

PHILIPPINE BIDDING DOCUMENTS

Procurement of Repair, Rehabilitation, and Maintenance of National Educators Academy of the Philippines (NEAP) Facility (Region IV-A CALABARZON)

**DEPARTMENT OF EDUCATION
REGION IV-A CALABARZON**
Government of the Republic of the Philippines

Project Identification Number: ROIVA-24-06

**Sixth Edition
July 2020**

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 contract, 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.

TABLE OF CONTENTS

Glossary of Terms, Abbreviations, and Acronyms	5
Section I. Invitation to Bid.....	8
Section II. Instructions to Bidders	11
1. Scope of Bid	12
2. Funding Information	12
3. Bidding Requirements.....	12
4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices	13
5. Eligible Bidders	13
6. Origin of Associated Goods	13
7. Subcontracts	13
8. Pre-Bid Conference.....	13
9. Clarification and Amendment of Bidding Documents	14
10. Documents Comprising the Bid: Eligibility and Technical Components	14
11. Documents Comprising the Bid: Financial Component	14
12. Alternative Bids	15
13. Bid Prices	15
14. Bid and Payment Currencies	15
15. Bid Security	15
16. Sealing and Marking of Bids.....	15
17. Deadline for Submission of Bids	16
18. Opening and Preliminary Examination of Bids.....	16
19. Detailed Evaluation and Comparison of Bids	16
20. Post Qualification	16
21. Signing of the Contract	16
Section III. Bid Data Sheet	17
Section IV. General Conditions of Contract.....	22
1. Scope of Contract.....	23
2. Sectional Completion of Works	23
3. Possession of Site.....	23
4. The Contractor's Obligations	23
5. Performance Security	24
6. Site Investigation Reports	24

7.	Warranty.....	24
8.	Liability of the Contractor.....	24
9.	Termination for Other Causes	24
10.	Dayworks.....	25
11.	Program of Work	25
12.	Instructions, Inspections and Audits	25
13.	Advance Payment	25
14.	Progress Payments	25
15.	Operating and Maintenance Manuals	26
Section V. Special Conditions of Contract.....		27
Section VI. Specifications		29
Section VII. Drawings.....		31
Section VIII. Bill of Quantities		32
Section IX. Checklist of Technical and Financial Documents		34

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



Republic of the Philippines
Department of Education
REGION IV-A CALABARZON

INVITATION TO BID
(ROIVA-24-06)

1. The **DEPARTMENT OF EDUCATION REGION IV-A CALABARZON**, through its Bids and Awards Committee (BAC), is inviting interested parties to bid the hereunder project:

Name of Project : **REPAIR, REHABILITATION, AND MAINTENANCE OF NATIONAL EDUCATORS ACADEMY OF THE PHILIPPINES (NEAP) FACILITY (REGION IV-A CALABARZON)**

Location : **P. Montecer St., Malvar, Batangas**

Completion of Works : One Hundred Thirty-Five (135) calendar days

2. The **Department of Education Region IV-A CALABARZON**, through the **NEAP FUNDS** intends to apply the sum of **TWENTY MILLION NINE HUNDRED SIXTY-SIX THOUSAND THREE HUNDRED FORTY-TWO PESOS AND 81/100 (Php20,966,342.81)**, being the Approved Budget for the Contract (ABC) to payments under the contract for Repair, Rehabilitation, and Maintenance of National Educators Academy of the Philippines (NEAP) Facility (Region IV-A CALABARZON) with Project Identification Number ROIVA-24-06. Bids received in excess of the ABC shall be automatically rejected at bid opening.
3. The **Department of Education Region IV-A CALABARZON** now invites bids for the above Procurement Project. Completion of the Works is required within **135 calendar days**. 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).
4. 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.
5. Interested bidders may obtain further information from **Department of Education Region IV-A CALABARZON, BAC Secretariat** and inspect the Bidding Documents at the address given below from **8:00am to 5:00pm**.
6. A complete set of Bidding Documents may be acquired by interested bidders on **August 8, 2024 to August 30, 2024** from given address and its website, and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **Twenty-Five Thousand Pesos (Php25,000.00)**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person.

7. The **Department of Education Region IV-A CALABARZON** will hold a Pre-Bid Conference¹ on **August 16, 2024 at 10:00 in the morning at DepEd Region IV-A CALABARZON, Gate 2 Karangalan Village, Cainta, Rizal**, which shall be open to prospective bidders.
8. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated on or before **August 30, 2024 at 8:45 in the morning**. Late bids shall not be accepted.
9. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.
10. Bid opening shall be on **August 30, 2024 at 9:00 in the morning at DepEd Region IV-A CALABARZON, Gate 2 Karangalan Village, Cainta, Rizal**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
11. The **Department of Education Region IV-A CALABARZON** 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.
12. For further information, please refer to:

JOCELYN L. MARTIN

BAC, Secretariat

DepEd Region IV-A Calabarzon, Gate 2 Karangalan Drive, Cainta, Rizal

Email add: **bac.calabarzon@deped.gov.ph**

Cel. No. 09175361866

13. You may visit the following websites:

For downloading of Bidding Documents: **<https://depedcalabarzon.ph/bid-documents>**
OR go to depedcalabarzon.ph, on the menu, go to **Transparency > Bid Documents**

August 1, 2024

(sgd) LOIDA N. NIDEA
BAC Chairperson

¹ May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a pre-bid conference.

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, **DEPED REGION IV-A CALABARZON** invites Bids for the procurement of **REPAIR, REHABILITATION, AND MAINTENANCE OF NATIONAL EDUCATORS ACADEMY OF THE PHILIPPINES (NEAP) FACILITY (REGION IV-A CALABARZON)**, with Project Identification Number **ROIVA-24-06**.

The Procurement Project (referred to herein as “Project”) is composed of ONE (1) LOT, the details of which are described in Section I (Invitation to Bid), Section VI (Schedule of Requirements), and Section VII (Technical Specifications).

2. Funding Information

2.1. The GOP through the *Income Generated from the National Educators Academy of the Philippines (NEAP) of the DepEd Regional Office IV-A CALABARZON* and *Sub-ARO (OSEC-4A-24-1806)* in the total amount of **TWENTY MILLION NINE HUNDRED SIXTY-SIX THOUSAND THREE HUNDRED FORTY-TWO PESOS AND 81/100 (Php20,966,342.81)**.

2.2. The source of funding are: *Income Generated from the National Educators Academy of the Philippines (NEAP) of the DepEd Regional Office IV-A CALABARZON* and *Sub-ARO (OSEC-4A-24-1806)*.

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

- a. **Subcontracting is not allowed.**

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address **DepEd Region IV-A CALABARZON, Gate 2 Karangalan Village, Cainta, Rizal** as indicated in paragraph 7 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:*

- a. 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 **120 calendar days**. 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 copy of the first and second components of its Bid.

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.

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 8 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 10 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

Bid Data Sheet

ITB Clause																								
5.2	<p>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be Repair, Rehabilitation and Maintenance of Vertical Infrastructure Projects with Upgrading/Installation of Electrical System.</p> <p>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.</p>																							
7.1	Subcontracting is not allowed.																							
10.3	<p>A valid PCAB License with registration particulars SP-EE (Electrical Works) and Allowable Range for the Cost of Contract (ARCC) is required, and in case of joint ventures, a valid special PCAB License, 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.</p>																							
10.4	<p>The key personnel must meet the required minimum years of experience set below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Key Staff</th> <th style="text-align: center;">Educational Qualification</th> <th style="text-align: center;">Experience</th> <th style="text-align: center;">Training</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Electrical Engineer (Professional and Registered)</td> <td style="text-align: center;">Bachelor's Degree in Electrical Engineering</td> <td style="text-align: center;">At least ten (10) years' experience as a Registered Electrical Engineer and two (2) years' experience as Professional Electrical Engineer in the construction/ design engineering</td> <td style="text-align: center;">24 hours of relevant training</td> </tr> <tr> <td style="text-align: center;">Civil Engineer/ Architect (Registered)</td> <td style="text-align: center;">Bachelor's Degree in Architecture or Civil Engineering</td> <td style="text-align: center;">At least five (5) years' experience as Site Engineer/ Architect in the Construction industry</td> <td style="text-align: center;">24 hours of relevant training</td> </tr> <tr> <td style="text-align: center;">General Foreman</td> <td style="text-align: center;">At least High School Graduate</td> <td style="text-align: center;">At least five (5) years' experience as General Foreman in the construction industry</td> <td style="text-align: center;">16 hours of relevant training</td> </tr> <tr> <td style="text-align: center;">Safety Officer</td> <td style="text-align: center;">At least High School Graduate</td> <td style="text-align: center;">At least five (5) years' experience as Safety Officer</td> <td style="text-align: center;">Valid Construction</td> </tr> </tbody> </table>				Key Staff	Educational Qualification	Experience	Training	Electrical Engineer (Professional and Registered)	Bachelor's Degree in Electrical Engineering	At least ten (10) years' experience as a Registered Electrical Engineer and two (2) years' experience as Professional Electrical Engineer in the construction/ design engineering	24 hours of relevant training	Civil Engineer/ Architect (Registered)	Bachelor's Degree in Architecture or Civil Engineering	At least five (5) years' experience as Site Engineer/ Architect in the Construction industry	24 hours of relevant training	General Foreman	At least High School Graduate	At least five (5) years' experience as General Foreman in the construction industry	16 hours of relevant training	Safety Officer	At least High School Graduate	At least five (5) years' experience as Safety Officer	Valid Construction
Key Staff	Educational Qualification	Experience	Training																					
Electrical Engineer (Professional and Registered)	Bachelor's Degree in Electrical Engineering	At least ten (10) years' experience as a Registered Electrical Engineer and two (2) years' experience as Professional Electrical Engineer in the construction/ design engineering	24 hours of relevant training																					
Civil Engineer/ Architect (Registered)	Bachelor's Degree in Architecture or Civil Engineering	At least five (5) years' experience as Site Engineer/ Architect in the Construction industry	24 hours of relevant training																					
General Foreman	At least High School Graduate	At least five (5) years' experience as General Foreman in the construction industry	16 hours of relevant training																					
Safety Officer	At least High School Graduate	At least five (5) years' experience as Safety Officer	Valid Construction																					

		in the construction industry	and Occupational Safety and health (COSH) Certificate of Training issued by Department of Labor and Employment (DOLE)
--	--	------------------------------	---

Construction Key Personnel:

- One (1) Registered Civil Engineer/ Architect, One (1) Professional Electrical Engineer, One (1) General Foreman, One (1) Safety Officer

Non-Key Staff	Educational Qualification	Experience	Training
Master Electrician (Registered)	At least High School Graduate	At least five (5) years' experience as Master Electrician the construction industry	8 hours of relevant training
Master Plumber (Registered)	At least High School Graduate	At least five (5) years' experience as Master Plumber the construction industry	8 hours of relevant training
Welder	At least High School Graduate	At least one (1) year year experience	8 hours of relevant training
Scaffolder	At least High School Graduate	At least one (1) year year experience	8 hours of relevant training
Others (i.e. Mason, Carpenter, Painter, Steelman)	None required	At least one (1) year year experience	None required

Non-key Personnel:

- One (1) Registered Master Electrician, One (1) Registered Master Plumber, Welder, Mason, Carpenter, Painter, Scaffolder, Plumber, Steelman

