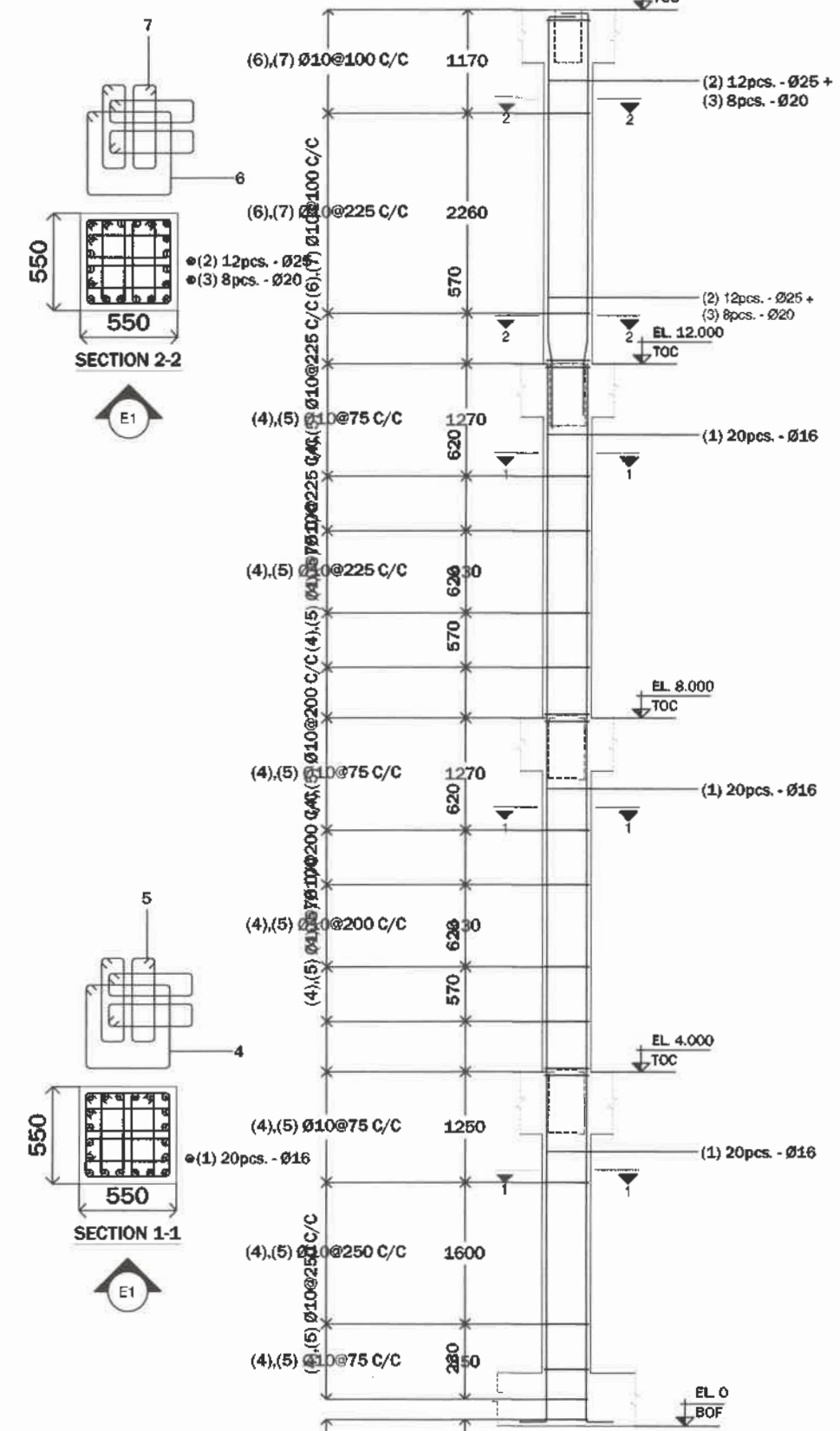
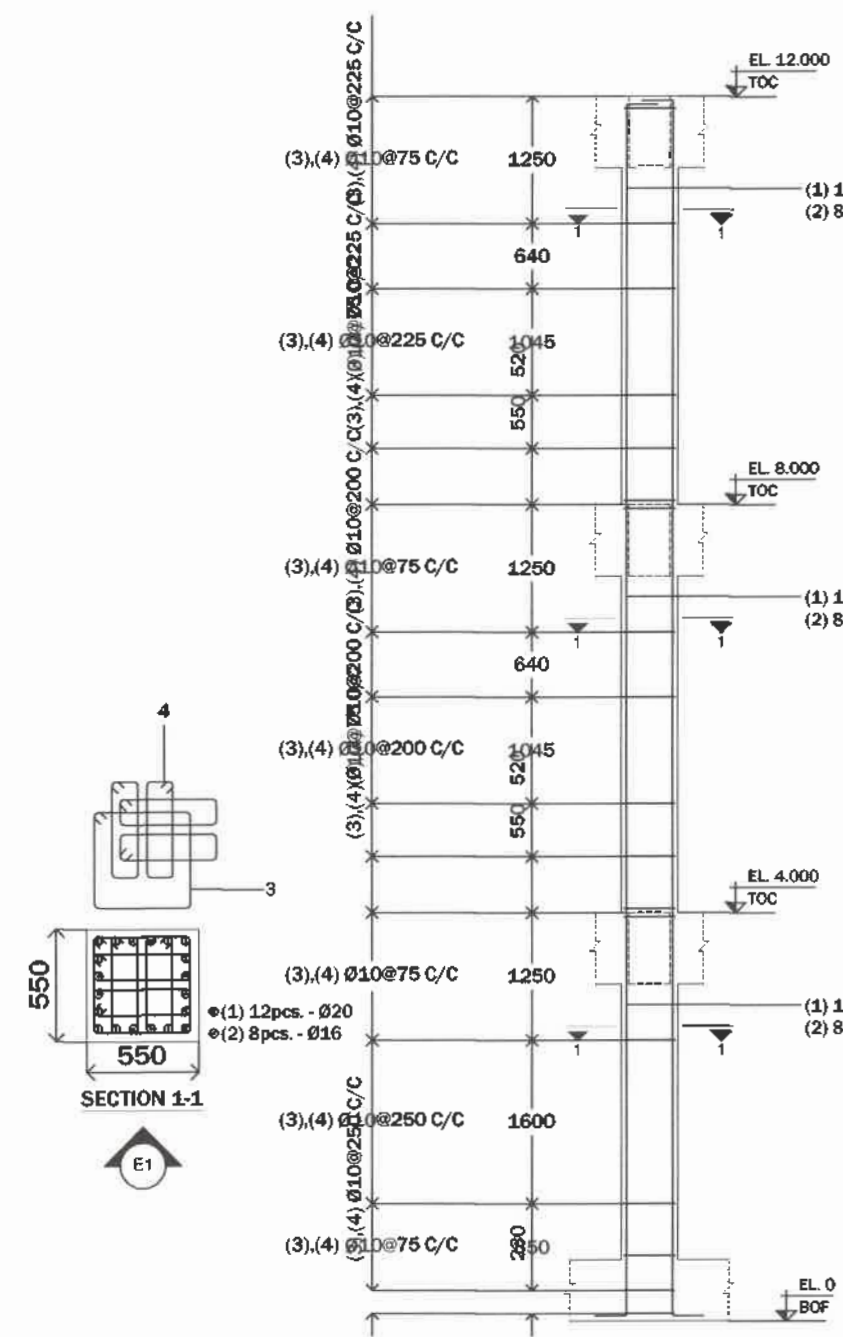
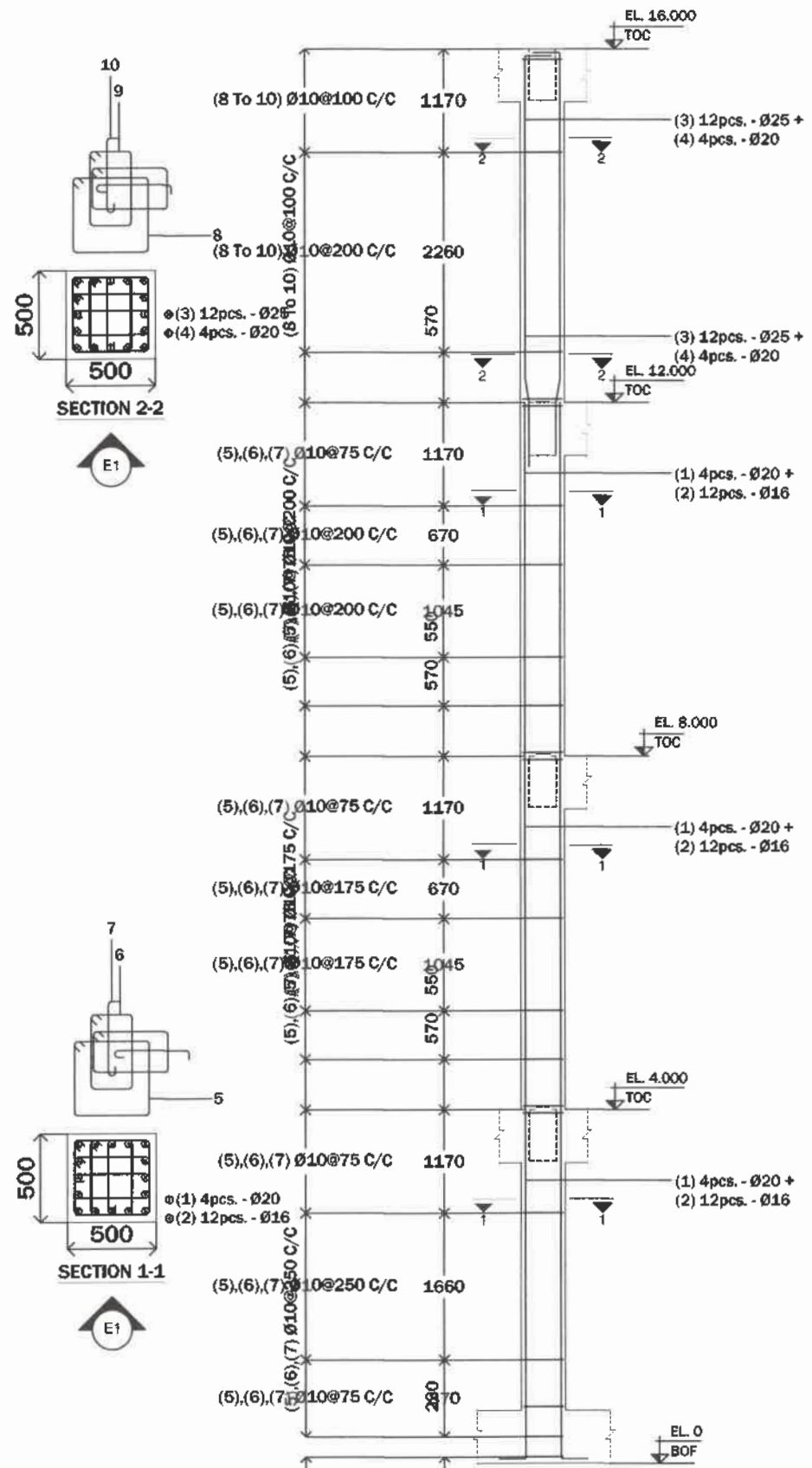
16 M TO 12 M	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 570 MM  12pcs. - Ø25 + 4pcs. - Ø20	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 570 MM  12pcs. - Ø25 + 8pcs. - Ø20	
	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 570 MM  4pcs. - Ø20 + 12pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  12pcs. - Ø20 + 8pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  20pcs. - Ø16
12 M TO 8 M	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 570 MM  4pcs. - Ø20 + 12pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  12pcs. - Ø20 + 8pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  20pcs. - Ø16
	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 570 MM  4pcs. - Ø20 + 12pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  12pcs. - Ø20 + 8pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  20pcs. - Ø16
8 M TO 4 M	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 570 MM  4pcs. - Ø20 + 12pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  12pcs. - Ø20 + 8pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  20pcs. - Ø16
4 M TO 0 M	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 570 MM  4pcs. - Ø20 + 12pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  12pcs. - Ø20 + 8pcs. - Ø16	C27.58 : Fy414 (M) : Fy276 (S) , COVER = 40MM CONFINING ZONE = 550 MM  20pcs. - Ø16
COLUMN MARKED	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C16, C17, C20, C21, C23, C24, C26, C27, C28, C29, C30, C31, C32	C12, C15	C13, C14, C18, C19, C22, C25

NOTES:

1. BE = BOUNDARY ELEMENT AS PER NSCP C101 - 2015. PROVIDE CONFINING REINFORCEMENT ACROSS ENTIRE HEIGHT OF WALL IN THE BOUNDARY ELEMENT
2. Z1 = SPECIAL CONFINING ZONE AS PER NSCP C101 - 2015, Z2 = REMAINING ZONES AS PER NSCP C101 - 2015
3. (M) - STEEL GRADE FOR MAIN REINFORCEMENT
4. (S) - STEEL GRADE FOR SHEAR REINFORCEMENT/LINKS

1 COLUMN SCHEDULE
S 11 SCALE AS SHOWN

	 SHERIFF JOHN C. LA MADRID PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 9098860 ISSUED: JANUARY 2, 2025 CIVIL ENGINEER	 CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:  RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL:  JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	APPROVED:  KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET S-11 20 38 65
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1
S 12
SCALE

1
S 12
SCALE

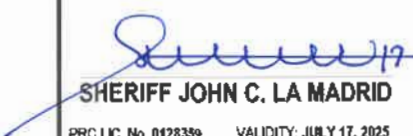




1
S 12
SCALE

<p>SHERIFF JOHN C. LA MADRID</p> <p>PRC LIC. No. 0128359 PTR No. 9098689</p> <p>CIVIL ENGINEER</p>	<p>OWNER/ PROJECT TITLE/ LOCATION</p> <p>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</p>	<p>CONFORME:</p> <p>RONDA BATACLAO TULLAY</p> <p>END-USER- DEAN</p>	<p>RECOMMENDING APPROVAL:</p> <p>JANET PADAY-OS PABLO</p> <p>SECTOR VICE PRESIDENT</p>	<p>APPROVED:</p> <p>KENNETH ALIP LARUAN</p> <p>PRESIDENT</p>	<p>SHEET CONTENT:</p> <p>AS SHOWN</p>	<p>SHEET</p> <p>S-12 20 39 65</p>
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FIRST FLOOR BEAM SCHEDULE (C27.58 : Fy414 (MAIN) : Fy276 (SHEAR)) (LEVEL: 4.00 m)

BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SFR	DIAGONAL	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT			
B1,B102	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	5pcs. - 2L-#10@175 C/C	3pcs. - 2L-#10@175 C/C	5pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	CANTILEVERED
B2,B3,B5,B6	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	10pcs. - 2L-#10@175 C/C	-	-	-
B4	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	7pcs. - 2L-#10@175 C/C	5pcs. - 2L-#10@175 C/C	7pcs. - 2L-#10@175 C/C	-	-	-
B7,B60	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - 2L-#10@175 C/C	2pcs. - 2L-#10@175 C/C	4pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	-
B8,B14,B66	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - 2L-#10@175 C/C	2pcs. - 2L-#10@175 C/C	4pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	CANTILEVERED
B9	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@100 C/C	17pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B10	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-#10@75 C/C	14pcs. - 2L-#10@125 C/C	17pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B11	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-#10@75 C/C	1pcs. - 2L-#10@75 C/C	17pcs. - 2L-#10@75 C/C	-	-	-
B12	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-#10@75 C/C	15pcs. - 2L-#10@125 C/C	17pcs. - 2L-#10@75 C/C	-	-	-
B13	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 2L-#10@75 C/C	17pcs. - 2L-#10@100 C/C	17pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B15,B29	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 3pcs. - Ø16	4pcs. - Ø16 3pcs. - Ø16	4pcs. - Ø16 3pcs. - Ø16	6pcs. - 2L-#10@125 C/C	4pcs. - 2L-#10@125 C/C	6pcs. - 2L-#10@125 C/C	2pcs. - #16EF	-	CANTILEVERED
B16,B30	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	10pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	-
B17,B31	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	10pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	-
B18	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 4L-#10@75 C/C	2pcs. - 4L-#10@125 C/C	17pcs. - 4L-#10@75 C/C	-	-	-
B19,B33	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	10pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	-
B20,B34	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	10pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	-
B21,B35	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	4pcs. - Ø16 3pcs. - Ø16	4pcs. - Ø16 3pcs. - Ø16	4pcs. - 2L-#10@175 C/C	2pcs. - 2L-#10@175 C/C	4pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	CANTILEVERED
B22,B36	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	6pcs. - 2L-#10@125 C/C	4pcs. - 2L-#10@125 C/C	6pcs. - 2L-#10@125 C/C	2pcs. - #16EF	-	CANTILEVERED
B23	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	-	-	-
B24	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	6pcs. - Ø16	20pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	-	-	-
B25	500	700	6pcs. - Ø16	4pcs. - Ø16	6pcs. - Ø16	6pcs. - Ø16	4pcs. - Ø16	6pcs. - Ø16 2pcs. - Ø16	18pcs. - 4L-#10@75 C/C	-	18pcs. - 4L-#10@75 C/C	-	-	-
B26	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	6pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#12@75 C/C	14pcs. - 2L-#12@100 C/C	20pcs. - 2L-#12@75 C/C	-	-	-
B27,B41	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	-	-	-
B28,B42,B71,B78 B85,B90,B96	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - 2L-#10@175 C/C	2pcs. - 2L-#10@175 C/C	4pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	CANTILEVERED
B32	300	600	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 4L-#10@75 C/C	2pcs. - 4L-#10@100 C/C	17pcs. - 4L-#10@75 C/C	-	-	-
B37	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	-	-	-
B38	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	6pcs. - Ø16	20pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B39	500	700	6pcs. - Ø16	4pcs. - Ø16	6pcs. - Ø16	6pcs. - Ø16	4pcs. - Ø16	6pcs. - Ø16	18pcs. - 4L-#10@75 C/C	-	18pcs. - 4L-#10@75 C/C	-	-	-
B40	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	6pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B43,B44	250	400	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	11pcs. - 2L-#10@150 C/C	9pcs. - 2L-#10@150 C/C	11pcs. - 2L-#10@150 C/C	-	-	-
B45	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	7pcs. - 2L-#10@100 C/C	5pcs. - 2L-#10@100 C/C	7pcs. - 2L-#10@100 C/C	2pcs. - #16EF	-	CANTILEVERED
B46	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@100 C/C	17pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B47	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@100 C/C	17pcs. - 2L-#10@75 C/C	-	-	-
B48	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 4L-#10@75 C/C	2pcs. - 4L-#10@125 C/C	17pcs. - 4L-#10@75 C/C	-	-	-
B49	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 2L-#10@75 C/C	18pcs. - 2L-#10@100 C/C	17pcs. - 2L-#10@75 C/C	-	-	-
B50	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 2L-#10@75 C/C	17pcs. - 2L-#10@100 C/C	17pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B51	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	6pcs. - 2L-#10@125 C/C	4pcs. - 2L-#10@125 C/C	6pcs. - 2L-#10@125 C/C	2pcs. - #16EF	-	CANTILEVERED
B52	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	10pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	-
B53	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	8pcs. - 2L-#10@175 C/C	4pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	-	-	-
B54	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	10pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	-
B55,B59,B97,B101	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	9pcs. - 2L-#10@175 C/C	2pcs. - #16EF	-	-
B56,B57,B58,B98 B99,B100	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	10pcs. - 2L-#10@175 C/C	8pcs. - 2L-#10@175 C/C	9pcs. - 2L-#10@175 C/C	-	-	-
B61,B63	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 2L-#10@75 C/C	15pcs. - 2L-#10@100 C/C	17pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-

1
S 13 SCALE
FIRST FLOOR BEAM SCHEDULE
AS SHOWN

 SHERIFF JOHN C. LA MADRID PRC LIC. No. 0128359 PTR No. 9098869 VALIDITY: JULY 17, 2025 ISSUED: JANUARY 2, 2025 CIVIL ENGINEER	 OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:  RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL:  JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	APPROVED:  KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET S-13 20 40 65
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FIRST FLOOR BEAM SCHEDULE (C27.58 : Fy414 (MAIN) : Fy276 (SHEAR)) (LEVEL: 4.00 m) continued.






BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SFR	DIAGONAL	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT			
B62,B64,B65	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	17pcs. - 2L-#10@75 C/C	15pcs. - 2L-#10@100 C/C	17pcs. - 2L-#10@75 C/C	-	-	-
B67,B72,B86	400	700	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	7pcs. - 2L-#10@150 C/C	5pcs. - 2L-#10@150 C/C	7pcs. - 2L-#10@150 C/C	2pcs. - #16EF	-	CANTILEVERED
B68	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 4pcs. - Ø16	20pcs. - 4L-#10@75 C/C	9pcs. - 4L-#10@125 C/C	20pcs. - 4L-#10@75 C/C	-	-	-
B69	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 4pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 5pcs. - Ø16	20pcs. - 2L-#12@75 C/C	56pcs. - 2L-#12@100 C/C	20pcs. - 2L-#12@75 C/C	2pcs. - #16EF	-	-
B70	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 5pcs. - Ø16	20pcs. - 2L-#10@75 C/C	75pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B73	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-#10@75 C/C	15pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B74	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#12@75 C/C	11pcs. - 2L-#12@100 C/C	20pcs. - 2L-#12@75 C/C	2pcs. - #16EF	-	-
B75	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#12@75 C/C	11pcs. - 2L-#12@100 C/C	20pcs. - 2L-#12@75 C/C	2pcs. - #16EF	-	-
B76,B83	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-#10@75 C/C	15pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	-	-	-
B77,B84	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#10@75 C/C	15pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	-	-	-
B79	400	700	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 3pcs. - Ø16	5pcs. - Ø16 3pcs. - Ø16	5pcs. - Ø16 3pcs. - Ø16	7pcs. - 2L-#10@150 C/C	5pcs. - 2L-#10@150 C/C	7pcs. - 2L-#10@150 C/C	2pcs. - #16EF	-	CANTILEVERED
B80	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 4L-#10@75 C/C	9pcs. - 4L-#10@125 C/C	20pcs. - 4L-#10@75 C/C	2pcs. - #16EF	-	-
B81,B82	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	20pcs. - 2L-#12@75 C/C	11pcs. - 2L-#12@100 C/C	20pcs. - 2L-#12@75 C/C	2pcs. - #16EF	-	-
B87	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 4pcs. - Ø16	20pcs. - 2L-#12@75 C/C	15pcs. - 2L-#12@75 C/C	20pcs. - 2L-#12@75 C/C	2pcs. - #16EF	-	-
B88,B89	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 4pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16 4pcs. - Ø16	20pcs. - 2L-#10@75 C/C	75pcs. - 2L-#10@75 C/C	20pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B91	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-#10@75 C/C	21pcs. - 2L-#10@75 C/C	17pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-
B92,B94,B95	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-#10@75 C/C	12pcs. - 2L-#10@125 C/C	17pcs. - 2L-#10@75 C/C	-	-	-
B93	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-#10@75 C/C	12pcs. - 2L-#10@125 C/C	17pcs. - 2L-#10@75 C/C	2pcs. - #16EF	-	-

2 FIRST FLOOR BEAM SCHEDULE
S 14 SCALE AS SHOWN

SECOND FLOOR BEAM SCHEDULE (C27.58 : Fy414 (MAIN) : Fy276 (SHEAR)) (LEVEL: 8.00 m)

BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SFR	DIAGONAL	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT			
B1	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	7pcs. - 2L-Ø10@175 C/C	5pcs. - 2L-Ø10@175 C/C	7pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B2,B3,B5	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	7pcs. - 2L-Ø10@75 C/C	18pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B4	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	7pcs. - 2L-Ø12@75 C/C	2pcs. - 2L-Ø12@100 C/C	17pcs. - 2L-Ø12@75 C/C	-	-	-
B6	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	7pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B7	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	0pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B8,B11,B18	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	0pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B9	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	7pcs. - 4L-Ø10@75 C/C	2pcs. - 4L-Ø10@100 C/C	17pcs. - 4L-Ø10@75 C/C	-	-	-
B10,B17	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	0pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B12	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	0pcs. - 2L-Ø12@75 C/C	14pcs. - 2L-Ø12@100 C/C	20pcs. - 2L-Ø12@75 C/C	-	-	-
B13	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	6pcs. - Ø16 2pcs. - Ø16	0pcs. - 2L-Ø12@75 C/C	13pcs. - 2L-Ø12@100 C/C	20pcs. - 2L-Ø12@75 C/C	-	-	-
B14	500	700	6pcs. - Ø16	4pcs. - Ø16	6pcs. - Ø16	6pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	8pcs. - 4L-Ø10@75 C/C	-	18pcs. - 4L-Ø10@75 C/C	-	-	-
B15	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	0pcs. - 2L-Ø10@75 C/C	19pcs. - 2L-Ø10@75 C/C	20pcs. - 2L-Ø10@75 C/C	-	-	-
B16	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	0pcs. - 2L-Ø12@75 C/C	13pcs. - 2L-Ø12@100 C/C	20pcs. - 2L-Ø12@75 C/C	-	-	-
B19,B24,B36	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	7pcs. - 4L-Ø10@75 C/C	2pcs. - 4L-Ø10@125 C/C	17pcs. - 4L-Ø10@75 C/C	-	-	-
B20	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	4pcs. - Ø16 2pcs. - Ø16	0pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	1pcs. - Ø16EF	-	-
B21	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	4pcs. - Ø16 4pcs. - Ø16	0pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B22	350	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	3pcs. - Ø16 2pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø16	7pcs. - 2L-Ø12@75 C/C	18pcs. - 2L-Ø12@100 C/C	17pcs. - 2L-Ø12@75 C/C	2pcs. - Ø16EF	-	-

1 SECOND FLOOR BEAM SCHEDULE
S 14 SCALE AS SHOWN

 SHERIFF JOHN C. LA MADRID PRC LIC. No. 0128339 PTR No. 9098969 VALIDITY: JULY 17, 2025 ISSUED: JANUARY 2, 2025 CIVIL ENGINEER	 OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:  RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL:  JANET PADAYOS PABLO SECTOR VICE PRESIDENT	APPROVED:  KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET S-14 20 41 65
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SECOND FLOOR BEAM SCHEDULE (C27.58 : Fy414 (MAIN) : Fy276 (SHEAR)) (LEVEL: 8.00 m) continued..


BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SFR	DIAGONAL	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT			
B23	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	5pcs. - Ø16 2pcs. - Ø18	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	24pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B25	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	18pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B26,B38	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B27	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B28,B29	250	400	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	11pcs. - 2L-Ø10@150 C/C	9pcs. - 2L-Ø10@150 C/C	11pcs. - 2L-Ø10@150 C/C	-	-	-
B30	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	5pcs. - 2L-Ø10@175 C/C	3pcs. - 2L-Ø10@175 C/C	5pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B31	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	5pcs. - 2L-Ø10@175 C/C	3pcs. - 2L-Ø10@175 C/C	5pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B32	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	22pcs. - 2L-Ø10@150 C/C	20pcs. - 2L-Ø10@150 C/C	19pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B33	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	7pcs. - 2L-Ø10@100 C/C	5pcs. - 2L-Ø10@100 C/C	7pcs. - 2L-Ø10@100 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B34	350	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	24pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B35	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	18pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B37	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	25pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B39,B41	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B40	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	7pcs. - 2L-Ø10@175 C/C	5pcs. - 2L-Ø10@175 C/C	7pcs. - 2L-Ø10@175 C/C	-	-	-
B42	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	5pcs. - 2L-Ø10@175 C/C	3pcs. - 2L-Ø10@175 C/C	5pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B43	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 4L-Ø10@75 C/C	10pcs. - 4L-Ø10@150 C/C	17pcs. - 4L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B44,B46	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	21pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B45	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	21pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B47,B73	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	21pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B48,B49	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	5pcs. - 2L-Ø10@175 C/C	3pcs. - 2L-Ø10@175 C/C	5pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B50	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	8pcs. - 2L-Ø10@125 C/C	6pcs. - 2L-Ø10@125 C/C	8pcs. - 2L-Ø10@125 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B51	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	6pcs. - 2L-Ø10@125 C/C	4pcs. - 2L-Ø10@125 C/C	6pcs. - 2L-Ø10@125 C/C	2pcs. - Ø16EF	-	-
B52	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	4pcs. - Ø20	4pcs. - Ø20	4pcs. - Ø20	20pcs. - 4L-Ø10@75 C/C	45pcs. - 4L-Ø10@125 C/C	20pcs. - 4L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B53	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	4pcs. - Ø20	4pcs. - Ø20	4pcs. - Ø20	20pcs. - 4L-Ø10@75 C/C	37pcs. - 4L-Ø10@150 C/C	20pcs. - 4L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B54,B61	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	6pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	6pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B55,B62	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	20pcs. - 4L-Ø10@75 C/C	9pcs. - 4L-Ø10@125 C/C	20pcs. - 4L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B56,B63	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-Ø12@75 C/C	11pcs. - 2L-Ø12@100 C/C	20pcs. - 2L-Ø12@75 C/C	-	-	-
B57,B64	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-Ø12@75 C/C	11pcs. - 2L-Ø12@100 C/C	20pcs. - 2L-Ø12@75 C/C	2pcs. - Ø16EF	-	-
B58,B65	400	700	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-Ø12@75 C/C	11pcs. - 2L-Ø12@100 C/C	20pcs. - 2L-Ø12@75 C/C	-	-	-
B59	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-Ø12@75 C/C	11pcs. - 2L-Ø12@100 C/C	20pcs. - 2L-Ø12@75 C/C	2pcs. - Ø16EF	-	-
B60,B67	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B66	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@75 C/C	20pcs. - 2L-Ø10@75 C/C	-	-	-
B68	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	8pcs. - 2L-Ø10@125 C/C	6pcs. - 2L-Ø10@125 C/C	8pcs. - 2L-Ø10@125 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B69	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-Ø12@75 C/C	15pcs. - 2L-Ø12@75 C/C	20pcs. - 2L-Ø12@75 C/C	2pcs. - Ø16EF	-	-
B70,B71	400	700	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	3pcs. - Ø16	5pcs. - Ø16	20pcs. - 2L-Ø12@75 C/C	56pcs. - 2L-Ø12@100 C/C	20pcs. - 2L-Ø12@75 C/C	2pcs. - Ø16EF	-	-
B72	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 4L-Ø10@75 C/C	12pcs. - 4L-Ø10@125 C/C	17pcs. - 4L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B74	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B75,B76	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B77	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-

1 SECOND FLOOR BEAM SCHEDULE
S 15 SCALE AS SHOWN


SHERIFF JOHN C. LA MADRID
PRC LIC. No. 0126339 VALIDITY: JULY 17, 2025
PTR No. 9098689 ISSUED: JANUARY 2, 2025
CIVIL ENGINEER

OWNER/ PROJECT TITLE/ LOCATION
 CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:

RONDA BATACLAO TULLAY
END-USER- DEAN

RECOMMENDING APPROVAL:

JANET PADAYOS PABLO
SECTOR VICE PRESIDENT

APPROVED:

KENNETH ALIP LARUAN
PRESIDENT

SHEET CONTENT:
AS SHOWN

SHEET
S-15 20
42 65

ROOF BEAM SCHEDULE (C27.58 : Fy414 (MAIN) : Fy276 (SHEAR)) (LEVEL: 16.00 m)


BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SFR	DIAGONAL	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT			
B1	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B2,B3,B5	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	-	-	-
B4,B44,B49	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	7pcs. - 2L-Ø10@175 C/C	5pcs. - 2L-Ø10@175 C/C	7pcs. - 2L-Ø10@175 C/C	-	-	-
B6,B46	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B7,B41,B47	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B8,B14,B18,B22,B26,B27,B33,B34,B40,B58,B64,B85,B86,B92	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B9,B10,B13,B32,B35,B39	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	14pcs. - 2L-Ø10@125 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B11,B30,B37	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	1pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B12	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@125 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B15	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B16	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 4L-Ø10@75 C/C	52pcs. - 4L-Ø10@125 C/C	17pcs. - 4L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B17	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 4L-Ø10@75 C/C	2pcs. - 4L-Ø10@100 C/C	17pcs. - 4L-Ø10@75 C/C	-	-	-
B19	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	3pcs. - Ø20	3pcs. - Ø20	5pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B20	350	600	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	17pcs. - 4L-Ø10@75 C/C	65pcs. - 4L-Ø10@100 C/C	17pcs. - 4L-Ø10@75 C/C	-	-	-
B21	350	600	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	5pcs. - Ø16	17pcs. - 4L-Ø10@75 C/C	2pcs. - 4L-Ø10@75 C/C	17pcs. - 4L-Ø10@75 C/C	-	-	-
B23	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	3pcs. - Ø20	3pcs. - Ø20	6pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B24	500	600	6pcs. - Ø16	6pcs. - Ø16	6pcs. - Ø16	6pcs. - Ø16	6pcs. - Ø16	6pcs. - Ø16	17pcs. - 4L-Ø10@75 C/C	65pcs. - 4L-Ø10@100 C/C	17pcs. - 4L-Ø10@75 C/C	-	-	-
B25	500	600	6pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	6pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 4L-Ø10@75 C/C	2pcs. - 4L-Ø10@75 C/C	17pcs. - 4L-Ø10@75 C/C	-	-	-
B28,B29	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	18pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B31,B36	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	14pcs. - 2L-Ø10@125 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B38	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@125 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B42	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B43,B45,B48,B50	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	10pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B51	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B52,B96,B97	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	9pcs. - 2L-Ø10@175 C/C	-	-	-
B53,B56,B98	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	9pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B54	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	9pcs. - 2L-Ø10@175 C/C	-	-	-
B55,B95	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	9pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B57,B99	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B59,B87,B89,B90	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B60,B62,B88,B91	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B61	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	12pcs. - 2L-Ø10@125 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B63	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	12pcs. - 2L-Ø10@125 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B65	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	6pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	7pcs. - 2L-Ø10@150 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B66,B84	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	20pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B67	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	9pcs. - 2L-Ø10@175 C/C	7pcs. - 2L-Ø10@175 C/C	9pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B68	300	600	3pcs. - Ø16	3pcs. - Ø16	3pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B69,B76	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	6pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	6pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B70,B77	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	21pcs. - 2L-Ø10@75 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B71,B74	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	2pcs. - Ø16EF	-	-
B72,B73,B78,B79,B80,B81	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	17pcs. - 2L-Ø10@75 C/C	15pcs. - 2L-Ø10@100 C/C	17pcs. - 2L-Ø10@75 C/C	-	-	-
B75,B82	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B83	300	600	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	4pcs. - Ø16	6pcs. - 2L-Ø10@175 C/C	5pcs. - 2L-Ø10@150 C/C	7pcs. - 2L-Ø10@150 C/C	2pcs. - Ø16EF	-	CANTILEVERED
B93	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	4pcs. - 2L-Ø10@175 C/C	2pcs. - 2L-Ø10@175 C/C	4pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-
B94	250	600	2pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	3pcs. - Ø16	2pcs. - Ø16	2pcs. - Ø16	10pcs. - 2L-Ø10@175 C/C	8pcs. - 2L-Ø10@175 C/C	9pcs. - 2L-Ø10@175 C/C	2pcs. - Ø16EF	-	-


1 ROOF BEAM SCHEDULE
S 17 SCALE
AS SHOWN


SHERIFF JOHN C. LA MADRID
PRC LIC. No. 0124339 VALIDITY: JULY 17, 2025
PTR No. 9098469 ISSUED: JANUARY 2, 2025
CIVIL ENGINEER

OWNER/ PROJECT TITLE/ LOCATION

CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:

RONDA BATACLAO TULLAY
END-USER- DEAN

RECOMMENDING APPROVAL:

JANET PADAY-OS PABLO
SECTOR VICE PRESIDENT

APPROVED:

KENNETH ALIP LARUAN
PRESIDENT

SHEET CONTENT:
AS SHOWN

SHEET
S-17 20
44 65

FIRST FLOOR SLAB SCHEDULE (C21 : FY276) (LEVEL : 4.00 M)

SLAB MARKED	SLAB THICKNESS (mm)	BOTTOM REINFORCEMENT				TOP REINFORCEMENT					REMARKS
		ALONG SHORT SPAN		ALONG LONG SPAN		OVER LONG SUPPORT		OVER SHORT SUPPORT		DISTRIBUTION	
		FULL LENGTH	CURTAILED	FULL LENGTH	CURTAILED	CONTINUOUS SUPPORT	END SUPPORT	CONTINUOUS SUPPORT	END SUPPORT		
S1, S4, S7, S44, S45, S46, S47	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S2, S3, S5, S6, S8, S14, S15, S21, S22, S28, S29, S35, S38, S42	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S9, S12, S13, S16, S20, S23, S27, S30, S34	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 150 C/C	—	Ø10 @ 275 C/C	—
S10	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 275 C/C	—
S11, S18, S25, S32, S41, S43	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 275 C/C	—
S17, S19, S24, S26, S31, S33, S40	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 150 C/C	—	Ø10 @ 275 C/C	—
S36, S37	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S39	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—