10.5	<p>The minimum major equipment requirements are the following:</p> <table border="1" data-bbox="384 255 1401 943"> <thead> <tr> <th data-bbox="384 255 692 320">Equipment</th> <th data-bbox="692 255 1102 320">Capacity</th> <th data-bbox="1102 255 1401 320">Number of Units</th> </tr> </thead> <tbody> <tr> <td data-bbox="384 320 692 385">One-Bagger Mixer</td> <td data-bbox="692 320 1102 385">350 Liters with Gas Engine</td> <td data-bbox="1102 320 1401 385">1</td> </tr> <tr> <td data-bbox="384 385 692 450">Welding Machine</td> <td data-bbox="692 385 1102 450">300 Amps</td> <td data-bbox="1102 385 1401 450">2</td> </tr> <tr> <td data-bbox="384 450 692 546">Bar Cutter</td> <td data-bbox="692 450 1102 546">up to 16mm Diameter Steel Bar</td> <td data-bbox="1102 450 1401 546">1</td> </tr> <tr> <td data-bbox="384 546 692 611">Pipe threader</td> <td data-bbox="692 546 1102 611">1/4" - 2"</td> <td data-bbox="1102 546 1401 611">1</td> </tr> <tr> <td data-bbox="384 611 692 676">PPR Fusion Weld</td> <td data-bbox="692 611 1102 676">1/2" - 2-1/2"</td> <td data-bbox="1102 611 1401 676">1</td> </tr> <tr> <td data-bbox="384 676 692 808">Hydraulic Pressure Test Pump</td> <td data-bbox="692 676 1102 808">Tank Capacity: 4.5 Liters Maximum Pressure: 300 psi / 5.0 (50) Mpa (kg/cm²)</td> <td data-bbox="1102 676 1401 808">1</td> </tr> <tr> <td data-bbox="384 808 692 943">Jack Hammer</td> <td data-bbox="692 808 1102 943">Power: 1,240 Watts Full-load Impact Rate: 1,400/min.</td> <td data-bbox="1102 808 1401 943">2</td> </tr> </tbody> </table> <p>NOTES:</p> <ul style="list-style-type: none"> • Tools, machine and equipment must be in good conditions. • Machine and equipment should be supported by proof of ownership: <ol style="list-style-type: none"> 1. Proof of Ownership 2. Lease of Agreement between lessor and lessee and Proof of Ownership of the Lessor. 3. Purchase Agreement between the Bidder and the owner. Certification of availability of equipment from the vendor for the duration of the project. 	Equipment	Capacity	Number of Units	One-Bagger Mixer	350 Liters with Gas Engine	1	Welding Machine	300 Amps	2	Bar Cutter	up to 16mm Diameter Steel Bar	1	Pipe threader	1/4" - 2"	1	PPR Fusion Weld	1/2" - 2-1/2"	1	Hydraulic Pressure Test Pump	Tank Capacity: 4.5 Liters Maximum Pressure: 300 psi / 5.0 (50) Mpa (kg/cm ²)	1	Jack Hammer	Power: 1,240 Watts Full-load Impact Rate: 1,400/min.	2
Equipment	Capacity	Number of Units																							
One-Bagger Mixer	350 Liters with Gas Engine	1																							
Welding Machine	300 Amps	2																							
Bar Cutter	up to 16mm Diameter Steel Bar	1																							
Pipe threader	1/4" - 2"	1																							
PPR Fusion Weld	1/2" - 2-1/2"	1																							
Hydraulic Pressure Test Pump	Tank Capacity: 4.5 Liters Maximum Pressure: 300 psi / 5.0 (50) Mpa (kg/cm ²)	1																							
Jack Hammer	Power: 1,240 Watts Full-load Impact Rate: 1,400/min.	2																							
12	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.																								
15	Bidder shall submit hard copies of their proposals manually in three sets (original, copy 1, and copy 2)																								
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> <ol style="list-style-type: none"> a. The amount of not less than <u>Four Hundred Nineteen Thousand Three Hundred Twenty-Six Pesos and 86/100 (Php419,326.86)</u>, <i>two percent (2%) of ABC</i>, 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 <u>One Million Forty-Eight Thousand Three Hundred Seventeen Pesos and 14/100 (Php1,048,317.14)</u>, <i>five percent (5%) of ABC</i> if bid security is in Surety Bond. 																								

20	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	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.

Section IV. General 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

Special Conditions of Contract

GCC Clause	
4.1	The NEAP through the Chief of HRDD shall give possession of the site to the Contractor upon receipt of NTP.
6	The prospective bidder/s shall submit a certificate of site inspection signed by the Dorm Manager and shall form part of the Technical Documents.
7.2	The warranty against defects/failures, except those force majeure damages shall cover a period of five (5) years.
10	No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Works to the Procuring Entity's Representative within five (5) calendar days from receipt of the Notice of Award.
13	<p>The amount of the advance payment is 15% of the total contract price and schedule of payment.</p> <p>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.</p> <p>The advance payment shall be made only upon the submission to and acceptance by the procuring entity of an irrevocable standby letter of credit of equivalent value from a commercial bank, a bank guarantee or a surety bond callable upon demand, issued by a surety or insurance company duly licensed by the Insurance Commission and confirmed by the procuring entity.</p> <p>The advance payment shall be repaid by the contractor by deducting fifteen percent (15%) from his periodic progress payments a percentage equal to the percentage of the total contract price used for the advance payment.</p> <p>The contractor may reduce his standby letter of credit or guarantee instrument by the amounts refunded by the Monthly Certificates in the advance payment.</p>
14	Request for payments by the contractor will be made only for the actual accomplishment, which will be subdivided into progress percentage evaluated and certified by the End-User through the Regional Engineer as performed by the contractor in accordance with the plans, specification and Program of Works/Construction Schedule.
15.1	The "as built" drawings shall be submitted in hard and e-copies within 7 days prior to the request of final billing.

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.

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: B.1

Description: Fire Safety Inspection Certificate (FSIC)

Quantity: 1.00

Output : 1.00

Unit: lot

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount	
Sub-Total (Labor)					Php	-
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount	
Sub-Total (Equipment)					Php	-
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount	
Sub-Total (Materials)					Php	
D.	Direct Cost (A+B+C)			Php		
E.	Overhead,Contingencies and Miscellaneous (Ocm)			0% of D.		
F.	Contractor's Profit			0% of D.		
G.	Value Added Tax (VAT)			5% of (D+E+F)		
H.	Adjusted Total Cost (D+E+F+G)			Php		
I.	Adjusted Unit Cost (H/Quantity)			Php		

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: : Cainta, Rizal

Item: B.2

Description: Security/ Bill Deposit

Quantity: 1.00

Output: 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount	
Sub-Total (Labor)					Php	-
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount	
Sub-Total (Equipment)					Php	-
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount	
	Security/ Bill Deposit	1	1.00			
Sub-Total (Materials)					Php	
D.	Direct Cost (A+B+C)			Php		
E.	Overhead,Contingencies and Miscellaneous (Ocm)			0% of D.		
F.	Contractor's Profit			0% of D.		
G.	Value Added Tax (VAT)			5% of (D+E+F)		
H.	Adjusted Total Cost (D+E+F+G)			Php		
I.	Adjusted Unit Cost (H/Quantity)			Php		

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: B.3

Description: Equipment Testing and Commissioning

Quantity: 1.00

Output: 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount	
Sub-Total (Labor)					Php	-
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount	
Sub-Total (Equipment)					Php	-
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount	
	Equipment Testing and Commissioning	1	1.00			
Sub-Total (Materials)					Php	
D.	Direct Cost (A+B+C)			Php		
E.	Overhead,Contingencies and Miscellaneous (Ocm)			0% of D.		
F.	Contractor's Profit			% of D.		
G.	Value Added Tax (VAT)			5% of (D+E+F)		
H.	Adjusted Total Cost (D+E+F+G)			Php		
I.	Adjusted Unit Cost (H/Quantity)			Php		

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: SPL 1

Description: Project Billboard

Quantity: 1.00

Output: 1.00

Unit: Each

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	4.00		
	Skilled Laborer	1	4.00		
	Unskilled Laborer	1	4.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	8' x 8' Tarpaulin, 1 set	sq ft	64.00		
	Rough Lumber, Sun Dried, Hardwood	bd.ft	29.33		
	CWN, Assorted	kg	0.50		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)			Php	
E.	Overhead,Contingencies and Miscellaneous (Ocm)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)			Php	
I.	Adjusted Unit Cost (H/Quantity)			Php	

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: SPL 2

Description: Construction Safety and Health

Quantity: 4.50
Output : 1.00
Unit: Month

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Safety Officer	1	1080.00		
	First Aider	1	1080.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	First Aid Kit	Ls	1		
	Personal Protective equipment (PPE)				
	Safety Helmet	man - days	20		
	Safety Shoes	man - days	20		
	Safety Gloves	man - days	50		
	Signages and Barricades				
	PPE Signage (4' x 8')	set	1		
	Safety First (4' x 4')	set	1		
	Warning Signs (2' x 3')	set	2		
	Caution Tape, 100 ft	roll	5		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (Ocm)				0% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: C.1

Description: Mobilization and Demobilization

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	32.00		
	Skilled Laborer	1	32.00		
	Unskilled Laborer	4	32.00		
	Highly Skilled Operator	1	32.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Self Loading Truck and Accessories	1	32		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (Ocm)			0% of D.	
F.	Contractor's Profit			0% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 20 (a)

Description: Manual Soil Excavation

Quantity: 108.88
Output per hour: 0.83
Unit: cu.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	131.18		
	Unskilled Laborer	4	131.18		
Sub-Total (Labor)					Php 50,357.43
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 1 (a)

Description: Clearing and Grubbing

Quantity: 45.28
Output per hour: 40.00
Unit: sq.m

A.	Designation of Personnel	No. of Person	Hourly Rate	Amount
	Construction Foreman	1		
	Unskilled Laborer	2		
Sub-Total (Labor)			Php	284.62
B.	Name / Capacity (Equipment)	No. of Units	Hourly Rate	Amount
Sub-Total (Equipment)			Php	-
C.	Name / Specification (Materials)	Unit	Unit Cost	Amount
Sub-Total (Materials)			Php	
D.	Direct Cost (A+B+C)		Php	
E.	Overhead,Contingencies and Miscellaneous (OCM)		% of D.	
F.	Contractor's Profit		% of D.	
G.	Value Added Tax (VAT)		5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)		Php	
I.	Adjusted Unit Cost (H/Quantity)		Php	

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 1 (c)

Description: **Backfilling of Excavated Materials**

Quantity: 101.99

Output per hour: 9.84

Unit: cu.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	10.36		
	Unskilled Laborer	3	10.36		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Plate Compactor (5hp)	1	7.77		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Select Fill (with 20% Compaction Factor)	cu.m	101.99		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 1 (d)

Description: Gravel Bedding

Quantity: 20.73
Output per hour: 1.20
Unit: cu m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	17.28		
	Unskilled Laborer	3	17.28		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Plate Compactor (5hp)	1	8.64		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Gravel Bedding G-1 (with 5% Shrinkage Factor)	cu.m	21.77		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 2(a)

Description: Demolition of Reinforced Concrete

Quantity: 33.34
Output per hour: 0.682
Unit: cu m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	48.89		
	Skilled Laborer	2	48.89		
	Unskilled Laborer	4	48.89		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Jack Hammer Drill	2	48.89		
	Electric Grinder	2	48.89		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 2 (b)

Description: Structural Concrete (Footing and Slab on Fill) - 3000psi

Quantity: 46.78
Output per hour: 0.36
Unit: cu m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	131.05		
	Skilled Laborer	1	131.05		
	Unskilled Laborer	4	131.05		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	One - bagger Mixer	1	131.05		
	Concrete Vibrator	1	131.05		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Portland Cement	bag	455.00		
	Washed Sand	cu.m.	26.10		
	Crushed Gravel 3/4"	cu.m.	50.70		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 2 (c)

Description:

Structural Concrete (Footing Tie Beam, Column, Suspended Slab, Girder/ Beam) - 3000psi

Quantity: 6.27
Output per hour: 0.27
Unit: cu.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	23.22		
	Skilled Laborer	1	23.22		
	Unskilled Laborer	4	23.22		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	One - bagger Mixer	1	131.05		
	Concrete Vibrator	1	131.05		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Portland Cement	bag	62.00		
	Washed Sand	cu.m.	3.80		
	Crushed Gravel 3/4"	cu.m.	7.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 2 (h)

Description: Ramp on Fill - 3000psi

Quantity: 2.07
Output per hour: 0.36
Unit: cu m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	5.79		
	Skilled Laborer	1	5.79		
	Unskilled Laborer	4	5.79		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Concrete Vibrator	1	5.79		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Portland Cement	bag	21.00		
	Washed Sand	cu.m.	1.20		
	Crushed Gravel 3/4"	cu.m.	2.30		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 21 (a)

Description: Reinforcing Steel Bar, Grade 33

Quantity: 2,881.00
Output per hour: 143.44
Unit: kg

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	20.09		
	Skilled Laborer	2	20.09		
	Unskilled Laborer	12	20.09		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Bar Cutter	1	10.04		
	Bar Bender	1	10.04		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Deformed Round Bars, Grade 33	kg	2,881.00		
	G.I. Tie Wire	kg	86.43		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 4 (a)

Description: Installation and Removal of Formworks

Quantity: 110.04
Output per hour: 3.24
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Installation of Formworks				
	Construction Foreman	1	33.96		
	Skilled Laborer	2	33.96		
	Unskilled Laborer	4	33.96		
	Removal of Formworks				
	Construction Foreman	1	13.59		
	Unskilled Laborer	6	13.59		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Good Lumber - 3 uses	bdft	490.00		
	Plywood, Marine 1/2" x 4' x 8' - 3 uses	pc.	31.00		
	Assorted CWN	kg.	18.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 5 (a)

Description: Demolition of Masonry Wall

Quantity: 144.62
Output per hour: 5.938
Unit: sq m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1.00	24.36		
	Skilled Laborer	1.00	24.36		
	Unskilled Laborer	4.00	24.36		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Jack Hammer Drill	2.00	24.36		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 5 (b)

Description: Masonry (100 mm CHB)

Quantity: 139.54
Output per hour: 3.825
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	36.48		
	Skilled Laborer	2	36.48		
	Unskilled Laborer	3	36.48		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	One - bagger Mixer	1	36.48		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	CHB 4" thk	pcs	1,915.00		
	Portland Cement	bags	90.00		
	Washed Sand	cu.m	47.20		
	10mm x 6m RSB	kgs	95.00		
	G.I. Tie Wire	kgs	9.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 5 (d)

Description: Plain Cement Plaster Finish

Quantity: 318.22
Output per hour: 7.125
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	44.66		
	Skilled Laborer	2	44.66		
	Unskilled Laborer	4	44.66		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Portland Cement	bags	207.00		
	Washed Sand	cu.m	12.70		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (a)

Description: Removal of Door with Jamb

Quantity: 33.00
Output per hour: 1.33
Unit: set

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	24.75		
	Skilled Laborer	1	24.75		
	Unskilled Laborer	1	24.75		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (b)

Description: Removal of Window with Jamb

Quantity: 2.68
Output per hour: 3.88
Unit: set

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	0.69		
	Skilled Laborer	1	0.69		
	Unskilled Laborer	2	0.69		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (f)

Description: Frames (Jambs, Sill, Head, Transoms, and Mullions)

Quantity: 31.00
Output per hour: 1.00
Unit: set

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	31.00		
	Skilled Laborer	1	31.00		
	Unskilled Laborer	2	31.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
					-
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Door Jamb 45mm x 150mm	set	31.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (d)

Description: **Wooden Panel Door**

Quantity: 62.79
Output per hour: 0.32
Unit: sq m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	196.22		
	Skilled Laborer	1	196.22		
	Unskilled Laborer	2	196.22		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
					-
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	D-1, Panel Door 0.90m x 2.10m on 150mm Wooden Jamb complete with Accessories (lever type door knob)	set	2.00		
	Hinges, Standard 3-1/2" x 3-1/2"	pa	66.00		
	Entrance, Lever Lockset	set	33.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (g)

Description: Ramp Rail

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	57		
	Skilled Laborer	2	57		
	Unskilled Laborer	4	57		
Sub-Total (Labor)					Php 31,688.30
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Welding Machine	1	28.50		
	Electric Grinder	1	28.50		
Sub-Total (Equipment)					Php 11,753.12
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	PWD Ramp - SS 304 Railings				
	Round Base Flange 2"Ø, Stainless Steel	pc	6.00		
	Elbow 2"Ø, Stainless steel 304	pc	8.00		
	Round Cover Flange 2"Ø, Stainless Steel	pc	8.00		
	Stainless Steel Welding Rod	kg	2.00		
	Utility Ramp - SS. 304 Railings				
	Round Base Flange 2"Ø, Stainless Steel	pc	6.00		
	Elbow 2"Ø, Stainless steel 304	pc	8.00		
	Round Cover Flange 2"Ø, Stainless Steel	pc	6.00		
	Stainless Steel Welding Rod	kg	2.00		
	Stair Ramp Beside GL A19 - SS. 304 Railings				
	Round Base Flange 2"Ø, Stainless Steel	pc	2.00		
	Round Cover Flange 2"Ø, Stainless Steel	pc	2.00		
	Stainless Steel Welding Rod	kg	1.00		
	Relocation of Stair at GL H19- SS. 304 Railings				
	Round Base Flange 2"Ø, Stainless Steel	pc	4.00		
	Elbow 2"Ø, Stainless steel 304	pc	2.00		
	Round Cover Flange 2"Ø, Stainless Steel	pc	4.00		

	Stainless Steel Welding Rod	kg	0.50	
	Provision of Opening at GL N4- SS. 304 Railings			
	Elbow 2"Ø, Stainless steel 304	pc	1.00	
	Stainless Steel Welding Rod	kg	0.25	
	<i>(Use Removed Stainless Steel pipes from Steel Railings at GL D2 - H2 & GL N4)</i>			
Sub-Total (Materials)				Php
D.	Direct Cost (A+B+C)			Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.
F.	Contractor's Profit			% of D.
G.	Value Added Tax (VAT)			5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)			Php
I.	Adjusted Unit Cost (H/Quantity)			Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (Ls-1)

Description: Aluminum Door and Jamb Analok Finish, stainless steel hinges and lock

Quantity: 1.00
Output per hour: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	32.00		
	Skilled Laborer	1	32.00		
	Unskilled Laborer	1	32.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
					-
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Toilet and Bathroom				
	Aluminum Door, 0.7m x 1.9, With Aluminum Jamb	pc	15.00		
	Narrow Butt Hinge, 2.5" Stainless Steel	pa	45.00		
	Toilet Partition indicator Lock Sliding, Stainless Steel 304	set	15.00		
	Blind Rivets	pc	360.00		
	3/4" Wood Screw	pc	150.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)			Php	
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)			Php	
I.	Adjusted Unit Cost (H/Quantity)			Php	

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (Ls-2)

Description: Aluminum Sliding Window with Jamb, Analok/Bare Finish

Quantity: 3.00
Output per hour: 1.00
Unit: sq m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	3.00		
	Skilled Laborer	1	3.00		
	Unskilled Laborer	1	3.00		
Sub-Total (Labor)					Php 813.67
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	W-1 Analok type Sliding Window 1.2m x 1.2m, 6mm Tempered Glass with Jamb and Complete Accessories	set	3.00		
	3/4 Wood Screw	pc	30.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (Ls-3)

Description: Relocation of Stainless Steel Letterings

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	6		
	Skilled Laborer	1	6		
	Unskilled Laborer	1	6		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Silicone Sealant, 300ml Construction Grade	pc	1.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 6 (Ls-4)

Description: 12mm tempered Glass Frameless Glass Door/ Glass Partition

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	6		
	Skilled Laborer	1	6		
	Unskilled Laborer	1	6		
Sub-Total (Labor)					Php 1,627.34
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	tempered Glass, 12mm thk, clear	sq.m	3.78		
	Frameless Glass Door Lock, Stainless Steel	pc	2.00		
	Frameless glass Door Patch Fitting Set, Corner patch,Top patch, Bottom Patch, Patch Lock, Floor Hinge - 110kg, Stainless Steel Capacity	set	2.00		
	Stainless Steel frameless glass door handle 32mmØ x 800mm	set	2.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			12% of D.	
F.	Contractor's Profit			10% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 7 (a)

Description: Removal of Steel Trusses

Quantity: 375.60

Output : 66.78

Unit: kg

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	5.62		
	Skilled Laborer	2	5.62		
	Unskilled Laborer	4	5.62		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Cutting Outfit	2	5.62		
	H - Frame 1.7m x 1.2m	4	5.62		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 7 (d)

Description: Structural Steel Purlins

Quantity: 5,018.94

Output : 90.45

Unit: kg

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	55.49		
	Skilled Laborer	2	55.49		
	Unskilled Laborer	4	55.49		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Welding Machine	2	55.49		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	LC 150 x 65 x 20 x 2.0mm	kg	2,484.72		
	LC 100 x 50 x 15 x 2.5mm	kg	2,441.34		
	LC 75 x 38 x 15 x 2.0mm	kg	92.88		
	Welding Rod	kg	101.25		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 7 (g)

Description: Metal Structure Accessories (Sag Rods)

Quantity: 14.00

Output :

Unit: pc

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	1.00		
	Skilled Laborer	1	1.00		
	Unskilled Laborer	1	1.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	10mmØ Sag Rods with Standard Nuts and Washers	pc	14.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 7(Ls-1)

Description: Rolled Shaped Steel

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	37.90		
	Skilled Laborer	1	37.90		
	Unskilled Laborer	1	37.90		
Sub-Total (Labor)					Php 10,279.33
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Welding Machine	2	37.90		
Sub-Total (Equipment)					Php 29,637.80
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	L 50 x 50 x 6mm	kg	697.32		
	L 40 x 40 x 5mm	kg	850.14		
	L 50 x 50 x 3mm	kg	1,204.98		
	Flat Bar 1½" x ¼"	kg	17.88		
	GI. Tubular 4" x 2" x 6m x 2.0mm	pc	18.00		
	Square Bar 19mm□	pc	54.00		
	Welding Rod	kg	74.25		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)			Php	
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)			Php	
I.	Adjusted Unit Cost (H/Quantity)			Php	

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 7(Ls-2)

Description: Steel Matting 2" x 2" x 3mm, 4ftx8ft

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	4.00		
	Skilled Laborer	1	4.00		
	Unskilled Laborer	1	4.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Steel Matting 2" x 2" x 3mm, 4ftx8ft	pc	9.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 7(Ls-3)

Description: Repair of Water tank

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	4.00		
	Skilled Laborer	1	4.00		
	Unskilled Laborer	1	4.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	PVC Clear pipe, 3/4"Ø x 3m	pc	1.00		
	uPVC Blue Female Threaded Adaptor, 3/4"Ø	pc	2.00		
	PP-R Pipe 3/4"Ø x 4.0m, PN10	pc	1.00		
	PP-R Elbow 90° x 3/4"Ø	pc	2.00		
	PP-R Threaded Female Union x 25mm x 3/4"Ø, Plastic to Brass	pc	2.00		
	Stainless Steel Barrel Nipple, 3/4"Ø x 3"	pc	4.00		
	PVC Cement	can	1.00		
	Stainless Steel Welding Rod	kg	4.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 8 (a)