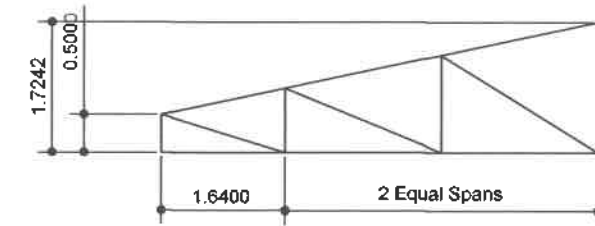
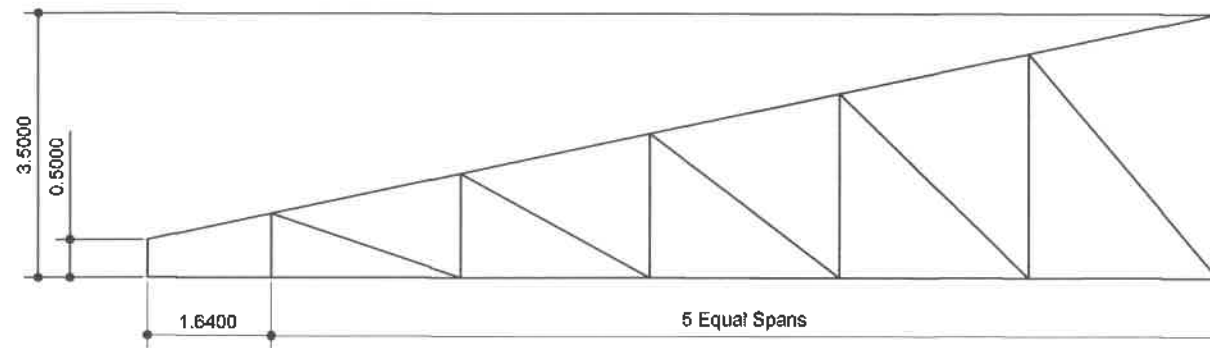
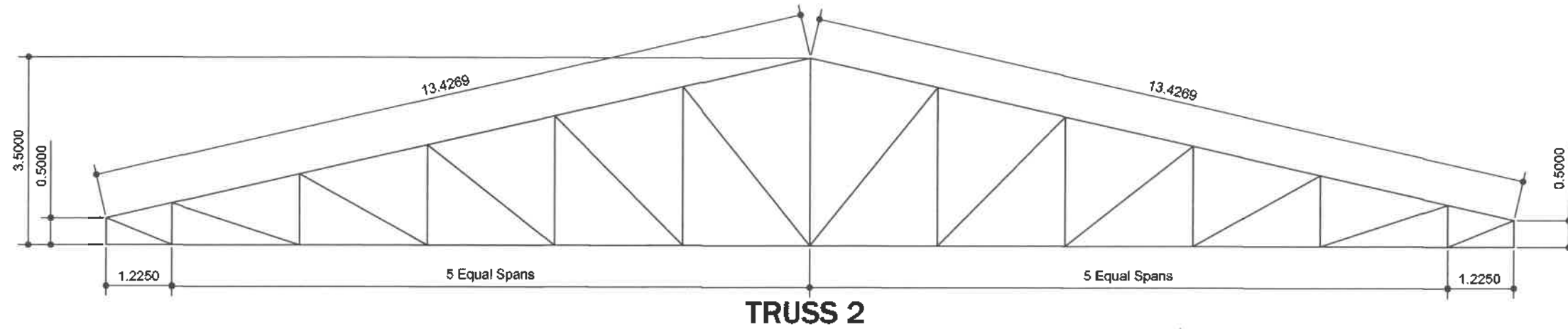
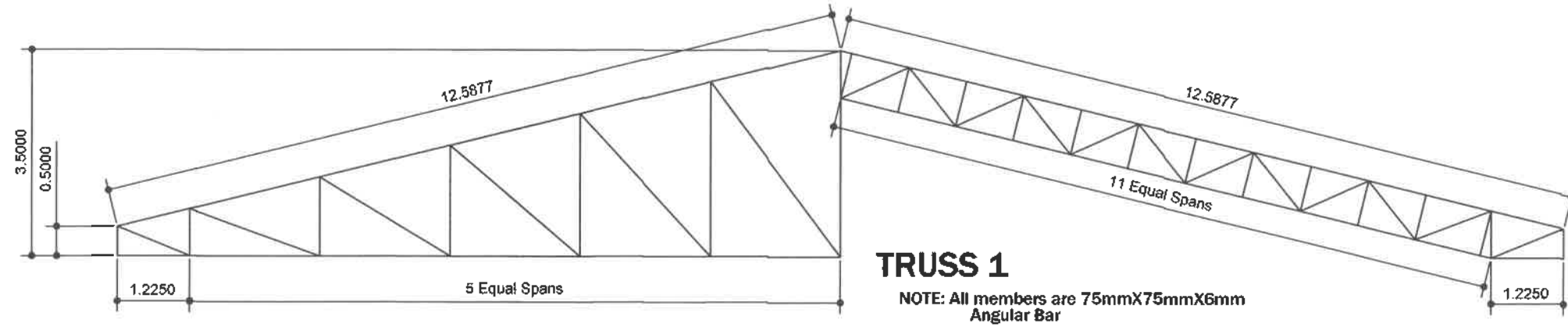
SECOND FLOOR SLAB SCHEDULE (C27.56 : FY276) (LEVEL : 8.00 M)

SLAB MARKED	SLAB THICKNESS (mm)	BOTTOM REINFORCEMENT				TOP REINFORCEMENT					REMARKS
		ALONG SHORT SPAN		ALONG LONG SPAN		OVER LONG SUPPORT		OVER SHORT SUPPORT		DISTRIBUTION	
		FULL LENGTH	CURTAILED	FULL LENGTH	CURTAILED	CONTINUOUS SUPPORT	END SUPPORT	CONTINUOUS SUPPORT	END SUPPORT		
S1, S30	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S2, S6, S18	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S3, S5	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S4, S9, S14, S19, S28	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 275 C/C	—
S7, S12	100	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S8, S10, S13, S15, S20	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 150 C/C	—	Ø10 @ 275 C/C	—
S11, S16	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S17	100	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S21	100	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S22, S23, S33	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S24	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S25, S32	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	—	Ø10 @ 275 C/C	—
S27	100	Ø10 @ 175 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	—	Ø10 @ 275 C/C	—
S29, S34, S35, S36	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S31	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—

THIRD FLOOR SLAB SCHEDULE (C27.56 : FY276) (LEVEL : 12.00 M)

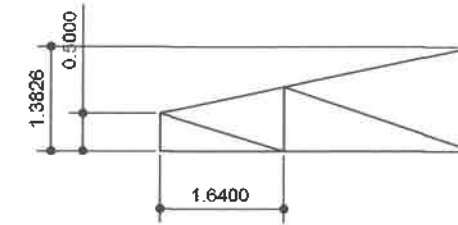
SLAB MARKED	SLAB THICKNESS (mm)	BOTTOM REINFORCEMENT				TOP REINFORCEMENT					REMARKS
		ALONG SHORT SPAN		ALONG LONG SPAN		OVER LONG SUPPORT		OVER SHORT SUPPORT		DISTRIBUTION	
		FULL LENGTH	CURTAILED	FULL LENGTH	CURTAILED	CONTINUOUS SUPPORT	END SUPPORT	CONTINUOUS SUPPORT	END SUPPORT		
S1	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S2, S6, S18	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S3, S5	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S4, S9, S14, S19, S28	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 275 C/C	—
S7, S12	100	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S8, S10, S13, S15, S20	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 150 C/C	—	Ø10 @ 275 C/C	—
S11, S16	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S17	100	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 175 C/C	Ø10 @ 200 C/C	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S21	100	Ø10 @ 200 C/C	—	Ø10 @ 175 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 150 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S22, S23, S32	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S24	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—
S25, S31	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	—	Ø10 @ 275 C/C	—
S27	100	Ø10 @ 175 C/C	—	Ø10 @ 200 C/C	—	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	—	Ø10 @ 275 C/C	—
S29, S30, S33, S34, S35	100	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	—	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 200 C/C	Ø10 @ 275 C/C	—

1 SLAB SCHEDULE
S 18 SCALE AS SHOWN



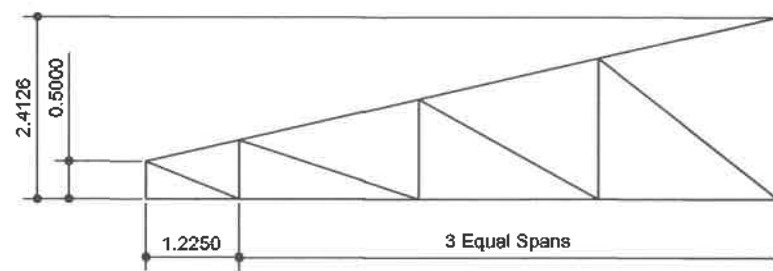
TRUSS 5

NOTE: All members are 75mmX75mmX6mm Angular Bar








TRUSS 6

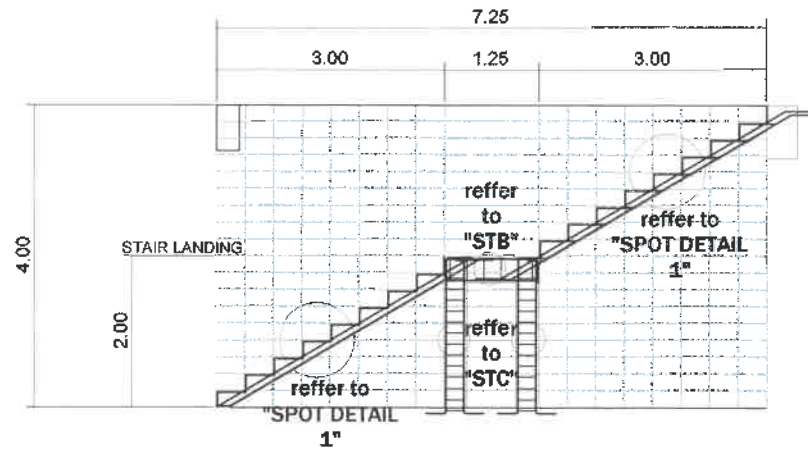
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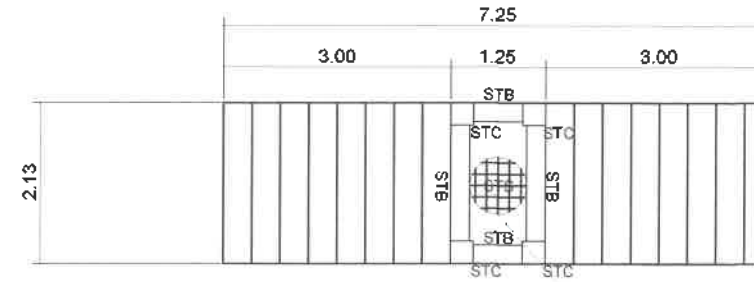
NOTE: All members are 75mmX75mmX6mm Angular Bar



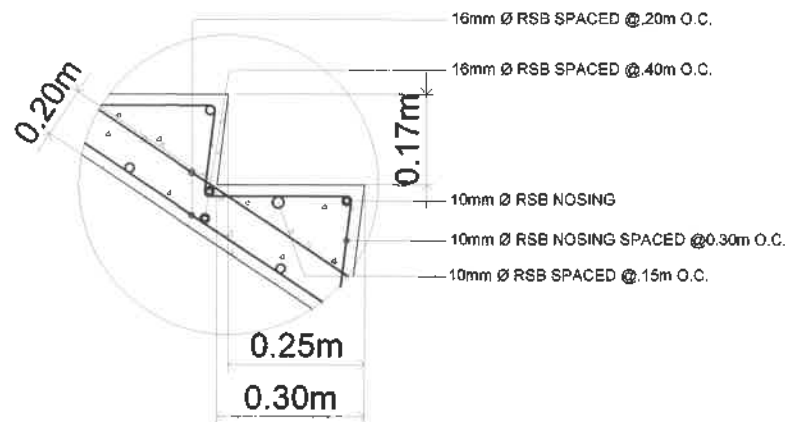
	<div><div>SHERIFF JOHN C. LA MADRID</div><div>PRC LIC. No. 0128359 VALIDITY: JULY 17, 2025 PTR No. 9098489 ISSUED: JANUARY 2, 2025</div><div>CIVIL ENGINEER</div></div>	<div><div>OWNER/ PROJECT TITLE/ LOCATION</div><div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div></div>	<div><div>CONFORME:</div><div><div>RONDA BATACLAO TULLAY</div><div>END-USER- DEAN</div></div></div>	<div><div>RECOMMENDING APPROVAL:</div><div><div>JANET PADAY-OS PABLO</div><div>SECTOR VICE PRESIDENT</div></div></div>	<div><div>APPROVED:</div><div><div>KENNETH ALIP LARUAN</div><div>PRESIDENT</div></div></div>	<div><div>SHEET CONTENT:</div><div>AS SHOWN</div></div>	<div><div>SHEET</div><div><table><tr><td>S-19</td><td>20</td></tr><tr><td>46</td><td>65</td></tr></table></div></div>	S-19	20	46	65
S-19	20										
46	65										



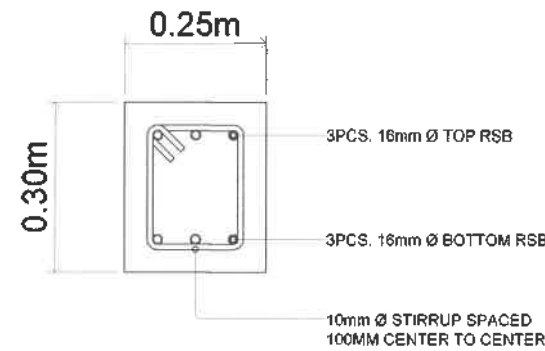
1 STAIR SECTION
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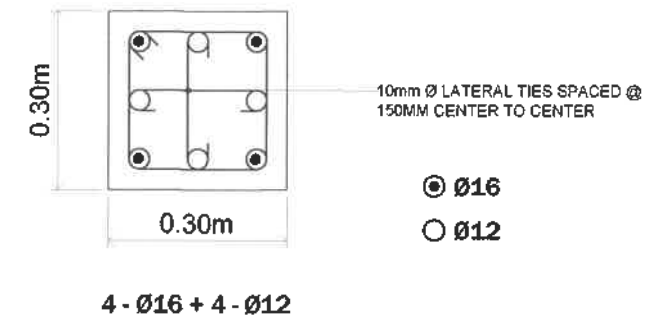
2 STAIR PLAN
S 20 SCALE AS SHOWN