Description: Removal of Metal Roofing

Quantity: 34.69
Output per hour: 18.250
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	1.90		
	Skilled Laborer	1	1.90		
	Unskilled Laborer	3	1.90		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	H - Frame 1.7m x 1.2m	2	1.90		
	Electric Hand Drill	2	1.90		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 8 (b)

Description: Pre - painted Metal Sheets (Corrugated, Short Span/ Long Span, below 0.427 BMT/ above 0.427 BMT)

Quantity: 53.35
Output per hour: 2.076
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	25.70		
	Skilled Laborer	1	25.70		
	Unskilled Laborer	2	25.70		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Hand Drill	1	25.70		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	G.I. Long-Span Roofing, Corrugated, Pre-Painted, 1220mm x 0.5mm BMT	lm	45.85		
	Teckscrew 2-½"	pc	241.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 8 (d)

Description: **Fabricated Metal Roofing Accessory (Gutter)**

Quantity: 276.00
Output per hour: 11.80
Unit: m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	23.39		
	Skilled Laborer	1	23.39		
	Unskilled Laborer	1	23.39		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	GI Gutter, Pre-Painted, 2.440m x 0.4mm BMT	pc	4.00		
	Stainless Steel Plain Sheet, 1.2m x 2.4m, 0.4mm THK	pc	4.00		
	Teckscrew 2- $\frac{3}{4}$ "	pc	1,150.00		
	Blind Rivets	pc	1,725.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Malvar, Batangas, Philippines

Item: 8 (c)

Description: **Fabricated Metal Roofing Accessory (Ridge/ Hip Rolls/ Flashing/ Counter Flashing/ Valley Roll)**

Quantity: 10.00
Output per hour: 10.00
Unit: m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	1.00		
	Skilled Laborer	1	1.00		
	Unskilled Laborer	1	1.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Hand Drill	1	1.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	G.I. Flashing, Preformed, Pre-Painted, 0.610m x 2.440m x 0.4mm BMT	pc	10.00		
	Teckscrew 2- $\frac{3}{8}$ "	pc	100.00		
	Blind Rivets	pc	150.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 9 (d)

Description: Removal of Ceiling

Quantity: 1087.56
Output per hour: 17.340
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	62.72		
	Skilled Laborer	1	62.72		
	Unskilled Laborer	3	62.72		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	H - Frame 1.7m x 1.2m	2	501.76		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY (REGION IV-A CALABARZON)

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 9 (f)

Description: 4.5mm Fiber Cement Board/ 4.5mm Marine Plywood/ 6.0mm Marine Plywood/ 6.0 mm Ordinary Plywood on Metal Frame Ceiling

Quantity: 733.22
Output per hour: 1.24
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	589.88		
	Skilled Laborer	1	589.88		
	Unskilled Laborer	2	589.88		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	H - Frame 1.7m x 1.2m	1	589.88		
	Electric Hand Drill	1	412.91		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Fiber Cement Ceiling Board (4.5mm thk)	pc	303.00		
	Metal Carrying Channel (12mm x 38mm x 5m x 0.8mm thk)	pc	293.00		
	Metal Double Furring Channel (19mm x 50mm x 3m x 0.5mm thk)	pc	814.00		
	Wall Angle 1" x 1" x 10'	pc	304.00		
	Rod Suspension Hanger with Adjustment Spring	pc	681.00		
	Steel Angle	pc	681.00		
	Threaded Hanger Clip	pc	681.00		
	Preformed Wire Clip	pc	1,800.75		
	Concrete Nails	kg	41.49		
	Steel/ Aluminum Manhole cover, 60cm x 60cm, powder coated	pc	15.00		
	Steel ceiling Manhole cover, 40cm x 40cm,	pc	31.00		
	Blind Rivets	pc	13,213.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY (REGION IV-A CALABARZON)

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 9 (Ls-1)

Description: 4' x 8' Laminated Phenolic/ laminated Marine Plywood Partition/ Cabinet

□

Quantity: 1.00
Output per hour: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	33.40		
	Skilled Laborer	1	33.40		
	Unskilled Laborer	2	33.40		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Circular Saw	1	23.38		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Phenolic Board 3/4' x 4' x 8'	pc	14.00		
	Laminating Sheet, Wood Grain 1.2m x 2.4m	pc	28.00		
	Contact Cement	gal	6.00		
	Edge band Glossy and Matte	m	100.99		
	L-type Bracket Stainless Steel 304'	pc	104.00		
	1' inch Screw with Tox	pc	468.00		
	Partition Bracing Foot, Adjustable Stainless Steel 304	pc	24.00		
	Concealed Hinge Half Overlay	pa	4.00		
	Concealed Hinge, Full overlay	pa	4.00		
	Partition Side Edge, aluminum 3/4' x 1.85m	pc	6.00		
	S4S Lumber, Kiln Dried, Hardwood	hd.ft	23.57		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY (REGION IV-A CALABARZON)

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 9 (Ls-2)

Description: Fabricated Cabinet and Shelves Marine Plywood 4ft x 8ft x 3/4" thk

Quantity: 25.92
Output per hour: 7.14
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Layout and Cutting				
	Construction Foreman	1	3.00		
	Skilled Laborer	1	3.00		
	Unskilled Laborer	1	3.00		
	Fabrication				
	Construction Foreman	1	3.63		
	Skilled Laborer	1	3.63		
	Unskilled Laborer	1	3.63		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Grinder	1	3.63		
	Electric Hand Drill	1	3.63		
	Circular Saw	1	3.63		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	2 pcs - Hanging Cabinet 1m x 1.4m x 0.4m 4 doors 4 shelves				
	Plywood, Marine 3/4" x 4' x 8'	pc	6.00		
	Concealed Hinge, Full overlay	pa	16.00		
	Cabinet Handle, Stainless Steel	pc	8.00		
	Wood Glue	li	1.00		
	Drawer Lock	pc	8.00		
	Shelve				
	Plywood, Marine 3/4" x 4' x 8'	pc	1.00		
	L-type Bracket Stainless Steel	pc	6.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Mabur, Batangas, Philippines

Item: 9(Ls-3)

Description: Metal Spandrel 0.4mm THK x 6' Width in Metal Ceiling Framing

[]

Quantity: 1.00
Output per hour: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	348.12		
	Skilled Laborer	1	348.12		
	Unskilled Laborer	2	348.12		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	H - Frame 1.7m x 1.2m	1	348.12		
	Electric Hand Drill	1	174.06		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Spandrel 6' with 0.4mm thickness	lm	2,427.60		
	Spandrel 6', Perforated with 0.4mm thickness	lm	606.90		
	Fascia Board, Fiber Cement 12' x 8'	pc	121.00		
	Metal Double Furring Channel (19mm x 50mm x 3m x 0.5mm thk	pc	23.10		
	Metal Carrying Channel (12mm x 38mm x 5m x 0.8mm thk	pc	126.00		
	Preformed Wire Clip	pc	408.00		
	Spandrel End Moulding, 6' x 0.4mm Thickness x 8ft	pc	243.00		
	Spandrel center Moulding, 12' x 0.4mm THK x 8ft	pc	11.00		
	Threaded Rod 8mm x 3m	pc	81.00		
	Steel Angle	pc	81.00		
	Nut and washer, M8	pc	243.00		
	Threaded Hanger Clip	pc	81.00		
	Concrete Nails	kg	13.53		
	Blind Rivets	pc	7,996.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: E 10 (b)

Description: Distribution Poles

Quantity: 1.00
Output per hour: 0.25
Unit: pc

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	4.00		
	Skilled Laborer	2	4.00		
	Unskilled Laborer	2	4.00		
	Highly Skilled Operator	2	4.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Boom Truck	1	4.00		
	Bucket Truck	1	4.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Distribution Transformer,Accessories and Assembly Pole, Concrete, 50', Class 1A, 2400kgs. (Minimum Load Break)	pc	1.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Malvar, Batangas, Philippines

Item: E 10 (c)

Description: **Distribution Transformer, Accessories and Assembly**

Quantity: 1.00

Output per hour: 0.13

Unit: Assy

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	8.00		
	Skilled Laborer	2	8.00		
	Unskilled Laborer	2	8.00		
	Highly Skilled Operator	2	8.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Boom Truck	1	8.00		
	Bucket Truck	1	8.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Pin Assembly				
	Insulator, Pin Type, Porcelain, ANSI, Class 57-2	pc	6.00		
	Pin, Pole Top, Channel, 1" Thread, 20" Long, Hot Dip Galvanized	pc	6.00		
	Bolt, Machine 5/8" X 8", Hot Dip Galvanized	pc	12.00		
	Washer, Curved, 2-1/2" X 2-1/2" X 3/16"	pc	12.00		
	Nut, Lock, MF Type, 5/8"	pc	12.00		
	Suspension Assembly				
	Washer, Curved, 2-1/2" X 2-1/2" X 3/16"	pc	6.00		
	Insulator, Suspension, 6', ANSI, Class 52-1	pc	18.00		
	Bolt, Double Arming 5/8" X 14", Hot Dip Galvanized	pc	6.00		
	Bolt, Oval Eye 5/8" X 12", Hot Dip Galvanized, Forged	pc	6.00		
	Bolt, Oval Eye 5/8" X 18", Hot Dip Galvanized, Forged	pc	6.00		
	Clamp, Dead-end Strain, #4/0 ACSR	pc	6.00		
	Three Phase Crossarm Construction				
	Conductor, 23kv Insulated, Tree Wire, ACSR/AW-TR/OC-SB#4/0, AWG 6/1 (Meters)	pc	90.00		

Bolt, Machine 5/8" X 12", Hot Dip Galvanized	pc	4.00	
Washer, Square, Flat, 2-1/4" X 2-1/3" X 3/16"	pc	22.00	
Pin, Crossarm, Steel, 5/8" X 10-3/4", Hot Dip Galvanized	pc	8.00	
Crossarm, Steel, 3" X 4" X 8", 3mm, Hot Dip Galvanized	pc	4.00	
Bolt, Carriage 3/8" X 4-1/2", Hot Dip Galvanized	pc	8.00	
Lag, Screw, 1/2" X 4"	pc	4.00	
Bolt, Single Upset 5/8" X 10", Hot Dip Galvanized, Forged	pc	2.00	
Nut, Lock, MF Type, 5/8"	pc	26.00	
Nut, Lock, MF Type, 3/8"	pc	8.00	
Brace, Cross-arm, Flat 28", Steel, Hot Dip Galvanized	pc	8.00	
Rod, Armor, Preformed, #4/0 ACSR, Single Support	pc	3.00	
Rod, Armor, Preformed, #4/0 MCM, Double Support	pc	9.00	
Wire, Tie, Insulated, #4 mm (Meters)	m	17.00	
Three Transformer Cluster Mounted Four Wire Grounded For 230 Volt Power Load			
Lag, Screw, 1/2" X 4"	pc	4.00	
Connector, Spilt Bolt	pc	3.00	
Transformer, Pole Type, Conventional, Amorphous, 100 KVA, Cu-Cu Winding	pc	3.00	
Fuse Cut-out & Arrester Combination, 15KV, Class 200	pc	3.00	
Bracket, Mounting for Fuse Cut-Out & Arrester	pc	3.00	
Connector, Solderless Copper, #4/0	pc	3.00	
Nut, Lock, MF Type, 3/8"	pc	2.00	
Rod, Armor, Preformed, #4/0 ACSR, Single Support	pc	3.00	
Rod, Armor, Preformed, #4/0 ACSR, Double Support	pc	3.00	
Bolt, Carriage 3/8" X 4-1/2", Hot Dip	pc	2.00	
Connector, Compression, YHO 400, Run #2/0 - #4/0 - Tap #2/0 - #4/0	pc	3.00	
Clamp, Hotline #2 - #4/0 ACSR	pc	3.00	
Nut, Lock, MF Type, 3/8"	pc	2.00	
Bolt, Double Arming 5/8" X 14", Hot Dip Galvanized	pc	3.00	
Washer, Curved, 2-1/2" X 2-1/2" X 3/16"	pc	13.00	
Bracket, Transformer Pole Mounting, 3 Phase, Cluster Type, Hot Dip Galvanized	pc	1.00	
Sub-Total (Materials)			Php
D. Direct Cost (A+B+C)			Php
E. Overhead,Contingencies and Miscellaneous (OCM)			% of D.
F. Contractor's Profit			% of D.
G. Value Added Tax (VAT)			5% of (D+E+F)
H. Adjusted Total Cost (D+E+F+G)			Php
I. Adjusted Unit Cost (H/Quantity)			Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: E 10 (d)

Description: Grounding Assembly

Quantity: 1.00

Output: 1.00

Unit: set

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	1.00		
	Skilled Laborer	1	1.00		
	Unskilled Laborer	1	1.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Racet	1	1.00		
	Hole Digger	1	1.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Distribution Transformer, Accessories and Assembly				
	Rod, Ground Steel, Galvanized, 5/8" X 8', Hot Dip Galvanized	pc	1.00		
	Connector, Ground Rod Clamp, 5/8"	pc	1.00		
	Staple, Ground Wire, 1/2" X 2"	ft	40.00		
	Preformed Wire Clip	pc	1.00		
	Wire, Grounding, Aluminum Alloy, #4 AWG (Feet)	ft	3.00		
	Connector, Compression, YHO 400, Run #2/0 - #4/0 - Tap #2/0 - #4/0	pc	1.00		
	Wire, Grounding, Galvanized, 3 Strand, 5/16" Dia. (Feet)	ft	35.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: E 10 (g)

Description: Guy and Anchor Assembly

Quantity: 1.00
Output per hour: 0.50
Unit: set

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	2.00		
	Skilled Laborer	1	2.00		
	Unskilled Laborer	2	2.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Ratchet	1	2.00		
	Hole Digger	1	2.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Distribution Transformer, Accessories and Assembly				
	Single Down Guy, Wrapped Type				
	Bolt, Machine 5/8" X 10", Hot Dip Galvanized	pc	1.00		
	Connector, Compression, YHO 400, Run #2/0 - #4/0 - Tap #2/0 - #4/0	pc	2.00		
	Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel, Hot Dip Galvanized	pc	2.00		
	Wire, Guy, Steel, 5/16", 7 Strand, High Strength (Feet)	ft	50.00		
	Wire, Grounding, Galvanized, 3 Strand, 5/16" Dia. (Feet)	ft	5.00		
	Hook, Guy, 5/8", Hot Dip Galvanized	pc	2.00		
	Plate, Guy	pc	2.00		
	Concrete Nails	kg	1.00		
	Clamp, Anchor Bonding Twin Eye 3/4"	pc	1.00		
	Nut, Lock, MF Type, 5/8"	pc	1.00		
	Line Anchor Assemblies				
	Rod, Anchor, Single Eye, 5/8" X 7', Hot Dip Galvanized, Forged	pc	1.00		
	Anchor, Expanding, 8 - Ways, Hot Dip	pc	1.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: E 10 (I)

Description: Metering System

Quantity: 1.00
Output per hour: 0.13
Unit: set

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	8.00		
	Skilled Laborer	2	8.00		
	Unskilled Laborer	1	8.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Hand Drill	1	8.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Potential Transformer, (10kV-36kV), 120/70:1	pc	3.00		
	Current Transformer, (10kV-36kV) 500/400/300 : 5,	pc	3.00		
	Meter Box, 24" X 27" X 12"	pc	1.00		
	Meter, Base Socket CL-200, 7 Jaw	pc	1.00		
	Meter, KWH, 3 Phase, Class 20, 240V, 3W, Form 45A, Electronic, Complete w/TOU & Load profiling	pc	1.00		
	Meter, KWH, 1 Phase, Class 20, 240V, 2W, Form 3S, Electronic, Complete w/TOU & Load profiling	pc	1.00		
	3.5 mm ² THWN-2 Wire Copper Stranded	m	150.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Malvar, Batangas, Philippines

Item: E 10 (f)

Description: Secondary Assembly

Quantity: 1.00
Output per hour: 0.50
Unit: set

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	2.00		
	Skilled Laborer	1	2.00		
	Unskilled Laborer	1	2.00		
	Highly Skilled Operator	1	2.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	bucket truck	1	2.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	50 mm ² THWN-2 Wire Copper Stranded	m	45.00		
	Copper split bolt-connector 185mm ² -(50mm ² -185mm ²) 350mm	pc	9.00		
	Rod, Ground Steel, Galvanized, 5/8" X 10, Hot Dip Galvanized	pc	1.00		
	Connector, Ground Rod Clamp, 5/8"	pc	1.00		
	RSC Conduit 2-1/2"Ø, 10ft	pc	1.00		
	RSC Conduit Coupling 2-1/2"Ø	pc	4.00		
	RSC Locknut 2-1/2"Ø	pc	4.00		
	RSC Bushing 2-1/2"Ø	pc	4.00		
	RSC Conduit Elbow 2-1/2"Ø	pc	4.00		
	RSC Conduit L&B 2-1/2"Ø	pc	4.00		
	Service entrance cap 2-1/2"Ø Diecast	pc	3.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: E 10 (k)

Description: Conduit, Boxes and Fitting

Quantity: 1.00
Output: 1.000
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	250.00		
	Skilled Laborer	2	250.00		
	Unskilled Laborer	1	250.00		
	Installation of Vertical Downlight Recessed Type - Corridor and Ceiling Eaves				
	Skilled Laborer	2	48.00		
	Unskilled Laborer	1	48.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Chisel Hammer	2	50.00		
	Electric Grinder	2	50.00		
	Electric Hand Drill	2	50.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Electrical Room				
	PVC Electrical Conduit 3/4"Ø (21mm), 10ft (Schedule 80)	pc	102.00		
	PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	204.00		
	PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	72.00		
	PVC Locknut & Bushing 3/4"Ø (20mm)	pc	72.00		
	PVC Electrical Conduit 1"Ø (27mm), 10ft (Schedule 80)	pc	24.00		
	PVC Electrical Conduit Coupling 1"Ø (27mm)	pc	36.00		
	PVC Long Elbow 1"Ø (27mm), (Schedule 80)	pc	13.00		
	PVC Locknut & Bushing 1"Ø (27mm)	pc	13.00		
	PVC Electrical Conduit 1-1/4Ø (35mm), 10ft (Schedule 80)	pc	46.00		
	PVC Electrical Conduit Coupling 1-1/4Ø (35mm)	pc	92.00		
	PVC Long Elbow 1-1/4Ø (35mm), (Schedule 80)	pc	33.00		
	PVC Locknut & Bushing 1-1/4Ø (35mm)	pc	33.00		
	PVC Electrical Conduit 1-1/2Ø (41mm), 10ft (Schedule 80)	pc	5.00		
	PVC Electrical Conduit Coupling 1-1/2Ø (40mm)	pc	10.00		
	PVC Long Elbow 1-2/4Ø (40mm), (Schedule 80)	pc	3.50		
	PVC Locknut & Bushing 1-1/2Ø (40mm)	pc	3.50		
	PVC Electrical Conduit 2Ø (53mm), 10ft (Schedule 80)	pc	22.00		
	PVC Electrical Conduit Coupling 2Ø (53mm)	pc	44.00		
	PVC Long Elbow 2Ø (53mm), (Schedule 80)	pc	16.00		
	PVC Locknut & Bushing 2Ø (53mm)	pc	16.00		
	PVC Electrical Conduit 2-1/2Ø (63mm), 10ft (Schedule 80)	pc	57.00		
	PVC Electrical Conduit Coupling 2-1/2Ø (63mm)	pc	114.00		

PVC Long Elbow 2-1/2Ø (63mm), (Schedule 80)	pc	40.00
PVC Locknut & Bushing 2-1/2Ø (63mm)	pc	40.00
Utility Box, PVC 2' x 4'	pc	5.00
Octagonal Box (Junction Box), PVC	pc	9.00
Duct Seal Putty, 5 lbs	pc	12.00
Fixture		
Duplex Universal Outlet with Ground and Shutter Set - Dark Wood	pc	3.00
1 Gang Aircon Outlet Set - Dark Wood	pc	1.00
Single Pole Wall Switch in One Switch Plate (10 AMP, 230V) - Dark Wood	pc	1.00
Recessed Panel Light 40 Watts, AC 220-240V, 3200 Lumen, 6500k (Daylight) Dimension: 600mm x 600mm x 9mm Beam Angle: 110° Color Rendering Index (CRI) > 80	pc	3.00
LED Round Recessed Integrated Downlight 19 Watts, AC 100-240V, 1900 Lumen, 6500k (Daylight), Dimension: Ø245mm x 98.5mm Cut-Out Size: Ø195mm x 210mm Beam Angle: 100°, Color Rendering Index (CRI) > 80	pc	6.00
WATER HEATER SUPPLY ALL TYPICAL ROOM (3 PAX) ROOM (4,5,6,13,14,15,16,17,18,19,21,22,23)		
PVC Electrical Conduit 3/4"Ø (21mm), 10ft (Schedule 80)	pc	414.00
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	828.00
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	290.00
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	290.00
WATER HEATER SUPPLY ALL BED ROOM (6 PAX) ROOM (3,9,10,11,12,24,25,26,27,28,29,30,31,32)		
PVC Electrical Conduit 3/4"Ø (20mm), 10ft (Schedule 80)	pc	535.00
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	1,070.00
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	375.00
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	375.00
WATER HEATER SUPPLY ALL BED ROOM (7 PAX) ROOM(1,2)		
PVC Electrical Conduit 3/4"Ø (20mm), 10ft (Schedule 80)	pc	63.00
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	126.00
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	45.00
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	45.00
WATER HEATER SUPPLY REGIONAL DIRECTOR & ASSISTANT REGIONAL DIRECTOR ROOM		
PVC Electrical Conduit 3/4"Ø (20mm), 10ft (Schedule 80)	pc	61.00
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	122.00
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	43.00
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	43.00
Laundry Area		
RSC Pipe Conduit 3/4"Ø (20mm), 10ft	pc	14.00
RSC Pipe Conduit Elbow 3/4"Ø (20mm)	pc	7.00
RSC Pipe Conduit Coupling 3/4"Ø (20mm)	pc	26.00
RSC Pipe Locknut 3/4"Ø (20mm)	pc	26.00
RSC Pipe Bushing 3/4"Ø (20mm)	pc	26.00
Emergency Button with Enclosure	pc	2.00
PVC Electrical Conduit 3/4"Ø (20mm), 10ft (Schedule 80)	pc	34.00
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	68.00
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	47.60
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	47.60