3 SPOT DETAIL 1
S 20 SCALE AS SHOWN








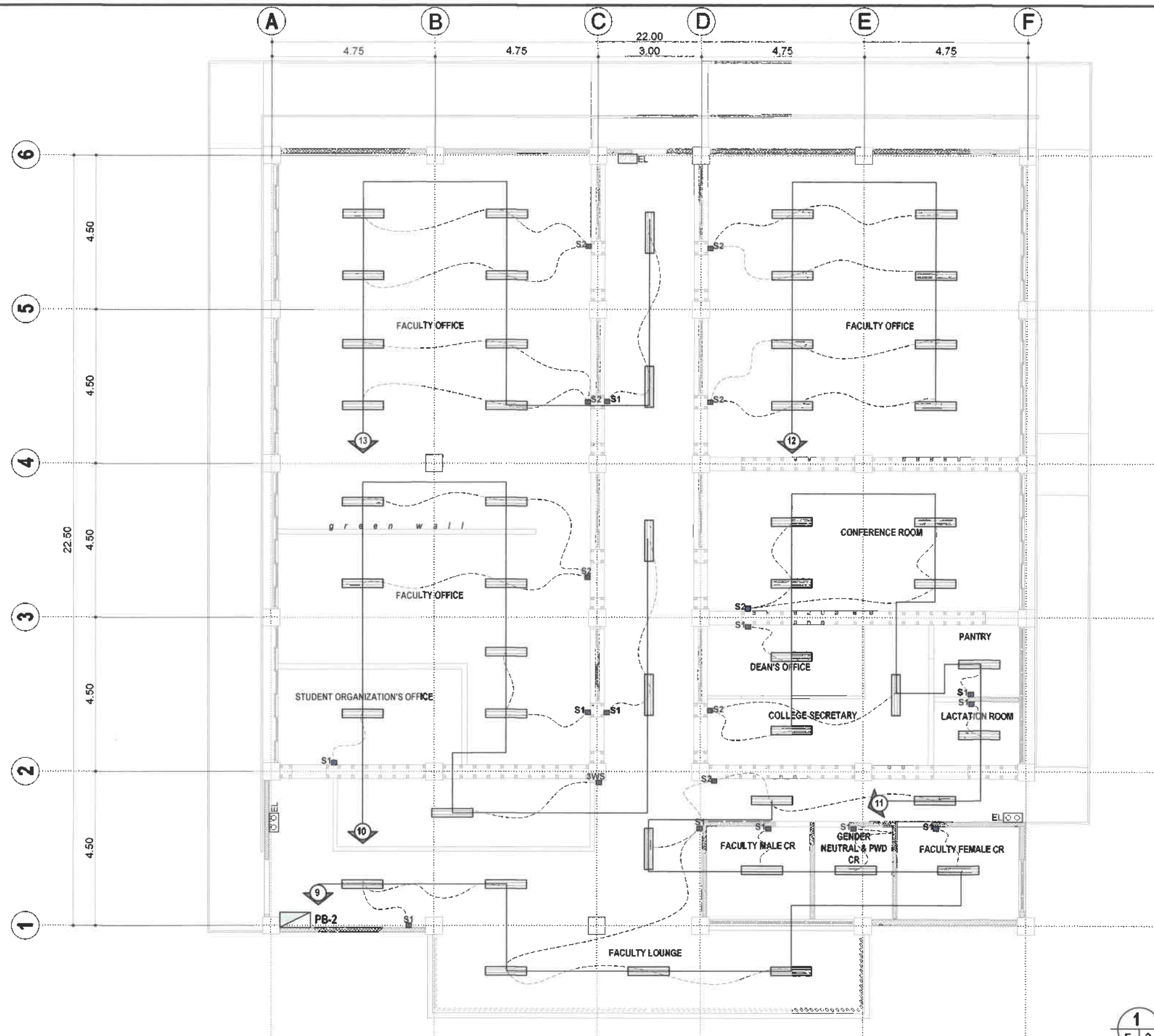
4 DETAIL OF STB
S 20 SCALE AS SHOWN



5 DETAIL OF STC
S 20 SCALE AS SHOWN





	<p><i>[Signature]</i> SHERIFF JOHN C. LA MADRID PRC LIC. No. 0126359 PTR No. 9098889 CIVIL ENGINEER</p>	<p>OWNER/ PROJECT TITLE/ LOCATION</p> <p>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</p>	<p>CONFORME:</p> <p><i>[Signature]</i> RONDA BATACLAO TULLAY END-USER- DEAN</p>	<p>RECOMMENDING APPROVAL:</p> <p><i>[Signature]</i> JANET PADAY-OS PABLO SECTOR VICE PRESIDENT</p>	<p>APPROVED:</p> <p><i>[Signature]</i> KENNETH ALIP LARUAN PRESIDENT</p>	<p>SHEET CONTENT:</p> <p>AS SHOWN</p>	<p>SHEET</p> <p>S-20 20 47 65</p>
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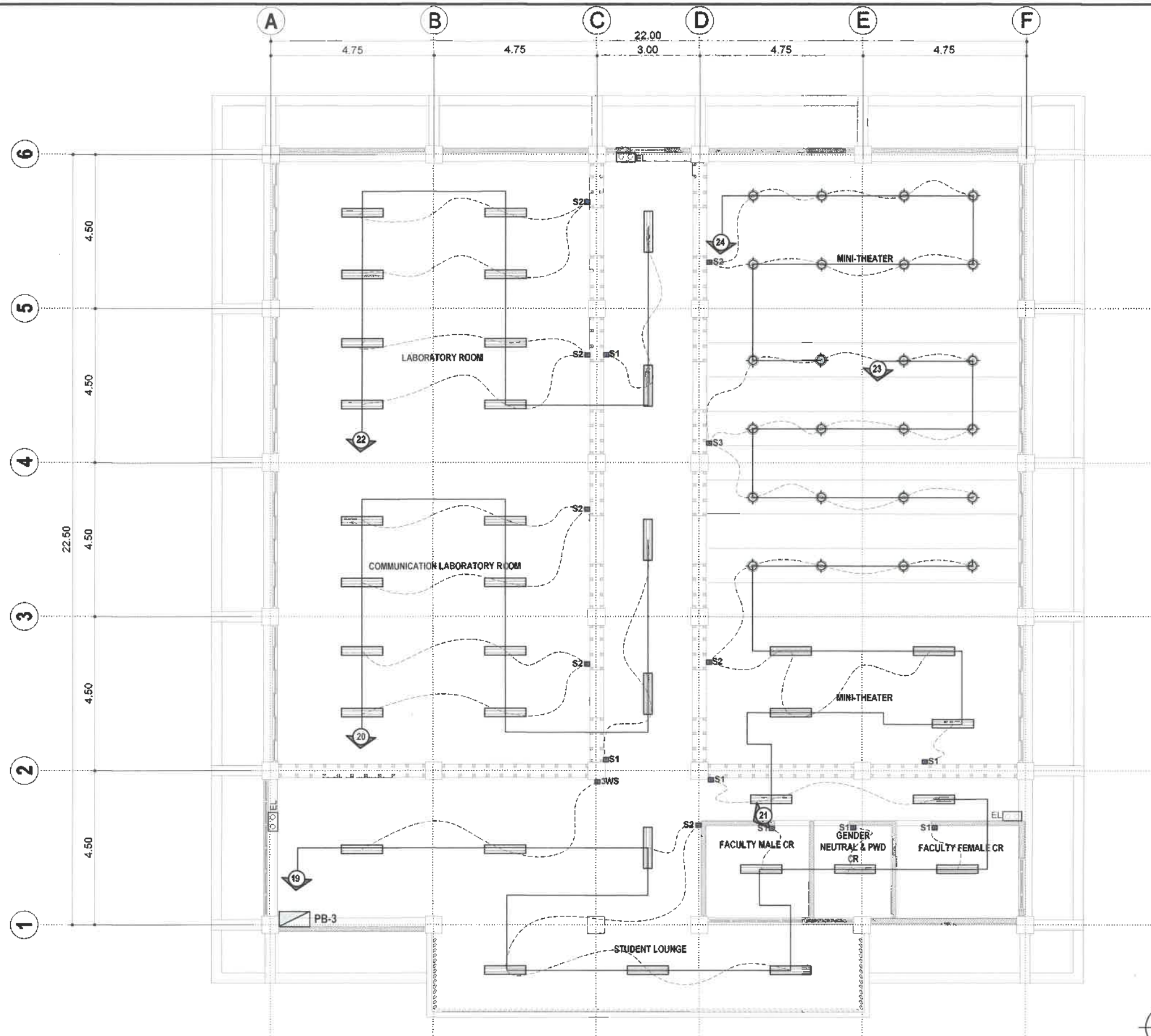
ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025		DRAFTED BY: EMSUMINSIN JAN.2025	OWNER/ PROJECT TITLE/ LOCATION  CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:  RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL:  JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	APPROVED:  KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET 
			ARCHITECT	ENGINEER				



L E G E N D	
	2-T8 LED LAMP WITH HOUSING AND DIFFUSER
	6" Ø LED LIGHT, SURFACE TYPE
	6" Ø RECESSED PIN LIGHT
	S1 SINGLE SWITCH
	S2 2-GANG SWITCH
	3WS 3-WAY SWITCH
	CIRCUIT/HOMERUN
	10-HOLES PANEL BOARD, 60 @ 100F, 230 V @ 32mm Ø RSC PIPE 300AT, 2P
	EL RECHARGEABLE EMERGENCY LIGHT

1 SECOND FLOOR ELECTRICAL LIGHTING LAYOUT
E 2 SCALE 1:125 MTS

ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9258412- LA TRINIDAD - JANUARY 31, 2025 ARCHITECT	ENGINEER	DRAFTED BY: EMSUMINSIN, JAN 2025	OWNER/ PROJECT TITLE/ LOCATION  CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:  RONDA BATACLAO TULLAY END-USER- DEAN	RECOMMENDING APPROVAL:  JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	APPROVED:  KENNETH ALIP LARUAN PRESIDENT	SHEET CONTENT: AS SHOWN	SHEET E-2 7 49 65



L E G E N D	
	2-T8 LED LAMP WITH HOUSING AND DIFFUSER
	6" Ø LED LIGHT, SURFACE TYPE
	6" Ø RECESSED PIN LIGHT
	S1 SINGLE SWITCH
	S2 2-GANG SWITCH
	3WS 3-WAY SWITCH
	CIRCUIT/HOMERUN
	10-HOLES PANEL BOARD, 60 @ 100F, 230 V @ 32mm Ø RSC PIPE 300AT, 2P
	EL RECHARGEABLE EMERGENCY LIGHT

1 THIRD FLOOR ELECTRICAL LIGHTING LAYOUT
E 3 SCALE 1:125 MTS

ARCH. HAZELINE N. TIBANGAY, UAP
PRC REG. NO. 028540 - NOV. 18, 2024
PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025

ARCHITECT

ENGINEER

DRAFTED BY:
EMS/UMINS/JAN 2025



OWNER/ PROJECT TITLE/ LOCATION

CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:

RONDA BATACLAO TULLAY

END-USER- DEAN

RECOMMENDING APPROVAL:

JANET PADAY OS PABLO

SECTOR VICE PRESIDENT

APPROVED:

KENNETH ALIP LARUAN

PRESIDENT

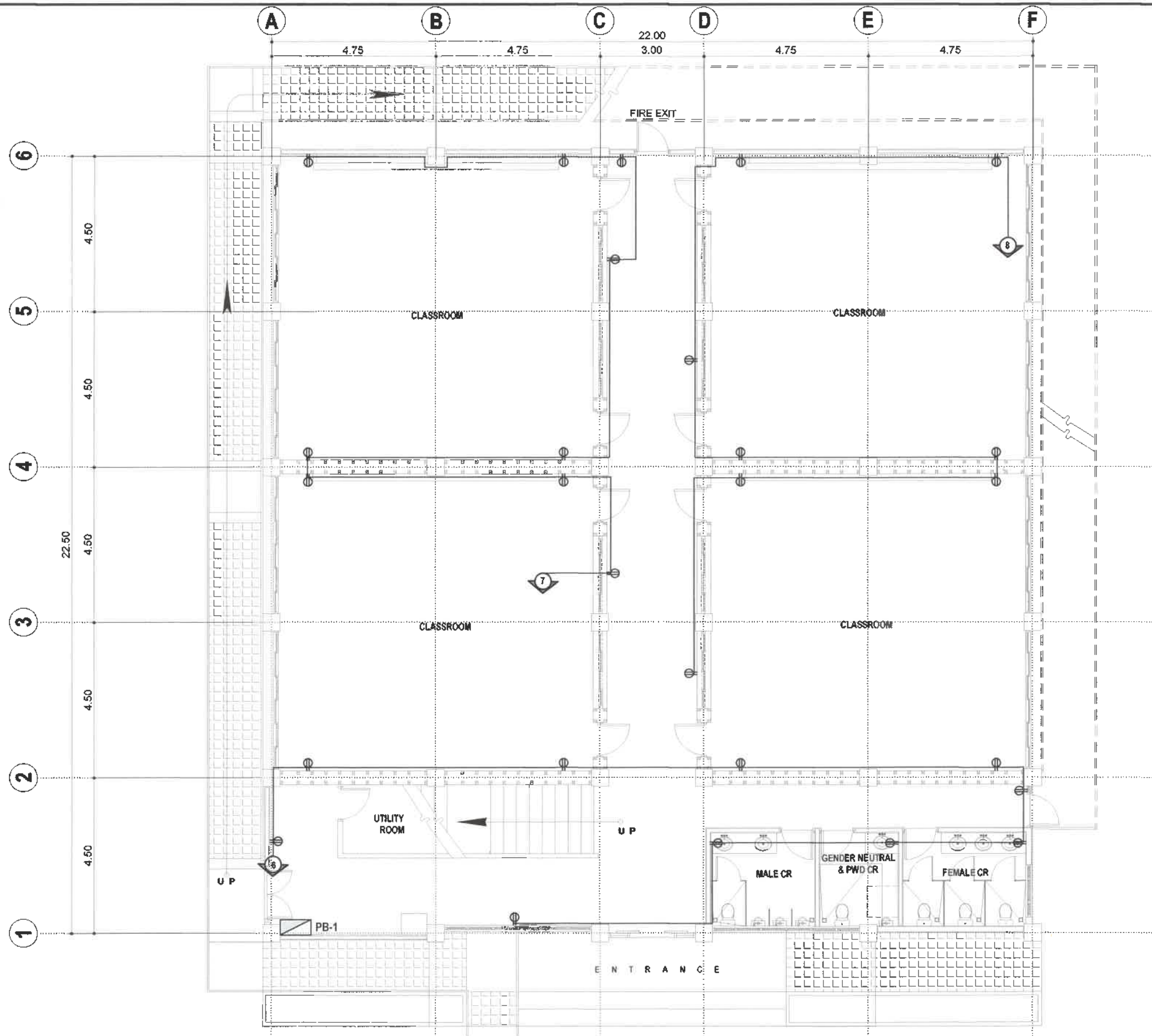
SHEET CONTENT:

AS SHOWN

SHEET





E-3 7

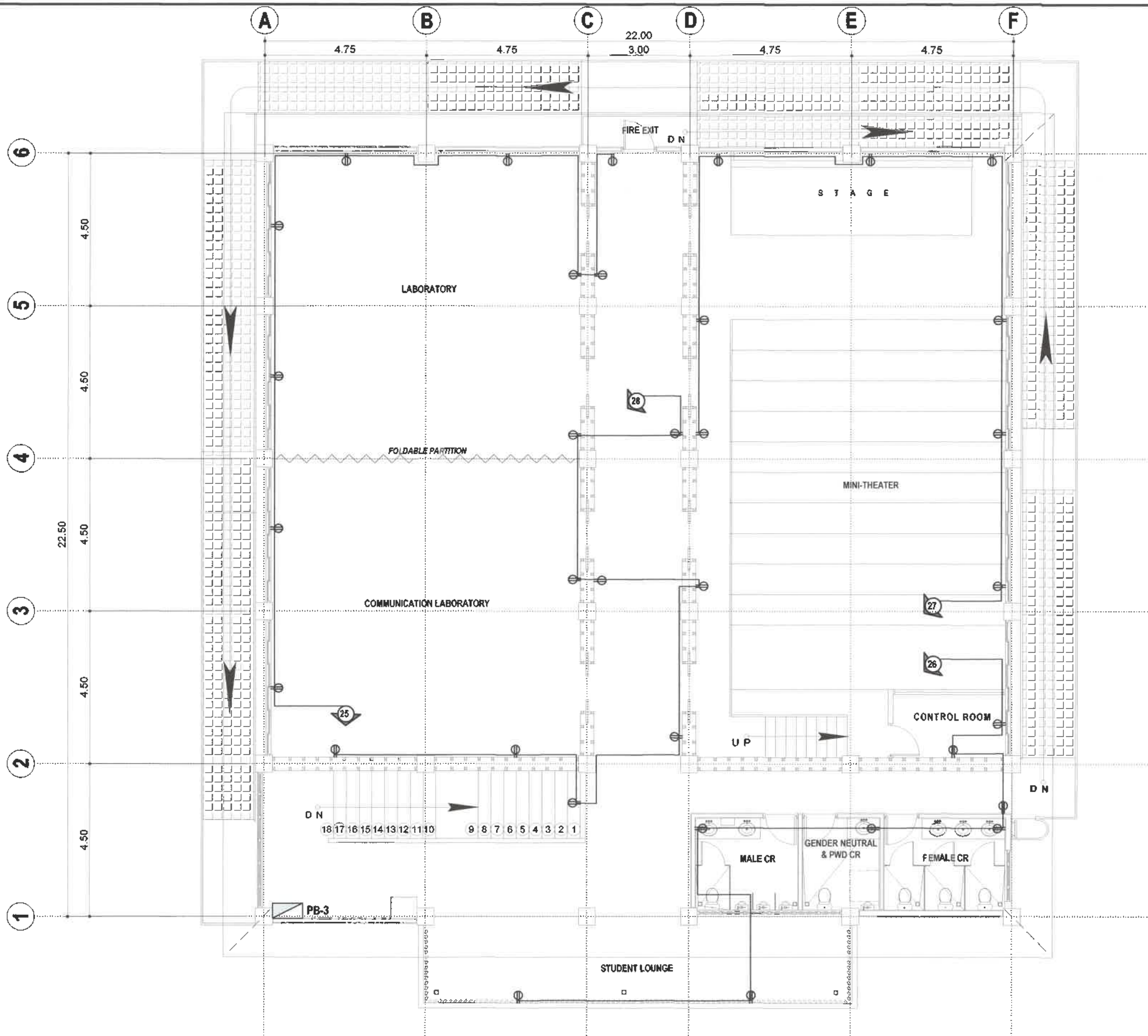
50 65



L E G E N D	
	10-HOLES PANEL BOARD, 60 @ 100F, 230 V @ 32mmØ RSC PIPE 300AT, 2P
	DUPLEX CONVENIENCE OUTLET
	WP WATERPROOF CONVENIENCE OUTLET
	R RANGE CONVENIENCE OUTLET
	REF REFRIGERATOR CONVENIENCE OUTLET




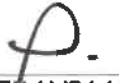
1 FIRST FLOOR ELECTRICAL POWER LAYOUT
E 4 SCALE 1:125 MTS

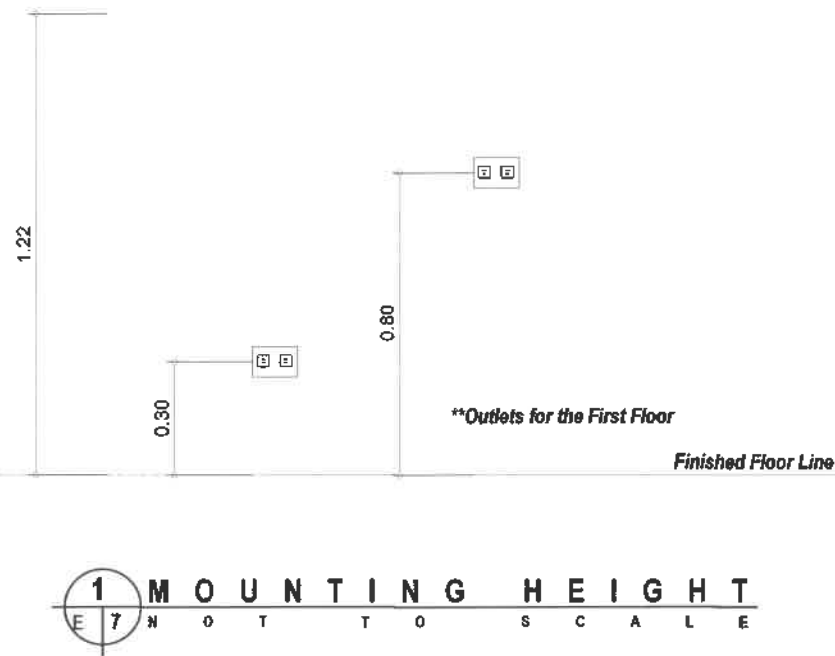
ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025	ENGINEER	DRAFTED BY: EMSUMINSIN JAN 2025	OWNER/ PROJECT TITLE/ LOCATION  CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:  RONDA BATACLAO TULLAY	RECOMMENDING APPROVAL:  JANET PADOY OS PABLO	APPROVED:  KENNETH ALIP LARUAN	SHEET CONTENT: AS SHOWN	SHEET E-4 7 51 65
				END-USER- DEAN	SECTOR VICE PRESIDENT	PRESIDENT		



L E G E N D	
	10-HOLES PANEL BOARD, 60 @ 100F, 230 V @ 32mmØ RSC PIPE 300AT, 2P
	DUPLEX CONVENIENCE OUTLET
	WP WATERPROOF CONVENIENCE OUTLET
	R RANGE CONVENIENCE OUTLET
	REF REFRIGERATOR CONVENIENCE OUTLET