Insulated terminal lugs for 3.5 mm ² THWN-2 Wire 100pcs	set	5.00	
Utility Box, PVC 2' x 4'	pc	11.00	
Octagonal Box (Junction Box), PVC	pc	13.00	
Duplex Universal Outlet with Ground and Shutter Set - Dark Wood	pc	9.00	
2 Single Pole Wall Switches in One Switch Plate (10 AMP, 230V) - Dark Wood	pc	2.00	
LED Round Recessed Slim Downlight 18 Watts, AC 100-240V, 1300 Lumen, 6500k (Daylight), Dimension: Ø215mm x 19mm, Cut-Out Size: Ø200mm, Beam Angle: 110°, Color Rendering Index (CRI) > 80	pc	13.00	
Ceiling Fan - 56" (1,400mm) 3-Leaf Metal Propeller Type Fan Blade - 90W - 3-Speed Settings - Max Speed: 350 RPM - Max Airflow: 230m ³ /min - Wall-Mounted Continuous Rotary Switch - Equipped with Resettable Thermal Cut-Off Fuse (TCO)	set	4.00	
ROOMS EXHAUST			
PVC Electrical Conduit 3/4"Ø (21mm),	pc	64.00	
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	128.00	
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	45.00	
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	45.00	
PWD TOILET EXHAUST			
PVC Electrical Conduit 3/4"Ø (21mm),	pc	6.00	
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	12.00	
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	5.00	
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	5.00	
LED Round Recessed Slim Downlight 18 Watts, AC 100-240V, 1300 Lumen, 6500k (Daylight), Dimension: Ø215mm x 19mm, Cut-Out Size: Ø200mm, Beam Angle: 110°, Color Rendering Index (CRI) > 80	pc	2.00	
Single Pole Wall Switch in One Switch Plate (10 AMP, 230V) - Dark Wood	pc	1.00	
KITCHEN EXHAUST			
PVC Electrical Conduit 3/4"Ø (21mm),	pc	4.00	
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	8.00	
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	3.00	
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	3.00	
MALE AND FEMALE PUBLIC COMFORT ROOM			
PVC Electrical Conduit 3/4"Ø (21mm),	pc	16.00	
PVC Electrical Conduit Coupling 3/4"Ø (20mm)	pc	32.00	
PVC Long Elbow 3/4"Ø (20mm), (Schedule 80)	pc	12.00	
PVC Locknut & Bushing 3/4"Ø (20mm)	pc	12.00	
Sub-Total (Materials)			Php
D. Direct Cost (A+B+C)			Php
E. Overhead, Contingencies and Miscellaneous (OCM)			% of D.
F. Contractor's Profit			% of D.
G. Value Added Tax (VAT)			5% of (D+E+F)
H. Adjusted Total Cost (D+E+F+G)			Php
I. Adjusted Unit Cost (H/Quantity)			Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: E 10 (i)

Description: Wires and Wiring Devices

Quantity: 1.00
Output: 0.004
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	250.00		
	Skilled Laborer	2	250.00		
	Unskilled Laborer	1	250.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Cable Puller/Tensioner	2.00	50.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	175 mm ² THWN-2 Wire Copper Stranded	m	342.00		
	100 mm ² THWN-2 Wire Copper Stranded	m	156.00		
	50 mm ² THWN-2 Wire Copper Stranded	m	195.00		
	38 mm ² THWN-2 Wire Copper Stranded	m	403.00		
	30 mm ² THWN-2 Wire Copper Stranded	m	90.00		
	14.0 mm ² Box of 150 Meters THWN-2 Wire Copper Stranded	set	49.00		
	8.0 mm ² Box of 150 Meters THWN-2 Wire Copper Stranded	set	4.00		
	5.5 mm ² Box of 150 Meters THWN-2 Wire Copper Stranded	set	4.00		
	3.5 mm ² Box of 150 Meters THWN-2 Wire Copper Stranded	set	53.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: E 10 (j)

Description: Panel Board and Circuit Protections

Quantity: 1.00
Output: 0.004
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	250.00		
	Skilled Laborer	1	250.00		
	Unskilled Laborer	1	250.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Chisel Hammer	2	50.00		
	Electric Grinder	2	50.00		
	Electric Hand Drill	2	50.00		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	PP-1 POWER PANEL SESSION HALL, MESS HALL, CORRIDOR, ADMIN OFFICE, KITCHEN & STORAGE AREA MAIN PROTECTION: 60AT/100AF,3P,230V,15KAIC BOLT ON TYPE BRANCHES: 18-20AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00		
	PP-2 POWER PANEL TYPICAL ROOMS MAIN PROTECTION: 125AT/125AF,3P,230V,15KAIC BOLT ON TYPE BRANCHES:33-20AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00		
	LP-1 LIGHTING PANEL SESSION HALL, MESS HALL, CORRIDOR, ADMIN OFFICE, KITCHEN & STORAGE AREA MAIN MAIN PROTECTION: 60AT/100AF,3P,230V,15KAIC BOLT ON TYPE BRANCHES: 22-15AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00		
	LP-2 LIGHTING PANEL TYPICAL ROOMS MAIN PROTECTION: 60AT/100AF,3P,230V,15KAIC BOLT ON TYPE BRANCHES: 31-15AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00		
	ACUP-1 AIRCONDITIONING UNIT PANEL SESSION HALL AND DWELLING UNIT MAIN PROTECTION: 200AT/225AF,3P,230V,25KAIC BOLT ON TYPE BRANCHES: 4-60AT 3P, & 24-20AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00		

	ACUP-2 AIRCONDITIONING UNIT PANEL MAIN PROTECTION: 200AT/225AF,3P,230V,25KAIC BOLT ON TYPE BRANCHES: 6-60AT 2P & 12-20AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00	
	WHF WATER HEATER PANEL MAIN PROTECTION: 400AT/400AF,3P,230V,30 KAIC MOLDED CASE CIRCUIT BREAKER BRANCHES: 28-20AT & 5-30AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00	
	PLLP POWER & LIGHTING LAUNDRY PANEL MAIN PROTECTION: 60AT/100AF,3P,230V,15KAIC BOLT ON TYPE BRANCHES: 8-20AT & 2-30AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00	
	POWER & LIGHTING SPARE PANEL MAIN PROTECTION: 60AT/100AF,3P,230V,15KAIC BOLT ON TYPE BRANCHES: 8-15AT 2P & 10-20AT 2P BOLT-ON IN FLUSH MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00	
	ACU SPARE PANEL MAIN PROTECTION: 125AT/125AF,3P,230V,15KAIC BOLT ON TYPE BRANCHES: 6-60AT 2P BOLT-ON IN FLUSH MOUNTED MOUNTED NEMA-1 ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00	
	MDF MAIN DISTRIBUTION PANEL MAIN PROTECTION: 800AT/800AF,3P,230V,60KAIC MOLDED CASE CIRCUIT BREAKER BRANCHES: 5-60AT 3P, 1-70AT 3P, 2-125AT 3P, 2-200AT 3P & 1-400AT 3P MCCB IN FLUSH MOUNTED NEMA-3R ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00	
	MSE MAIN SWITCH BOARD MAIN PROTECTION: 800AT/800AF,3P,230V,60KAIC MOLDED CASE CIRCUIT BREAKER BRANCHES: 1-800AT 3P & 1-700AT 3P MCCB IN SURFACE MOUNTED NEMA-4X ENCLOSURE WITH GROUND TERMINAL LUGS	assy	1.00	
	AUTOMATIC TRANSFER SWITCH Specification: Transition Type: Open Transition Enclosure: NEMA - 3R Circuit Breakers: 2 -800AT 3P Switching Mechanism: Molded Case Type Include: All Accessories, Controls & Wiring Devices. Include: Monitoring Device (Status of Voltage, Current & Temperature) Indicator Light: Red Light - Utility Power Mode Green Light - Generator Power Mode	assy	1.00	
	Sub-Total (Materials)			Php
D.	Direct Cost (A+B+C)			Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.
F.	Contractor's Profit			% of D.
G.	Value Added Tax (VAT)			5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)			Php
I.	Adjusted Unit Cost (H/Quantity)			Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 10 (a)

Description: Removal of Old Wires and Electrical Equipment & Devices

Quantity: 1.00

Output: 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Unskilled Laborer	2	74		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Jack Hammer Drill	2	50		
	Electric Grinder	2	50		
	Electric Hand Drill	2	50		
	Truck Mounted Crane (20 - 25mT)	2	8		
	Bucket Truck	2	8		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Removal of Pole Type Distribution Transformer, 37.5 KVA	Ls	1.00		
	Removal of Existing Wires within Pole Type Distribution Transformer, Current Transformer & Meter Assembly	Ls	1.00		
	Removal of Molded Case Type Automatic Transfer Switch with 2-500 AT 3P Molded Case Breaker	Ls	1.00		
	Removal of Contactor Type Automatic Transfer Switch with 1-630 AT 3P Molded Case Breaker	Ls	1.00		
	Removal of Flush Mounted NEMA 3R Panelboard in Service Entrance Concrete Post (Main: 500 AT 3 Pole MCCB)	Ls	1.00		
	Removal of Existing Wires in Service Entrance Concrete Post	Ls	1.00		

	Removal of Flush Mounted NEMA 3R Panelboard (Main: 500 AT 3 Pole MCCB, Branches: 1-225 AT 3 Pole, 1-200AT 3 Pole, 1-100AT 2 Pole & 1-125AT 2 Pole Bolt-on)	Ls	1.00	
	Removal of Flush Mounted NEMA 1 Panelboard (Main: 225 AT 3 Pole Bolt On, Branches: 4-60AT 3 & 24-20AT 2 Pole Bolt On)	Ls	1.00	
	Removal of Flush Mounted NEMA 1 Panelboard (Main: 200 AT 3 Pole Bolt On, Branches: 4-60AT 2 Pole Bolt On & 10-20AT 2 Pole Bolt On)	Ls	1.00	
	Removal of Flush Mounted NEMA 1 Panelboard (Main: 100 AT 2 Pole Bolt On, Branches: 18-20AT 2 Pole Bolt On)	Ls	1.00	
	Removal of Flush Mounted NEMA 1 Panelboard (Main: 125 AT 2 Pole Bolt On, Branches: 20-20AT 2 Pole Bolt On)	Ls	1.00	
	Removal of Wires and Conduit within Main Switch Board, Main Distribution Panel, Automatic Transfer Switch, Back-Up Generator Set and Panelboards	Ls	1.00	
	CEILING LIGHTING FIXTURES - Ceiling Eaves, Corridors, Common Area, Lounge and Ceiling at Front Facade			
	Removal of Vertical Downlight Recessed Type	Ls	1.00	
Sub-Total (Materials)				Php
D.	Direct Cost (A+B+C)			Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.
F.	Contractor's Profit			% of D.
G.	Value Added Tax (VAT)			5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)			Php
I.	Adjusted Unit Cost (H/Quantity)			Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Malvar, Batangas, Philippines

Item: 11 (a)

Description: Waterline Works

Quantity: 1.00
Output per hour: 1.00
Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	328.00		
	Skilled Laborer	1	328.00		
	Unskilled Laborer	1	328.00		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Unites	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php -
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Waterline Works				
	Faucet, Lavatory	set	29.00		
	Faucet, Hose Bibb, Brass 1/2"Ø	pc	6.00		
	Teflon Tape	roll	10.00		
	PP-R Pipe 1/2"Ø x 4.0m, PN10	pc	109.00		
	PP-R Pipe 3/4"Ø x 4.0m, PN10	pc	14.00		
	PP-R Pipe 1"Ø x 4.0m, PN10	pc	18.00		
	PP-R Pipe 1-1/4"Ø x 4.0m, PN10	pc	7.00		
	PP-R Pipe 1-1/2"Ø x 4.0m, PN10	pc	19.00		
	PP-R Pipe 2"Ø x 4.0m, PN10	pc	46.00		
	PP-R Pipe 2-1/2"Ø x 4.0m, PN10	pc	2.00		
	PP-R Pipe 1/2"Ø x 4.0m, PN16	pc	22.00		
	PP-R Pipe 1"Ø x 4.0m, PN16	pc	9.00		
	PP-R Elbow 90° x 1/2"Ø	pc	204.00		
	PP-R Elbow 90° x 3/4"Ø	pc	4.00		
	PP-R Elbow 90° x 1"Ø	pc	11.00		
	PP-R Elbow 90° x 1-1/4"Ø	pc	12.00		
	PP-R Elbow 90° x 1-1/2"Ø	pc	7.00		
	PP-R Elbow 90° x 2"Ø	pc	22.00		
	PP-R Elbow 90° x 2-1/2"Ø	pc	2.00		
	PP-R Tee x 1/2"Ø	pc	78.00		
	PP-R Tee x 3/4"Ø	pc	3.00		
	PP-R Tee x 1"Ø	pc	4.00		
	PP-R Tee x 1-1/4"Ø	pc	2.00		
	PP-R Tee x 1-1/2"Ø	pc	2.00		

PP-R Tee x 2"Ø	pc	8.00
PP-R Tee x 2-1/2"Ø	pc	3.00
PP-R Coupling x 1/2"Ø	pc	42.00
PP-R Coupling x 3/4"Ø	pc	8.00
PP-R Coupling x 1"Ø	pc	10.00
PP-R Coupling x 1-1/4"Ø	pc	2.00
PP-R Coupling x 1-1/2"Ø	pc	16.00
PP-R Coupling x 2"Ø	pc	44.00
PP-R Threaded Female Adapter Coupling with Brass 20mm x 1/2"Ø	pc	7.00
PP-R Threaded Male Adapter Coupling with Brass 40mm x 1-1/4"Ø	pc	3.00
PP-R Threaded Male Adapter Coupling with Brass 50mm x 1-1/2"Ø	pc	2.00
PP-R Threaded Male Adapter Coupling with Brass 63mm x 2"Ø	pc	5.00
PP-R Gate Valve x 1/2"Ø	pc	41.00
PP-R Gate Valve x 1"Ø	pc	2.00
PP-R Gate Valve x 1-1/4"Ø	pc	1.00
PP-R Gate Valve x 1-1/2"Ø	pc	2.00
PP-R Gate Valve x 2"Ø	pc	6.00
PP-R Threaded Female Union 32mm x 1"Ø, Plastic to Brass	pc	2.00
PP-R Threaded Female Union 40mm x 1-1/4"Ø, Plastic to Brass	pc	3.00
PP-R Threaded Female Union 50mm x 1-1/2"Ø, Plastic to Brass	pc	2.00
PP-R Threaded Female Union 63mm x 2"Ø, Plastic to Brass	pc	1.00
PP-R Coupling Union 63mm x 2"Ø, Plastic to Plastic	pc	1.00
PP-R Threaded Female Tee 20mm x 1/2"Ø	pc	35.00
PP-R Threaded Female Tee with Brass 25mm x 1/2"Ø	pc	3.00
PP-R Threaded Female Tee 32mm x 1"Ø	pc	1.00
PP-R Threaded Female Elbow With Brass 90° 20mm x 1/2"Ø	pc	183.00
PP-R Tee Reducer 3/4" x 1/2" x 3/4"Ø	pc	6.00
PP-R Tee Reducer 1" x 1/2" x 1"Ø	pc	10.00
PP-R Tee Reducer 1-1/2" x 1/2" x 1-1/2"Ø	pc	4.00
PP-R Tee Reducer 1-1/2" x 3/4" x 1-1/2"Ø	pc	1.00
PP-R Tee Reducer 1-1/2" x 1" x 1-1/2"Ø	pc	1.00
PP-R Tee Reducer 2" x 1/2" x 2"Ø	pc	4.00
PP-R Tee Reducer 2" x 1" x 2"Ø	pc	3.00
PP-R Tee Reducer 2-1/2" x 1-1/2" x 2-1/2"Ø	pc	1.00
PP-R Tee Reducer 2-1/2" x 2" x 2-1/2"Ø	pc	4.00
PP-R Coupling Reducer 3/4" x 1/2"Ø	pc	13.00
PP-R Coupling Reducer 1" x 1/2"Ø	pc	4.00
PP-R Coupling Reducer 1" x 3/4"Ø	pc	3.00
PP-R Coupling Reducer 1-1/4" x 1/2"Ø	pc	1.00
PP-R Coupling Reducer 1-1/4" x 3/4"Ø	pc	1.00
PP-R Coupling Reducer 1-1/4" x 1"Ø	pc	3.00
PP-R Coupling Reducer 1-1/2" x 1/2"Ø	pc	2.00
PP-R Coupling Reducer 1-1/2" x 1"Ø	pc	1.00
PP-R Coupling Reducer 2" x 1-1/2"Ø	pc	3.00
PP-R Elbow Reducer 3/4" x 1/2"Ø	pc	1.00
Check Valve 2"Ø, Brass Swing type	pc	4.00
Check Valve 1-1/2"Ø, Brass Swing type	pc	2.00
Check Valve 1-1/4"Ø, Brass Swing type	pc	2.00
Check Valve 1"Ø, Brass Swing type Threaded	pc	2.00

Pressure Switch Regulator, Diaphragm actuated, Includes 2 1/4-inch poles, 18 NPSF internal thread with 1/4 opening, 220 PSI maximum pressure rating with low pressure cut-off at 40 PSI, 2HP Water Pump capacity	set	2.00	
Float Valve Brass 1-1/2"Ø inlet with stainless ball	pc	1.00	
Threaded Reducer Bush, Male BSP 1/2in to Female BSP 1/4in	pc	4.00	
Stainless Steel Barrel Nipple, 1"Ø	pc	2.00	
Stainless Steel Barrel Nipple, 1-1/4"Ø	pc	2.00	
Stainless Steel Barrel Nipple, 2"Ø	pc	3.00	
Stainless Steel Barrel Nipple, 1/4"Ø	pc	2.00	
Pressure Guage 2"Ø Dial Face 100PSI, Oil Filled, Back mounted 1/4"Ø	pc	2.00	
Shallow Well Jet Pump 2HP Impeller Material: Stainless Steel 304/ Brass Suction Port (in.): 1.25" Discharge Port (in.): 1" Max Flow (GPH): 2376 GPH (39.6 gal/min) Volts: 220V - Single Phase AMP: 9A Max. Total Head (ft.): 154ft Max. Suction Lift (ft.): 26.2ft Max. PSI: 68psi	pc	2.00	
Bladder Tank -Vertical Nominal Volume: 750 Liters Capacity 10 Bar (145 psi) Pressure Rating 2"Ø Connection Built in Pressure Guage With Butyl interchangeable membrane Working temperature: -5°C - 90°C	pc	1.00	
Two way angle Valve, 1/2"Ø x 1/2"Ø, Stainless steel	pc	45.00	
Five way angle Valve, 1/2"Ø x 1/2"Ø, Stainless steel	pc	38.00	
Flexible Hose, 1/2"Ø x 0.5m	pc	96.00	
S. S Bidet 1/2"Ø, with complete accessories	set	38.00	
Shower Flexible Hose with Hand shower head and accessories, 1/2"Ø x 1.5m, Stainless Steel	set	6.00	
Shower Mixer with Faucet, Hot and Cold, with Complete Fittings stainless Steel 304	pc	34.00	
Kitchen Faucet, Gooseneck, Deck Mounted Stainless Steel	pc	10.00	
Urinal Push type Flush Valve, Stainless Steel 1/2"Ø	set	4.00	
Stainless Steel Barrel Nipple, 1/2"Ø x 1-1/2"	pc	62.00	
S.S. Grab Rail 1-1/2"Ø	set	2.00	
PP-R Coupling Reducer 1-1/2" x 1-1/4" Ø	pc	2.00	
Sub-Total (Materials)			Php
D. Direct Cost (A+B+C)			Php
E. Overhead,Contingencies and Miscellaneous (OCM)			% of D.
F. Contractor's Profit			% of D.
G. Value Added Tax (VAT)			5% of (D+E+F)
H. Adjusted Total Cost (D+E+F+G)			Php
I. Adjusted Unit Cost (H/Quantity)			Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Malvar, Batangas, Philippines

Item: 12 (a)

Description: Sewer Line Works

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	229		
	Skilled Laborer	1	229		
	Unskilled Laborer	1	229		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	PVC Sanitary Elbow 90° x 4"Ø	pc	2.00		
	PVC Sanitary Elbow 90° x 3"Ø	pc	38.00		
	PVC Sanitary Elbow 90° x 2"Ø	pc	42.00		
	PVC Sanitary Elbow 1/8 x 4"Ø	pc	101.00		
	PVC Sanitary Elbow 1/8 x 3"Ø	pc	241.00		
	PVC Sanitary Elbow 1/8 x 2"Ø	pc	172.00		
	PVC Sanitary Wye 4" x 4"	pc	45.00		
	PVC Sanitary Wye 3" x 3"	pc	11.00		
	PVC Sanitary Tee 4" x 4"	pc	3.00		
	PVC Sanitary Tee 2" x 2"	pc	123.00		
	Ceramic Soap Holder	pc	34.00		
	PVC Sanitary Pipe 2"Ø x 3.0m, S1000	pc	55.00		
	PVC Sanitary Pipe 3"Ø x 3.0m, S1000	pc	85.00		
	PVC Sanitary Pipe 4"Ø x 3.0m, S1000	pc	93.00		
	PVC Sanitary Socket 2"Ø	pc	19.00		
	PVC Sanitary Socket 4"Ø	pc	61.00		
	PVC Sanitary Clean-out 3"Ø, W/ plug and Seal Ring	pc	26.00		
	PVC Sanitary Clean-out 4"Ø, W/ plug and Seal Ring	pc	22.00		
	PVC Sanitary Tap Tee 90° x 10"Ø, 2" x 1-1/2"	pc	31.00		
	PVC Sanitary P Trap 2"Ø, With 1/8 Bend	pc	47.00		
	PVC Sanitary Eccentric Bushing Reducer , 3" x 2"	pc	9.00		
	PVC Sanitary Eccentric Bushing Reducer , 4" x 3"	pc	5.00		
	PVC Sanitary Tee Reducer 3" x 2"	pc	140.00		

	PVC Sanitary Wye Reducer 4" x 3"	pc	24.00	
	Stainless Steel Sanitary Clean-Out 6" x 6" x 3"Ø, Square	pc	79.00	
	Stainless steel Sanitary Clean-Out 4" x 4" x 2"Ø, Square	pc	2.00	
	PVC Concentric Bushing Reducer, 4" x 2"Ø	pc	12.00	
	PVC Concentric Bushing Reducer, 4" x 3"Ø	pc	26.00	
	PVC Cement, 1 Liter	can	40.00	
	PVC Sanitary Tee 3" x 3"	pc	72.00	
	Lavatory P-trap with Clean out, PVC, 1-1/2"Ø	pc	37.00	
	Lavatory strainer with Tail Piece, Stainless Steel	set	28.00	
	Aluminum Foil Air Duct, 4"Ø x 5m	pc	4.00	
	Aluminum Duct tape, 4" x 47.5m	pc	7.00	
	Stainless Hose Clamp, 4"Ø	pc	32.00	
	Aluminum Steel Round Airvent, 100mmØ, With Insect Mesh	pc	16.00	
Sub-Total (Materials)				Php
D.	Direct Cost (A+B+C)			Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.
F.	Contractor's Profit			% of D.
G.	Value Added Tax (VAT)			5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)			Php
I.	Adjusted Unit Cost (H/Quantity)			Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 12 (b)