1 FIRST FLOOR ELECTRICAL POWER LAYOUT
E 6 SCALE 1:125 MTS

<div>ARCH. HAZELINE N. TIBANGAY, UAP</div> <div>PRC REG. NO. 028540 - NOV.18, 2024</div> <div>PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025</div>		DRAFTED BY: EMSIJANISIN JAN 2025	<div></div> <div>OWNER/ PROJECT TITLE/ LOCATION</div> <div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT: AS SHOWN	SHEET <div><div>E-67</div><div>5365</div></div>
				<div></div> <div>RONDA BATACLAO TULLAY</div> <div>END-USER- DEAN</div>	<div></div> <div>JANET PADAY-OS PABLO</div> <div>SECTOR VICE PRESIDENT</div>	<div></div> <div>KENNETH ALIP LARUAN</div> <div>PRESIDENT</div>		
ARCHITECT	ENGINEER							



LOAD COMPUTATION

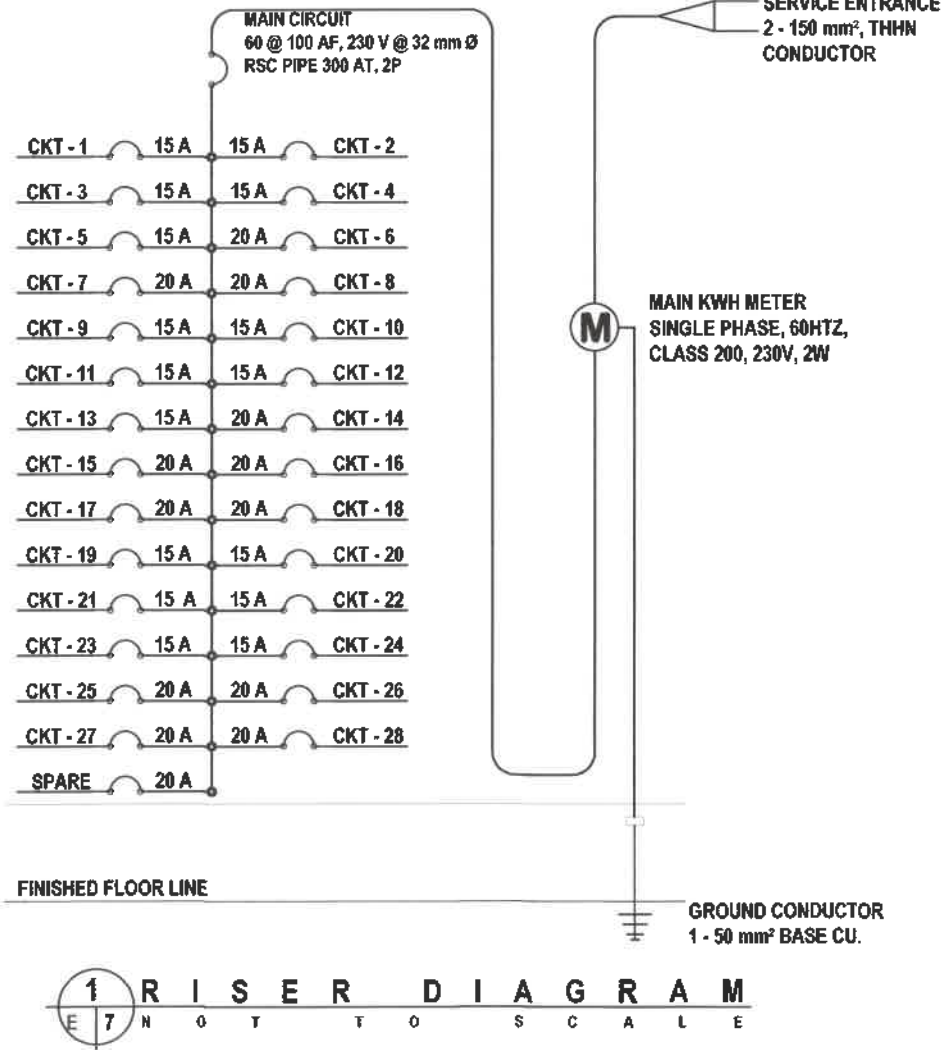
TOTAL CURRENT LOAD
 $I = 34,900 \text{ w}$

WORKING CURRENT
 $I = w/v$
 $= 34,900 \text{ w} / 230 \text{ v}$
 $= 151.74 \text{ amps}$

SAFETY DEMAND FACTOR
 $151.74 \text{ amps} \times 80\% = 121.392 \text{ amps}$

USE: 60 AMPS. MAIN SERVICE EQUIPMENT, 2
POLES, 230 VOLTS

2 - 150mm², THHN FOR SERVICE ENTRANCE
CONDUCTOR



TABULATED LOAD COMPUTATION

	CKT NO.	NO. OF OUTLET	LOAD SCHEDULE	VOLTS	WATTS/ OUTLET	WATTS/ CIRCUIT	V.A.	AMP	SIZES AND NUMBERS	
									CONDUCTORS	CONDUITS
PANEL BOARD 1	1	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	2	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	3	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	4	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	5	8	LIGHTING OUTLET	230	100	800	3.48	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	6	8	CONVENIENCE OUTLET	230	200	1,600	6.96	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	7	8	CONVENIENCE OUTLET	230	200	1,600	6.96	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	8	8	CONVENIENCE OUTLET	230	200	1,600	6.96	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
PANEL BOARD 2	9	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	10	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	11	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	12	8	LIGHTING OUTLET	230	100	800	3.48	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	13	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	14	9	CONVENIENCE OUTLET	230	200	1,800	7.83	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	15	8	CONVENIENCE OUTLET	230	200	1,600	6.96	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	16	10	CONVENIENCE OUTLET	230	200	2,000	8.70	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
PANEL BOARD 3	17	7	CONVENIENCE OUTLET	230	200	1,400	6.09	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	18	8	CONVENIENCE OUTLET	230	200	1,600	6.96	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	19	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	20	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	21	9	LIGHTING OUTLET	230	100	900	3.91	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	22	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	23	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	24	10	LIGHTING OUTLET	230	100	1,000	4.35	15	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
	25	8	CONVENIENCE OUTLET	230	200	1,600	6.96	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	26	7	CONVENIENCE OUTLET	230	200	1,400	6.09	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	27	8	CONVENIENCE OUTLET	230	200	1,600	6.96	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
	28	8	CONVENIENCE OUTLET	230	200	1,600	6.96	20	2-3.5 mm ² THHN	25 mm FLEXIBLE CONDUIT
			SPARE	230	100	-	-	20	2-2.0 mm ² THHN	20 mm FLEXIBLE CONDUIT
									34,900	151.74

1 TABULATED LOAD COMPUTATION

GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORKS AND INSTALLATION SHALL CONFORM WITH THE PROVISIONS OF THE PHILIPPINE ELECTRICAL CODE OF THE NATIONAL AND LOCAL AUTHORITIES CONCERNED IN THE ENFORCEMENT OF ELECTRICAL CODES WITH RULES AND REGULATIONS OF THE UTILITY COMPANIES.
- SERVICE UTILITY TO THE BUILDING SHALL BE 220 VOLTS, 60 HRTZ, SINGLE PHASE THREE WIRE SYSTEM.
- THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF THE CONCRETE TERMINAL POST FOR CONNECTION TO THE POWER SUPPLY AND OR THE TELEPHONE SERVICE.
- ALL INSTALLATIONS SHALL BE CONCEALED FROM VIEW. WIRING SHALL BE ENCASED IN POLYVINYL CHLORINE (PVC) PIPES SCHEDULED 40 FOR POWER SERVICE ENTRANCE CAP WHICH SHALL BE IN RIGID STEEL CONDUIT (RSC) UNLESS OTHERWISE SPECIFIED.
- MINIMUM CONDUIT WIRE SHALL BE NO. 12 AWG AND ½ DIAMETER PIPE RESPECTIVELY, UNLESS OTHERWISE SPECIFIED.
- MINIMUM WIRE AND CONDUIT SHALL BE PROVIDED EVEN IF NOT INDICATED IN THE DRAWINGS TO ACCOMMODATE NO. OF SPLICES OR WIRES.
- FLUORESCENT LAMPS SHALL BE PROVIDED WITH POLYESTER FILLED PRE-HEATED THERMALLY PROTECTED HIGH POWER FACTOR BALLAST.
- ALL MATERIALS TO BE LISTED SHALL BE NEW AND OF APPROVED QUALITY FOR BOTH LOCATION AND INTENDED USE.
- LIGHT CONTROL SWITCHES SHALL BE RATED TO A, 250 VOLTS FOR ROUND SLOTS, 220 VOLTS AND PARALLEL SLOTS FOR SPECIAL PURPOSE OUTLETS SHALL BE RATED 15 AMPERE OR 20 AMPERE AS REQUIRED.
- DUPLEX RECEPTACLES SHALL BE RATED 10 AMPERE, 250 VOLTS (ROUND SLOTS) FOR A LOAD NOT GREATER THAN 5.0 AMPS. LIGHT SWITCHES SHALL BE INSTALLED FOR OPERATION WITH VERTICAL MOTION.
- ELECTRICAL INSTALLATION SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER OR A REGISTERED MASTER ELECTRICIAN.
- ALL CHANGES IN PLANS AND SPECIFICATION SHALL BE DONE, UNLESS OTHERWISE APPROVED BY THE ARCHITECT.

ARCH. HAZELINE N. TIBANGAY, UAP
PRC REG. NO. 028540 - NOV.18, 2024
PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025

ARCHITECT

ENGINEER

DRAFTED BY:
ENSMUNISIN JAN 2025



OWNER/ PROJECT TITLE/ LOCATION
CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS

CONFORME:

RONDA BATA CLAO TULLAY

END-USER- DEAN

RECOMMENDING APPROVAL:

JANET PADAYOS PABLO

SECTOR VICE PRESIDENT

APPROVED:

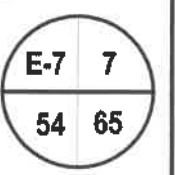
KENNETH ALIP LARUAN

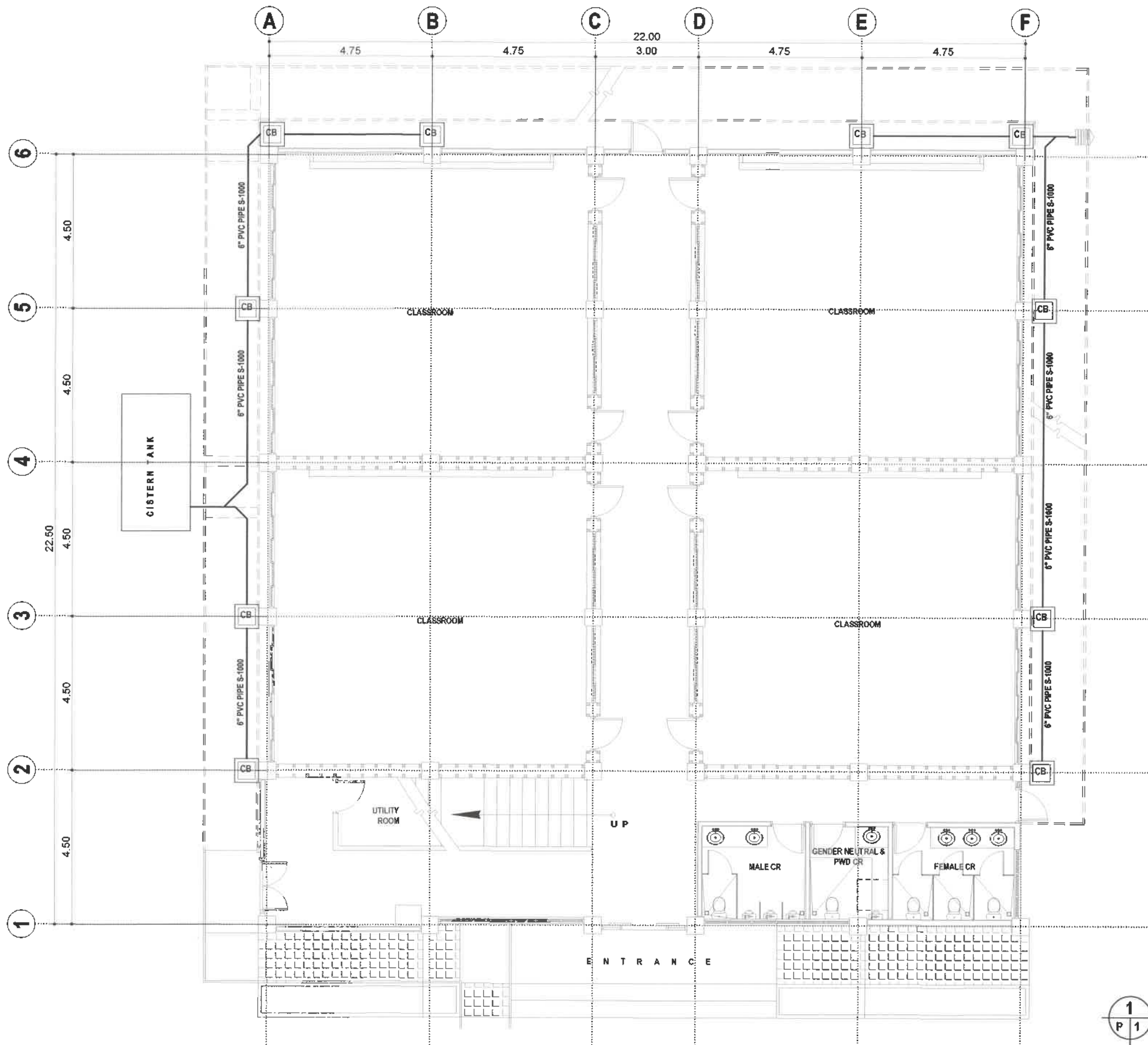
PRESIDENT

SHEET CONTENT:

AS SHOWN





SHEET



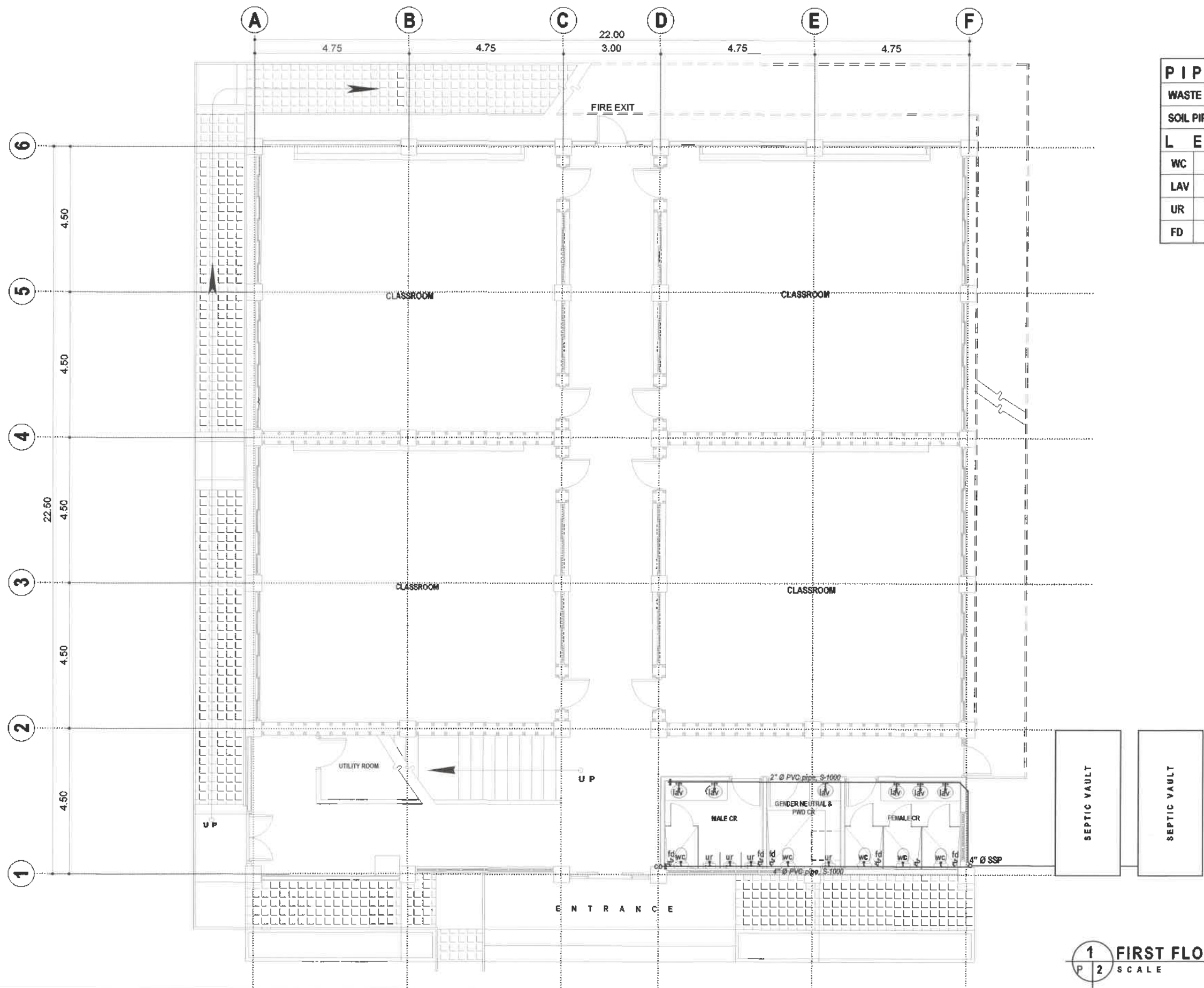


PIPE SCHEDULE		
WASTE PIPE----- 2"Ø PVC PIPE, S- 1000		
SOIL PIPE ----- 4"Ø PVC PIPE, S- 1000		
L E G E N D		
QTY		
5 SETS	WC	WATER CLOSET
6 SETS	LAV	LAVATORY
4 SETS	UR	URINAL
6 SETS	FD	FLOOR DRAIN

1 STORM DRAINAGE LAYOUT
P 1 SCALE 1:125 MTS





ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025	ENGINEER	DRAFTED BY: ENSMUMSIN, JAN 2025		OWNER/ PROJECT TITLE/ LOCATION	CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT: AS SHOWN	SHEET
				CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	 RONDA BATACLAO TULLAY END-USER- DEAN	 JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	 KENNETH ALIP LARUAN PRESIDENT		

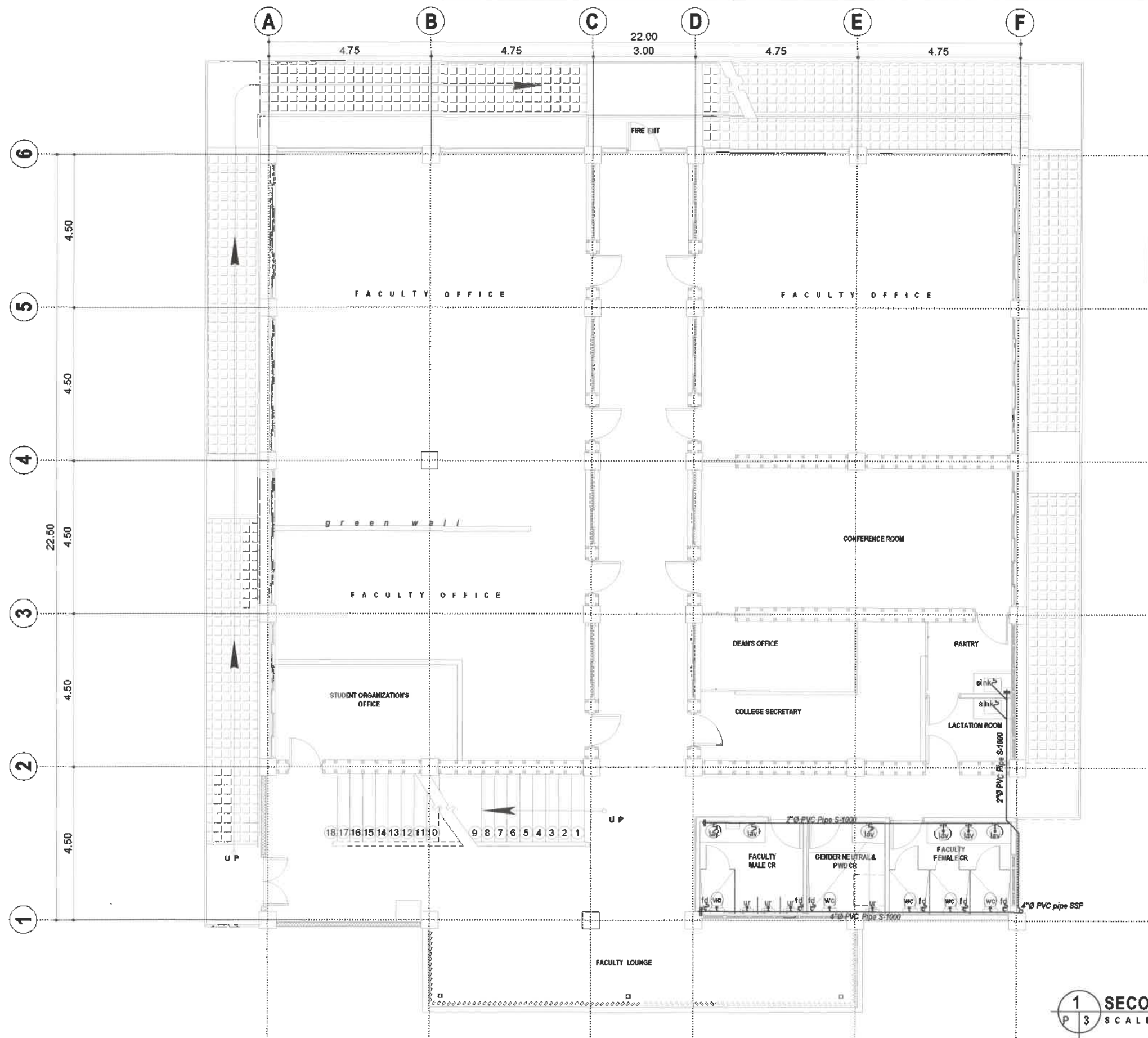
P-1	11
55	65



PIPE SCHEDULE		
WASTE PIPE	2" Ø PVC PIPE, S- 1000	
SOIL PIPE	4" Ø PVC PIPE, S- 1000	
L E G E N D		
		QTY
WC	WATER CLOSET	5 SETS
LAV	LAVATORY	6 SETS
UR	URINAL	4 SETS
FD	FLOOR DRAIN	6 SETS





1 FIRST FLOOR SANITARY LINE LAYOUT
P 2 SCALE 1:125 MTS

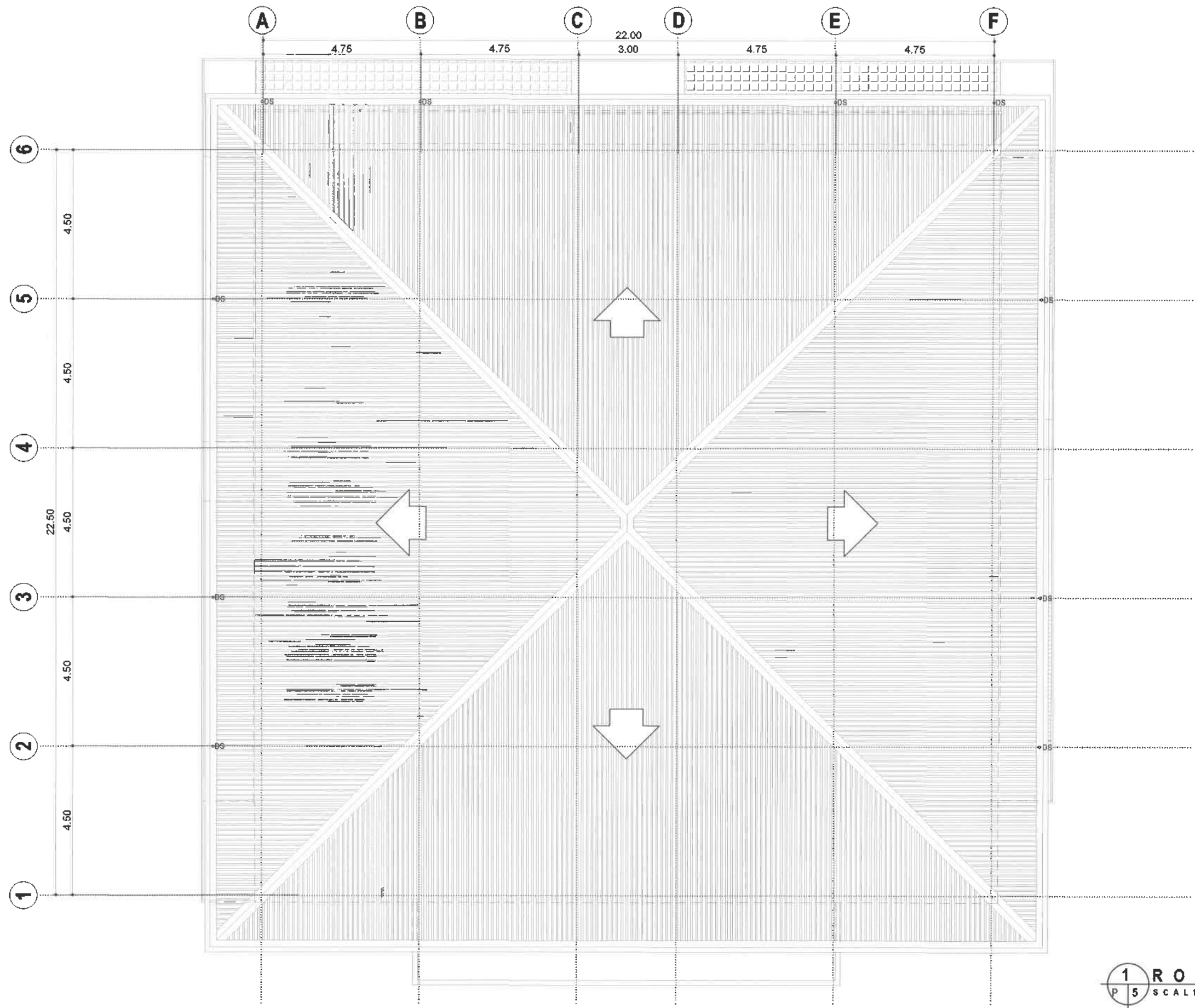
ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025	ENGINEER	DRAFTED BY: ENSMUNISIN, JAN 2025	OWNER/ PROJECT TITLE/ LOCATION  CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT: AS SHOWN	SHEET P-2 11 56 65
				 RONDA BATACLAO TULLAY END-USER- DEAN	 JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	 KENNETH ALIP LARUAN PRESIDENT		







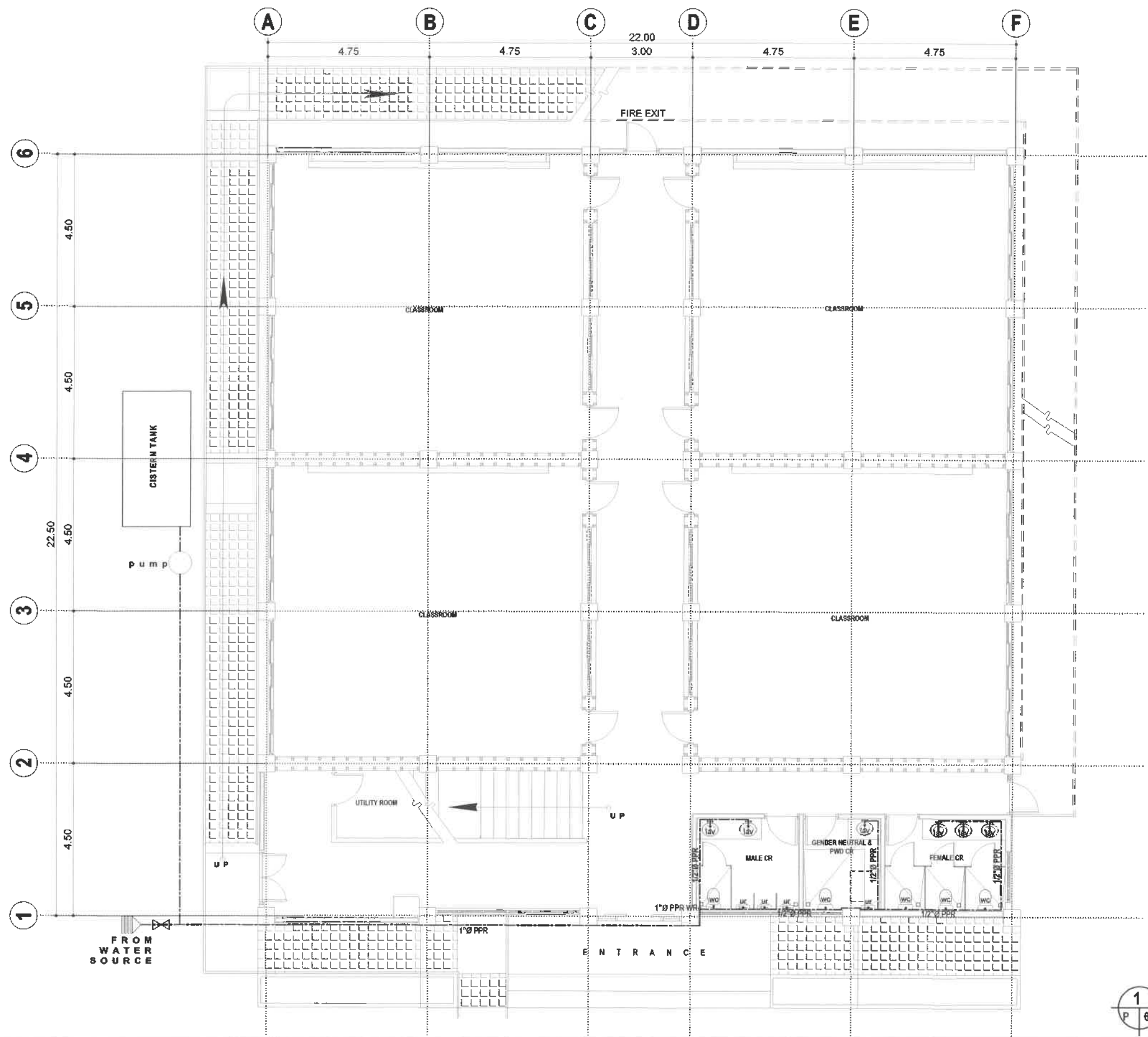
PIPE SCHEDULE		
WASTE PIPE----- 2 "Ø PVC PIPE, S- 1000		
SOIL PIPE -----4 "Ø PVC PIPE, S- 1000		
L E G E N D QTY		
WC	WATER CLOSET	5 SETS
LAV	LAVATORY	6 SETS
UR	URINAL	4 SETS
FD	FLOOR DRAIN	6 SETS
sink	SINK	2 UNITS

1 SECOND FLOOR SANITARY LINE LAYOUT
P 3 SCALE 1 : 125 MTS

ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV.18, 2024 PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025	ENGINEER	DRAFTED BY: EASUMINSIN JAN 2025		OWNER/ PROJECT TITLE/ LOCATION CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	CONFORME:  RONDA BATACLAO TULLAY	RECOMMENDING APPROVAL:  JANET PADAY-OS PABLO	APPROVED:  KENNETH ALIP LARUAN	SHEET CONTENT: AS SHOWN	SHEET <table border="1"><tr><td>P-3</td><td>11</td></tr><tr><td>57</td><td>65</td></tr></table>	P-3	11	57	65
					P-3	11							
57	65												
ARCHITECT			END-USER- DEAN	SECTOR VICE PRESIDENT	PRESIDENT								







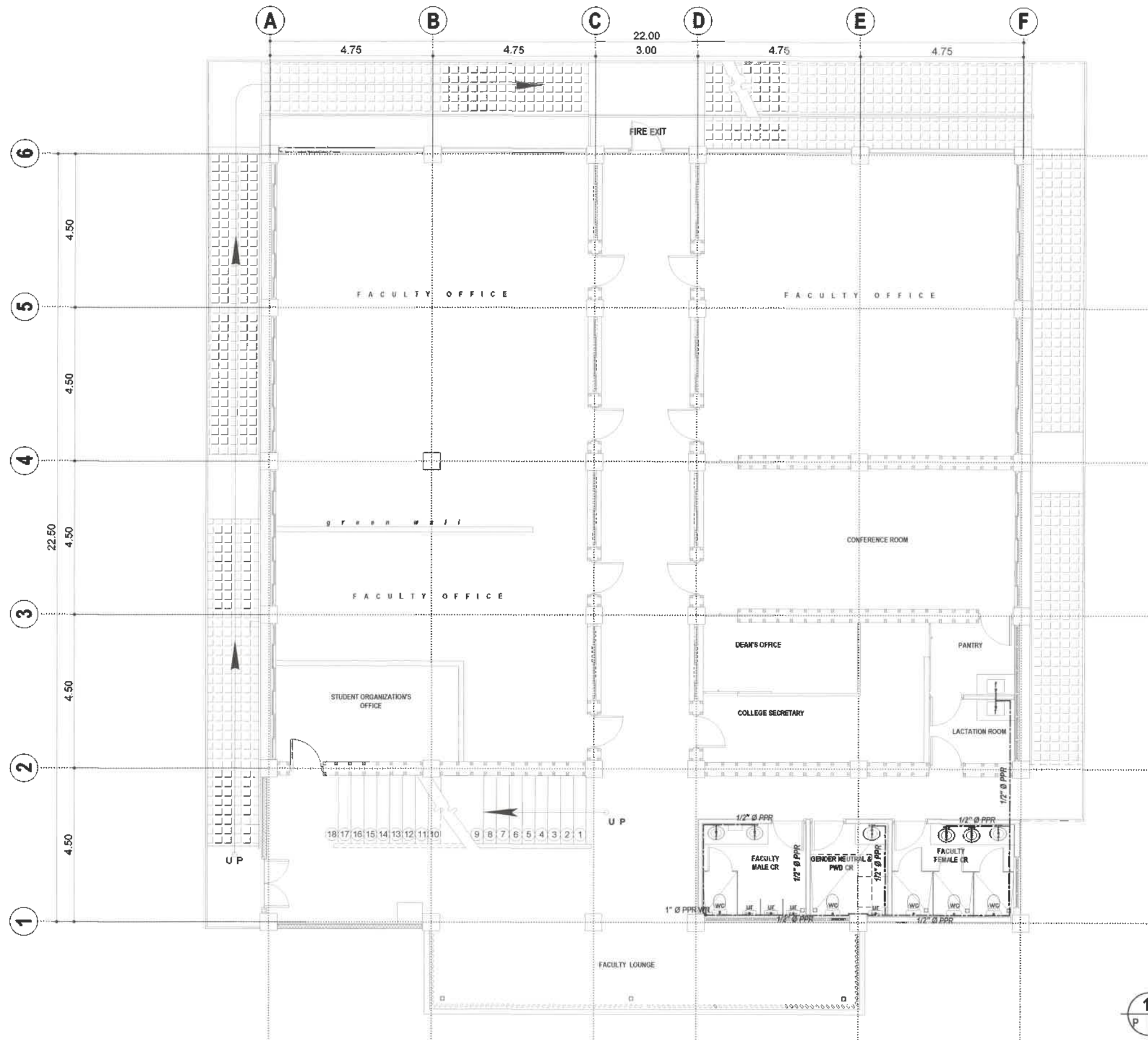
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			<div></div> <div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div></div> <div>RONDA BATACLAO TULLAY</div> <div>END-USER- DEAN</div>	<div></div> <div>JANET PADAY-OS PABLO</div> <div>SECTOR VICE PRESIDENT</div>	<div></div> <div>KENNETH ALIP LARUAN</div> <div>PRESIDENT</div>	AS SHOWN	<div><div>P-511</div><div>5965</div></div>
ARCHITECT	ENGINEER							



PIPE SCHEDULE	
WATER PIPE	1"Ø PPR
FIXTURES	
WATER CLOSET	5 SETS
LAVATORY	6 SETS
URINAL	4 SETS
FLOOR DRAIN	6 PCS





1 FIRST FLOOR WATERLINE LAYOUT
P 6 SCALE 1:125 MTS

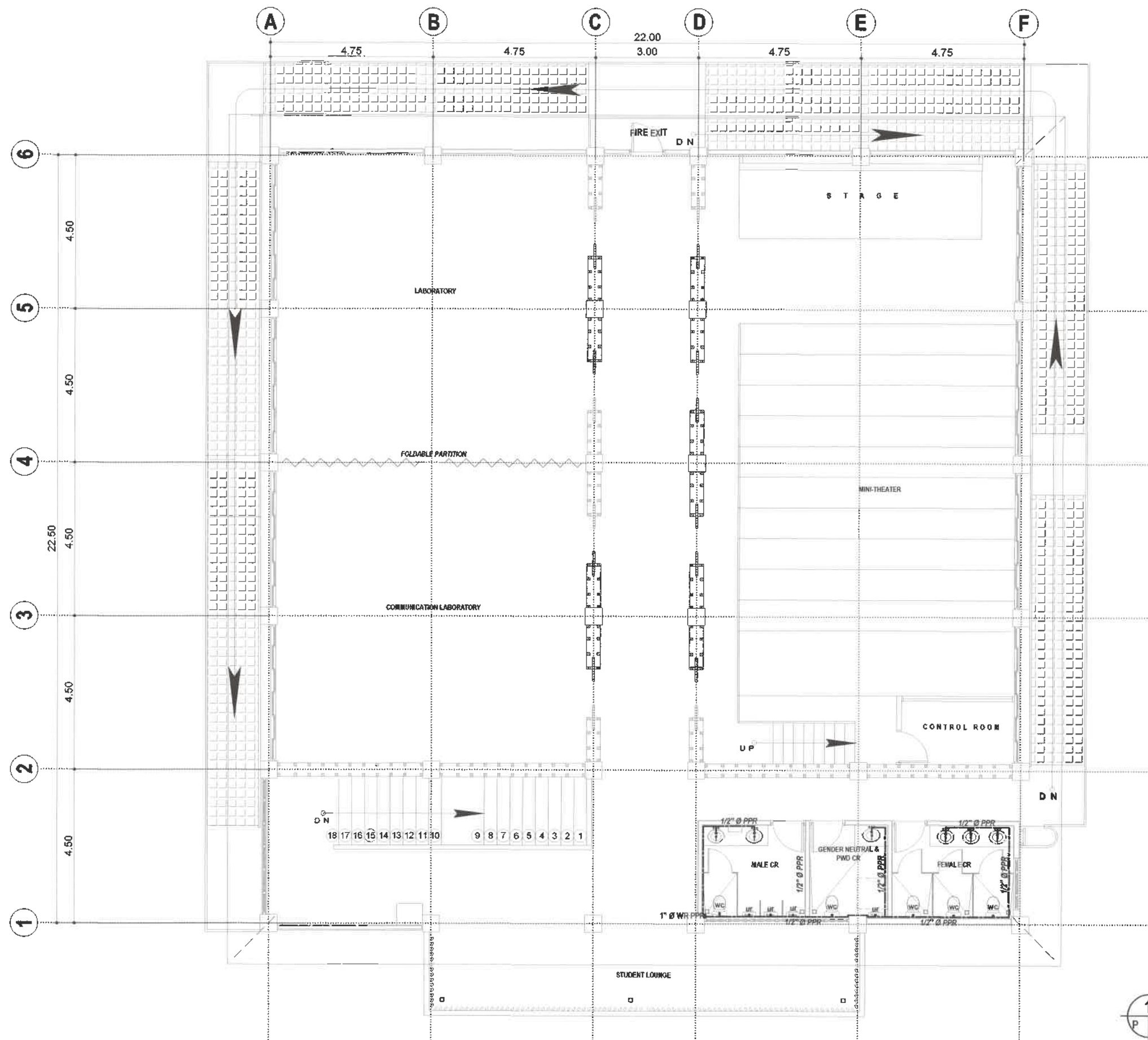
<div>ARCH. HAZELINE N. TIBANGAY, UAP</div> <div>PRC REG. NO. 028540 - NOV.18, 2024</div> <div>PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025</div>		DRAFTED BY: ENG. JUAN SIN JAN. 2025	<div></div> <div>OWNER/ PROJECT TITLE/ LOCATION</div> <div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div>CONFORME:</div> <div></div> <div>RONDA BATACLAO TULLAY</div>	<div>RECOMMENDING APPROVAL:</div> <div></div> <div>JANET PADAY-OS PABLO</div>	<div>APPROVED:</div> <div></div> <div>KENNETH ALIP LARUAN</div>	<div>SHEET CONTENT:</div> <div>AS SHOWN</div>	<div>SHEET</div> <div><div>P-611</div><div>6065</div></div>
				<div>END-USER- DEAN</div>	<div>SECTOR VICE PRESIDENT</div>	<div>PRESIDENT</div>		
ARCHITECT	ENGINEER							



PIPE SCHEDULE	
WATER PIPE	1" Ø PPR
FIXTURES	
WATER CLOSET	5 SETS
LAVATORY	6 SETS
URINAL	4 SETS
SINK	2 SETS
FLOOR DRAIN	6 PCS





1 SECOND FLOOR WATERLINE LAYOUT
P 7 SCALE 1:125 MTS

<div>ARCH. HAZELINE N. TIBANGAY, UAP</div> <div>PRC REG. NO. 028540 - NOV.18, 2024</div> <div>PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025</div>	<div></div>	<div>DRAFTED BY:</div> <div>EMSUMINSIN JAN 2025</div>	<div>OWNER/ PROJECT TITLE/ LOCATION</div> <div></div> <div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div>CONFORME:</div> <div></div> <div>RONDA BATACLAO TULLAY</div>	<div>RECOMMENDING APPROVAL:</div> <div></div> <div>JANET PADOY OS PABLO</div>	<div>APPROVED:</div> <div></div> <div>KENNETH ALIP LARUAN</div>	<div>SHEET CONTENT:</div> <div>AS SHOWN</div>	<div>SHEET</div> <div><table><tr><td>P-7</td><td>11</td></tr><tr><td>61</td><td>65</td></tr></table></div>	P-7	11	61	65
			P-7	11								
61	65											
ARCHITECT	ENGINEER		END-USER- DEAN	SECTOR VICE PRESIDENT	PRESIDENT							

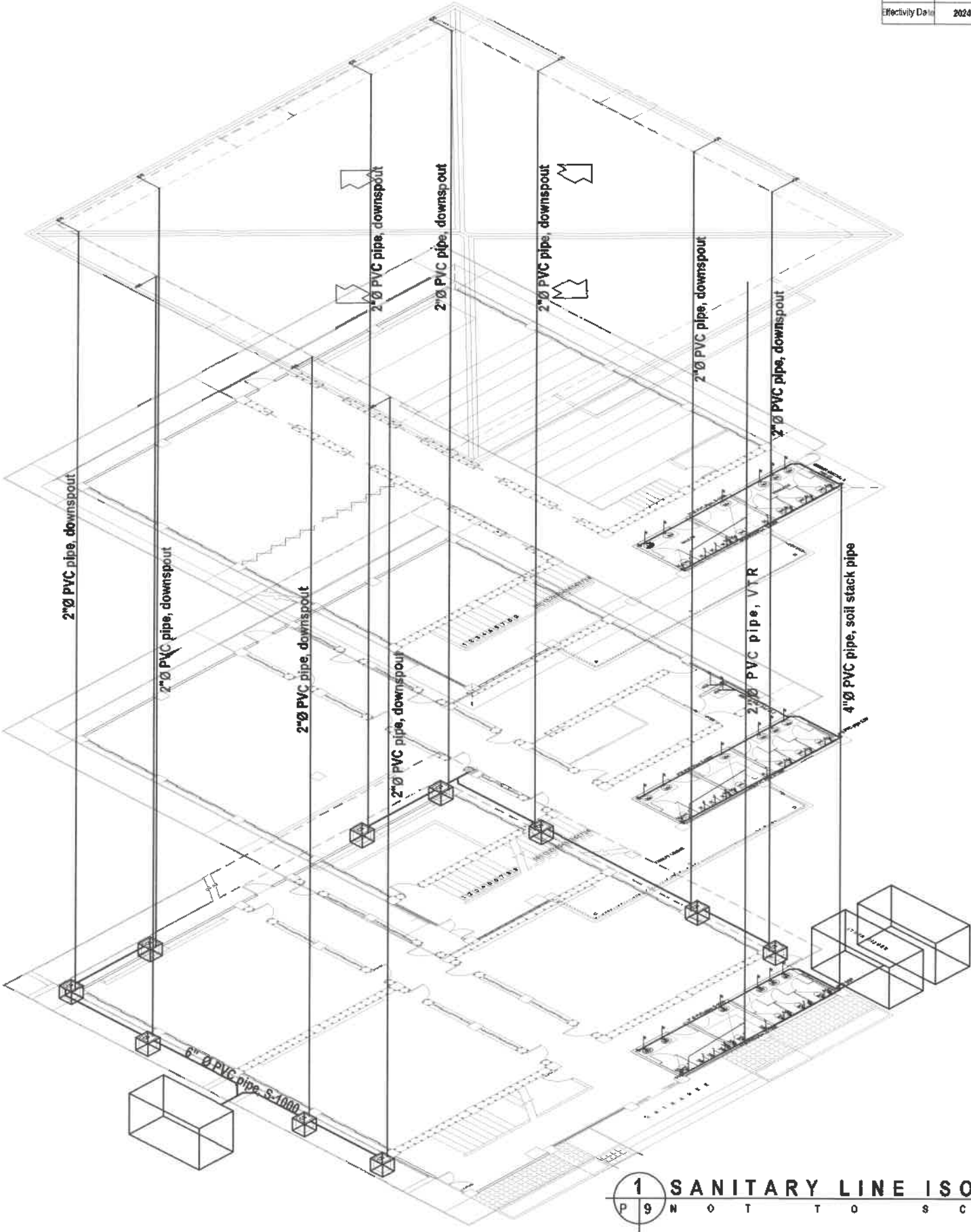


PIPE SCHEDULE	
WATER PIPE	1"Ø PPR
FIXTURES	
WATER CLOSET	5 SETS
LAVATORY	6 SETS
URINAL	4 SETS
FLOOR DRAIN	4 PCS

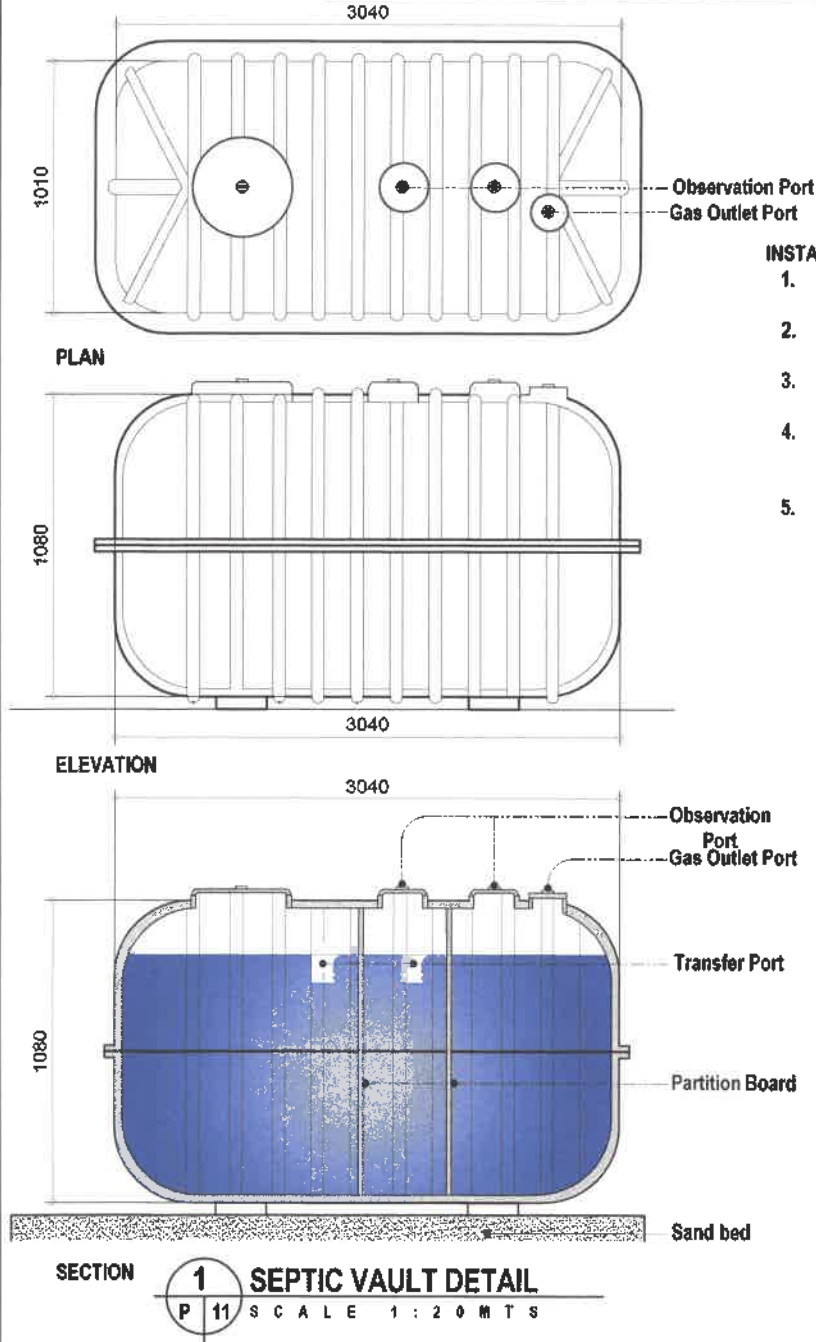
1 THIRD FLOOR WATERLINE LAYOUT
P 8 SCALE 1:125 MTS

<div>ARCH. HAZELINE N. TIBANGAY, UAP</div> <div>PRC REG. NO. 028540 - NOV.18, 2024</div> <div>PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025</div>		DRAFTED BY: ENSMUNSIIN_JAN,2025	<div>OWNER/ PROJECT TITLE/ LOCATION</div> <div></div> <div>CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS</div>	<div>CONFORME:</div> <div></div> <div>RONDA BATACLAO TULLAY</div>	<div>RECOMMENDING APPROVAL:</div> <div></div> <div>JANET PADAY-OS PABLO</div>	<div>APPROVED:</div> <div></div> <div>KENNETH ALIP LARUAN</div>	<div>SHEET CONTENT:</div> <div>AS SHOWN</div>	<div>SHEET</div> <div><table><tr><td>P-8</td><td>11</td></tr><tr><td>62</td><td>65</td></tr></table></div>	P-8	11	62	65
			P-8	11								
62	65											
ARCHITECT	ENGINEER		END-USER- DEAN	SECTOR VICE PRESIDENT	PRESIDENT							

MINIMUM PLUMBING FIXTURES												
	Water Closet		Urinal	Lavatory		TOTAL						
	Male	Female	Male	Male	Female	Male	Female					
Educational Occupancy-private	Male	Female	Male 1 per	Male	Female							
First Floor												
Classroom (85.50 m²)	42.75	42.75										
	42.75	42.75										
	17.1	25.65										
Classroom (85.50 m²)	42.75	42.75										
	42.75	42.75										
	17.1	25.65										
Classroom (85.50 m²)	42.75	42.75										
	42.75	42.75										
	17.1	25.65										
Classroom (85.50 m²)	42.75	42.75										
	42.75	42.75										
	17.1	25.65										
	68.40	102.60										
wc	1.71	3.42								wc	2	4
lav	1.71	3.42							2	4	lav	2
ur	1.95		2			ur	2					
Schools for staff use												
Second Floor	Water Closet		Urinal	Lavatory		TOTAL						
	Male	Female	Male	Male	Female	Male	Female					
	2 :16-35	4: 36-55	0.624	0.78	0.96							
	Office (260.00m²)	182	196									
		78	64									
		31.2	38.4									
		31.2	38.4									
	wc	0.62	1.28					wc	2	2		
	lav	0.78	0.96					1	2	lav	1	1
	ur	0.31	1							ur	1	
	Third Floor											
	Laboratory Room (171.00m²)	85.5	85.5									
85.5		85.5										
34.2		51.3										
Mini Theater (171 m²)	85.5	85.5										
	85.5	85.5										
	34.2	51.3										
	68.4	102.6										
wc	1.37	3.42			wc	2	4					
lav	1.71	2.57		2	3	lav	2					3
ur	0.68	1			ur	1						
FIRST TO THIRD FLOOR												
	Male CR	Female CR										
Water Closets	6	10										
Urinal	4											
Lavatory	5	8										



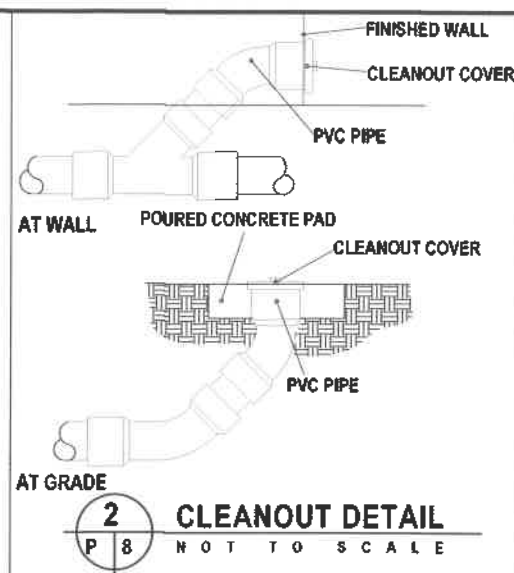
QUANTITY OF SEWAGE FLOW			
Type of Establishment		Gallons per person per day	
Day Schools without cafeterias, gym or showers		15	
Formula			
$V = 1.125 + 0.75 Q$			
Where: V= Liquid volume of the tank in gallons			
Q= The daily sewage flow in gallons			
1.125 and 0.75 is constant in value			
Assume 390 persons to be served			
390 x 15 gallons			
5,850 gallons			
$V = 1.125 + (0.75 \times 5,850 \text{ gallons})$			
$V = 4,388.625 \text{ gallons}$			
There are 264 gallons in one cubic meter volume. Divide			
		4,388.63	16.62 Cu.m. capacity of the tank
		264	
To find the dimension of the tank if maximum depth is 1.50m and the width is assumed to be 2.00m			
L	16.62	4.4	
	2.5 x 1.5		
Size of the Septic Tank		2.50 m x 4.40m x 1.50 m	
* SOURCE: Plumbing Design and Estimate Second Edition by Max Fajardo Jr.			
Manual of Septic Tank Practice, Public Health Service Publication 526			



MODEL	SIZE (mm)	THICKNESS	VOLUME
STAH 2500	3040mm x 1010mm x 1080mm	5mm	3.32m³

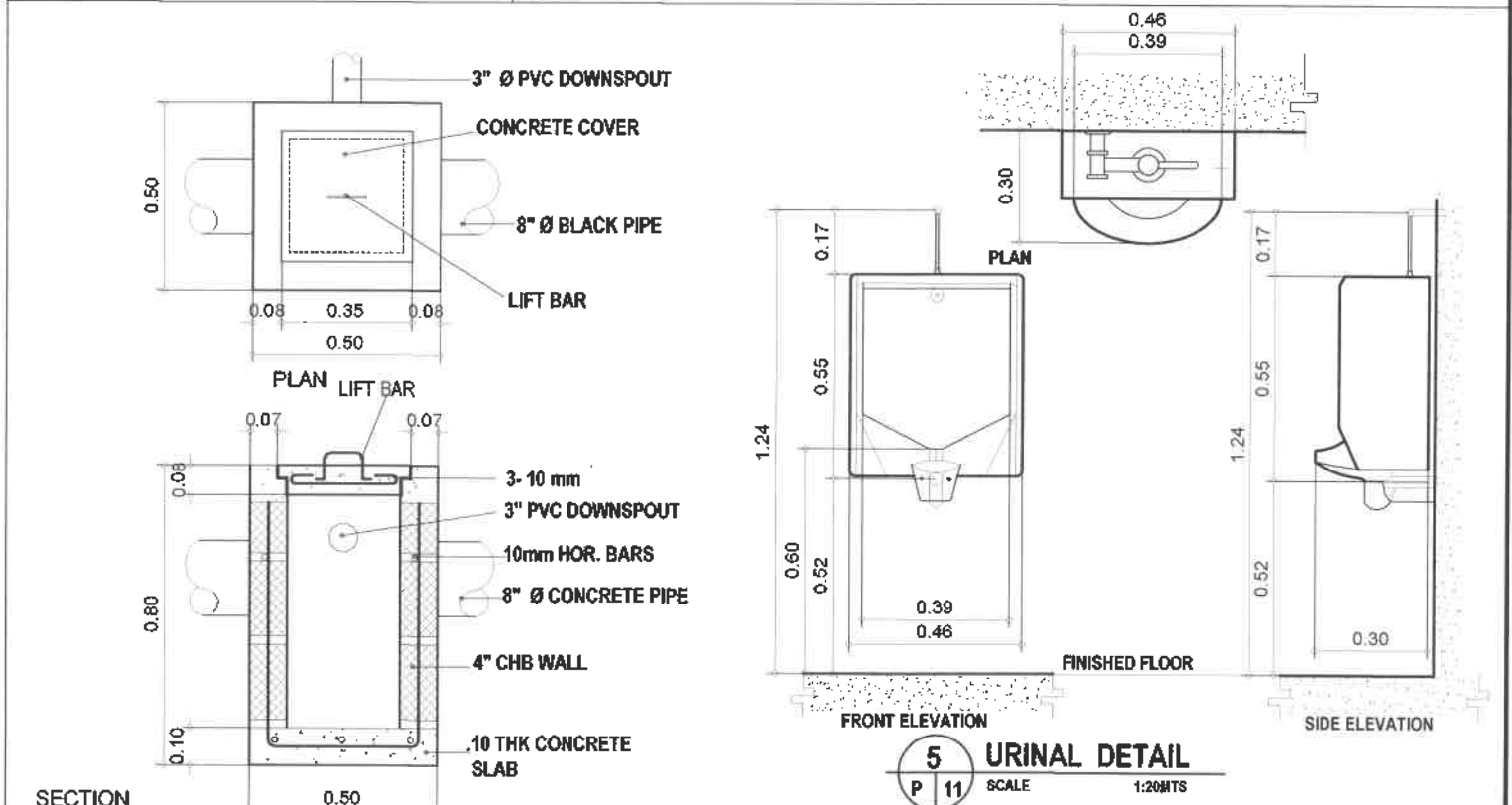
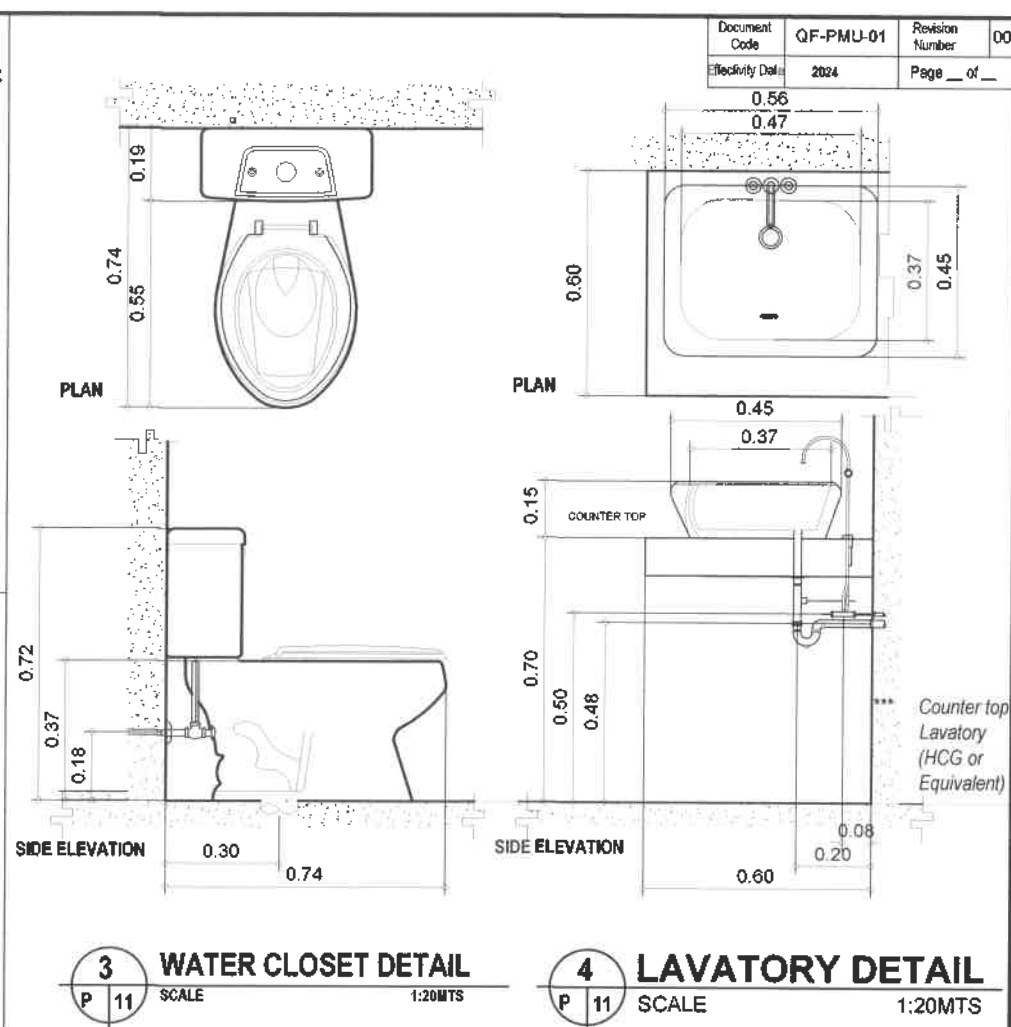
INSTALLATION INSTRUCTION:





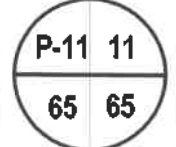
1. Dig the pit at least 6-12 inches wider than the septic vault on all sides. The top of the septic vault should be 12-24 inches below the finished level.
2. Place 6-8 inches of sand at the bottom of the pit. Pack it down using a compactor or similar instrument, making sure that it is level.
3. Slowly lower the septic on top of the compacted sand bed. Check again for level and adjust if necessary.
4. Mix together sand, gravel and soil. Fill up the septic vault with water while pouring the sand, gravel and soil mixture around the space of the septic vault. This should be done at the same time or alternately every meter.
5. Finish with top-soil or cement. Remember to provide access to the top view port, clean-out port and the air vent.



LEGEND

WC	WATER CLOSET
LAV	LAVATORY
FD	FLOOR DRAIN
UR	URINAL
CO	CLEANOUT
VTR	VENT THRU ROOF
VS	VENT SYSTEM
SS	SOIL STACK
SD	SHOWER DRAIN
PVC	POLYVINYL CHLORIDE
G.I.	GALVANIZED IRON
KS	KITCHEN SINK
CP	CONCRETE PIPE
CB	CONCRETE CATCH BASIN
DS	DOWNSPOUT
LS	LAUNDRY SINK



ARCH. HAZELINE N. TIBANGAY, UAP PRC REG. NO. 028540 - NOV. 18, 2024 PTR NO. 9256412- LA TRINIDAD - JANUARY 31, 2025		DRAWN BY: ENRIMUNSKIN JAN 2025	OWNER/ PROJECT TITLE/ LOCATION	CONFORME:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENT:	SHEET
ARCHITECT	ENGINEER		 CONSTRUCTION OF THE COLLEGE OF ARTS AND HUMANITIES BUILDING-PHASE I BSU - LA TRINIDAD CAMPUS	 RONDA BATACLAO TULLAY END-USER- DEAN	 JANET PADAY-OS PABLO SECTOR VICE PRESIDENT	 KENNETH ALIP LARUAN PRESIDENT	AS SHOWN	

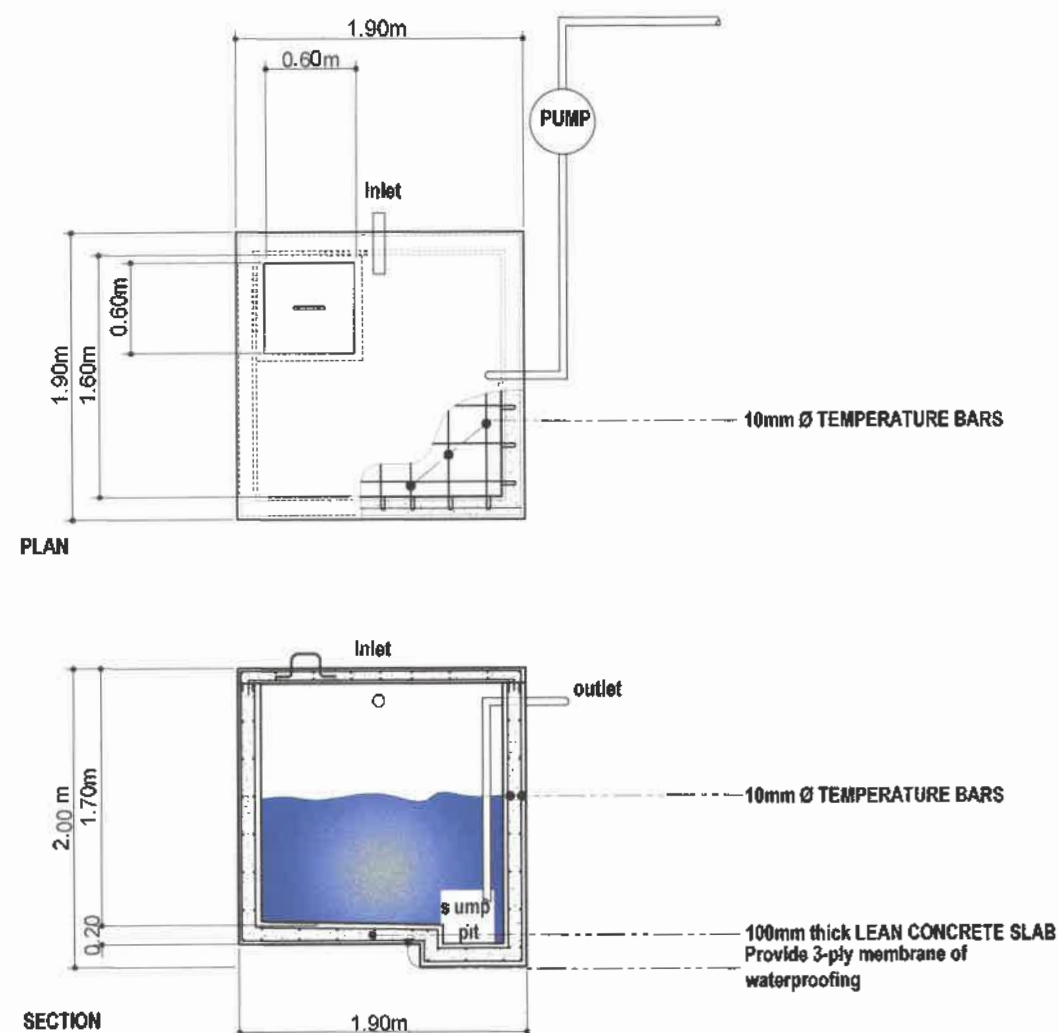
GENERAL PLUMBING NOTES

1. ALL WORKS SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL PLUMBING CODE LOCAL CODE REQUIREMENTS AND SUBDIVISION REGULATIONS.
2. THE PLUMBING LAYOUT IS ONLY DIAGRAMATIC, PIPES, CLEANOUTS, AND CHECK VALVES SHALL BE CONCEALED AS MUCH AS POSSIBLE
3. MINIMUM SLOPE FOR SEWER SHALL BE 2 PERCENT AND DRAIN LINES AT ONE PERCENT
4. ALL FLOOR DRAINS SHALL BE VENTED INDIVIDUALLY
5. ALL PVC PIPES SHALL BE OF APPROVED QUALITY AND G.I. PIPES FOR WATER DISTRIBUTION LINES SHALL BE SCHEDULE 40 OF U.S. STANDARD WEIGHT
6. PROVIDE VENT PIPES AND VENT STACK THRU ROOF OF PVC APPROVED QUALITY AS REQUIRED.
7. ALL INDIVIDUAL BRANCHES TO FIXTURES OR GROUP OF FIXTURES AND OR EQUIPMENT SHALL BE PROVIDED WITH AIR CHAMBER OF CAPPED VERTICAL PIPE EXTENSIONS OF DIMENSIONS AS SHOWN:

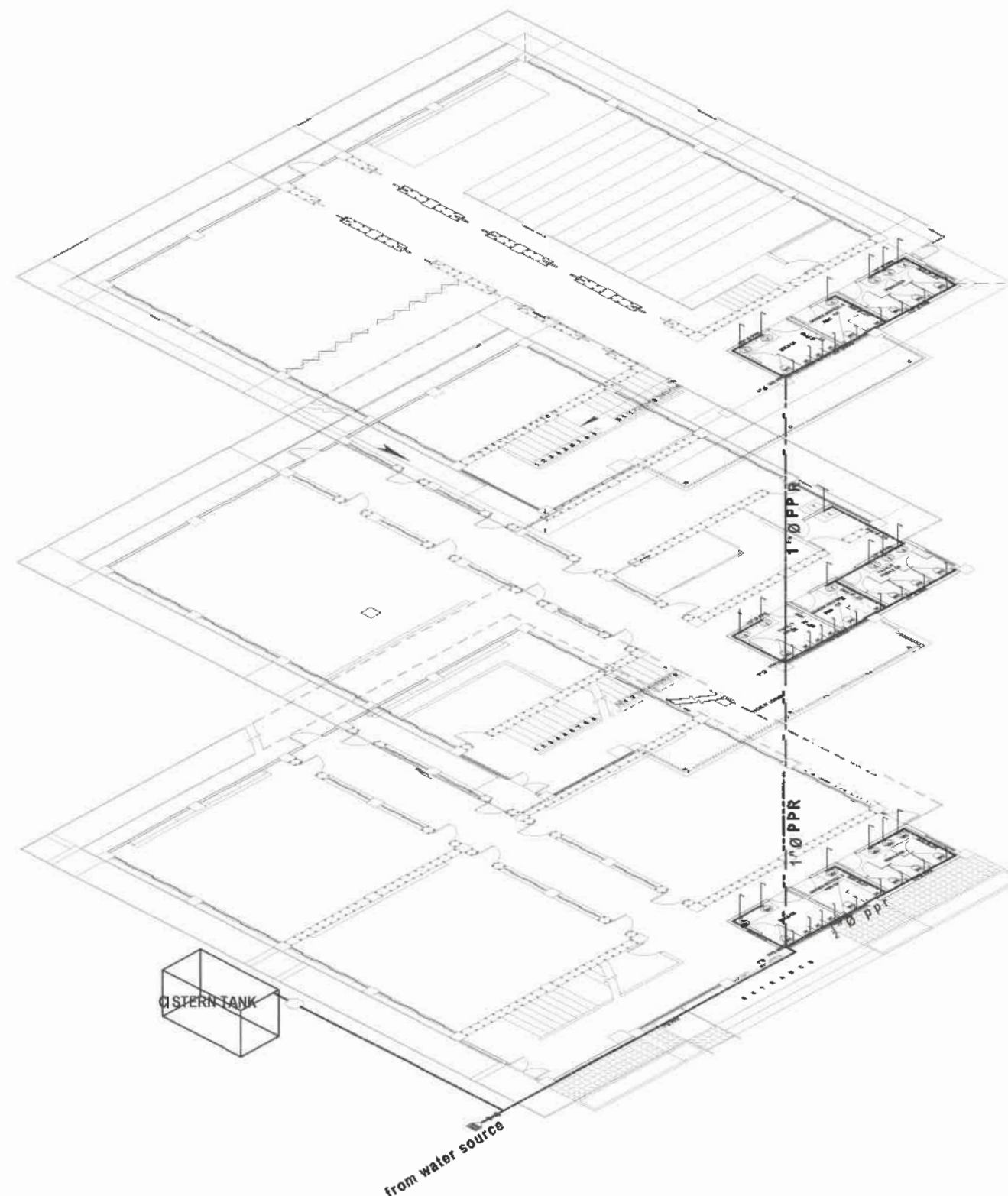
0.45 M. FOR $\frac{1}{4}$ " Ø
0.50 M. FOR $\frac{1}{2}$ " Ø



8. ALL PLUMBING SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED SANITARY ENGINEER OR A MASTER PLUMBER



1 CISTERN TANK DETAIL
P 10 SCALE 1:50 MTS



1 WATERLINE ISOMETRY
P 10 NOT TO SCALE

ARCH. HAZELINE N. TIBANGAY, UAP
PRC REG. NO. 028540 - NOV.18, 2024
PTR NO.9256412- LA TRINIDAD -JANUARY 31,2025

ARCHITECT

ENGINEER

DRAFTED BY:
EMSUMINSIN JAN.2025



OWNER/ PROJECT TITLE/ LOCATION
**CONSTRUCTION OF THE
COLLEGE OF ARTS AND
HUMANITIES BUILDING-PHASE I
BSU - LA TRINIDAD CAMPUS**

CONFORME:

RONDA BATAO LAO TULLAY

END-USER- DEAN

RECOMMENDING APPROVAL:

JAN ET PA DAY-OS PABLO

SECTOR VICE PRESIDENT

APPROVED:

KENNE THALIP LARUAN

PRESIDENT

SHEET CONTENT:

AS SHOWN

SHEET

P-10 11
64 65