Description: Sanitary/ Plumbing Fixtures

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	229		
	Skilled Laborer	1	229		
	Unskilled Laborer	1	229		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Water Closet 1.6gpf with Accessories	set	38.00		
	Urinal 0.8gpf	set	4.00		
	Lavatory, Pedestal Type with Accessories	set	1.00		
	Tissue Holder	pc	31.00		
	S.S. Floor Drain 4" x 4"	set	46.00		
	Urinal Push type Flush Valve, Stainless Steel 1/2"Ø	set	4.00		
	both towel Shelf, 600mm, Stainless Steel	pc	34.00		
	Ceramic Soap Holder	pc	34.00		
	Water Closet Flange, With Wax Gasket, Flat-Head Fixing Bolt, Metal Screw w/ Expansion Plug and Bolt Cover	set	38.00		
	Stainless Steel Grease Trap, 10 GPM Capacity	set	1.00		
	Lavatory, Vessel type, With Fittings and Accesories	set	8.00		
	Silicone Sealant, 300ml Construction Grade	pc	41.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead, Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 13 (a)

Description: **Masonry Painting**

Quantity: 2806.90
Output per hour: 2.10
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	1,336.62		
	Skilled Laborer	2	1,336.62		
	Unskilled Laborer	1	1,336.62		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Latex, Flat	gal	123.25		
	Masonry Putty	gal	193.75		
	Latex, Semi Gloss	gal	241.75		
	Paint Thinner	gal	131.50		
	Gypsum Joint Compound , 15 kg/ bag	bag	321.00		
	Fiberglass Mesh Tape,2' x 100ft /50mm,Self Adhesive	pc	75.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 13 (b)

Description: **Wooden Painting**

Quantity: 786.17
Output per hour: 1.89
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	415.96		
	Skilled Laborer	2	415.96		
	Unskilled Laborer	1	415.96		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Acri Color	qrt	13.75		
	Enamel, Flatwall	gal	73.25		
	Glazing Putty	gal	33.25		
	Enamel, Semi Gloss	gal	66.00		
	Paint Thinner	gal	28.75		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Malvar, Batangas, Philippines

Item: 13 [c]

Description: Metal Painting

Quantity: 1594.95
Output per hour: 2.00
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	797.47		
	Skilled Laborer	2	797.47		
	Unskilled Laborer	1	797.47		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Lacquer Thinner	gal	140.25		
	Primer, Red Oxide	gal	18.50		
	Enamel, Semi Gloss	gal	140.25		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Malvar, Batangas, Philippines

Item: 14 (a)

Description: Glazed Tiles and Trims

Quantity: 554.79

Output : 1.37

Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	406		
	Skilled Laborer	5	406		
	Unskilled Laborer	5	406		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Grinder	2.00	203.22		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Ceramic Outdoor Wall Tile 20cm x 40cm	pc	199.00		
	Glazed Wall Tiles 60cm x 60cm	pc	1,578.00		
	Tile Adhesive 25 kg/bag	bag	228.00		
	Tile Grout 5 kg/bag	bag	50.00		
	Portland Cement	bag	329.00		
	Washed Sand	cu.m	30.25		
	Tile Trim 6mm	pc	111.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)			Php	
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)			Php	
I.	Adjusted Unit Cost (H/Quantity)			Php	

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 14 (b)

Description: Unglazed Tiles/ Granite Tiles/ Synthetic Granite Tiles

Quantity: 1141.35

Output : 1.95

Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	585		
	Skilled Laborer	5	585		
	Unskilled Laborer	5	585		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Electric Grinder	2.00	203.22		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Glazed Floor Tiles 30cm x 30cm	pc	1,159.00		
	Unglazed Floor Tiles 60cm x 60cm	pc	2,472.00		
	Tile Adhesive 25 kg/bag	bag	395.00		
	Tile Grout 5 kg/bag	bag	155.00		
	Portland Cement	bag	567.00		
	Washed Sand	cu.m	54.25		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
L.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecer St, Malvar, Batangas, Philippines

Item: 14 (LS-1)

Description: Removal of Tiles

Quantity: 1,262.67
Output : 5.94
Unit: sq.m

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	213		
	Skilled Laborer	1	213		
	Unskilled Laborer	4	213		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
	Jack Hammer Drill	2.00	159.50		
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)				% of D.
F.	Contractor's Profit				% of D.
G.	Value Added Tax (VAT)				5% of (D+E+F)
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

DETAILED UNIT PRICE ANALYSIS

Project : REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY [REGION IV-A CALABARZON]

Location: P. Montecor St, Malvar, Batangas, Philippines

Item: 15 (Ls-1)

Description: Ceiling Exhaust Fans and Air Vent Ducting

Quantity: 1.00

Output : 1.00

Unit: Ls

A.	Designation of Personnel	No. of Person	No. of Hours	Hourly Rate	Amount
	Construction Foreman	1	215		
	Skilled Laborer	1	215		
	Unskilled Laborer	1	215		
Sub-Total (Labor)					Php
B.	Name / Capacity (Equipment)	No. of Units	No. of Hours	Hourly Rate	Amount
Sub-Total (Equipment)					Php
C.	Name / Specification (Materials)	Unit	Quantity	Unit Cost	Amount
	Exhaust Fan, Blade size 8", 20W, 71 CFM, white, Ceiling Mounted	pc	47.00		
	PVC Sanitary Pipe 4"Ø x 3.0m, S1000	pc	23.00		
	PVC Sanitary Pipe 6"Ø x 3.0m, S1000	pc	47.00		
	PVC Sanitary Socket 4"Ø	pc	20.00		
	PVC Sanitary Socket 6"Ø	pc	47.00		
	PVC Sanitary Elbow 1/8 x 4"Ø	pc	57.00		
	PVC Sanitary Wye Reducer, 6" x 4"	pc	37.00		
	PVC Sanitary Wye 4" x 4"	pc	24.00		
	PVC Sanitary Clean-out 4"Ø, W/ plug and Seal Ring	pc	10.00		
	PVC Sanitary Clean-out 6"Ø, W/ plug and Seal Ring	pc	9.00		
	Aluminum Foil Air Duct, 4"Ø x 5m	pc	11.00		
	Aluminum Foil Air Duct, 6"Ø x 5m	pc	3.00		
	Aluminum Duct tape, 4" x 47.5m	pc	4.00		
	Stainless Hose Clamp, 4"Ø	pc	47.00		
	PVC Cement, 1 Liter	cart	28.00		
	Aluminum Steel Round Airvent, 150mmØ, With Insect Screen Mesh	pc	8.00		
	Aluminum Steel Round Airvent, 100mmØ, With Insect Mesh	pc	1.00		
Sub-Total (Materials)					Php
D.	Direct Cost (A+B+C)				Php
E.	Overhead,Contingencies and Miscellaneous (OCM)			% of D.	
F.	Contractor's Profit			% of D.	
G.	Value Added Tax (VAT)			5% of (D+E+F)	
H.	Adjusted Total Cost (D+E+F+G)				Php
I.	Adjusted Unit Cost (H/Quantity)				Php

Section VII. Drawings

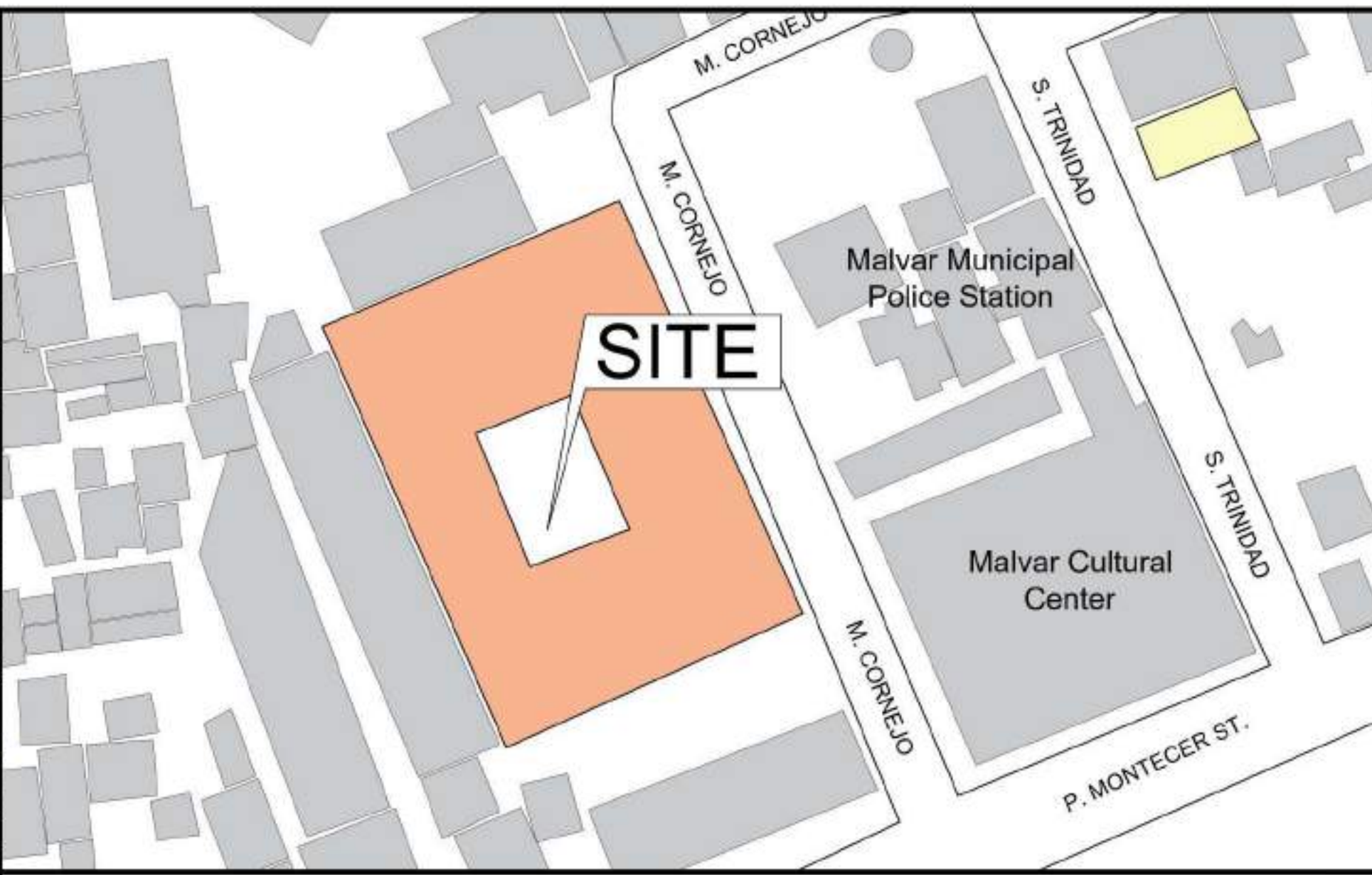
[Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section, or annexed in a separate folder.]



1 P E R S P E C T I V E
AR 101 SCALE NTS



2 V I C I N I T Y M A P
AR 101 SCALE NTS

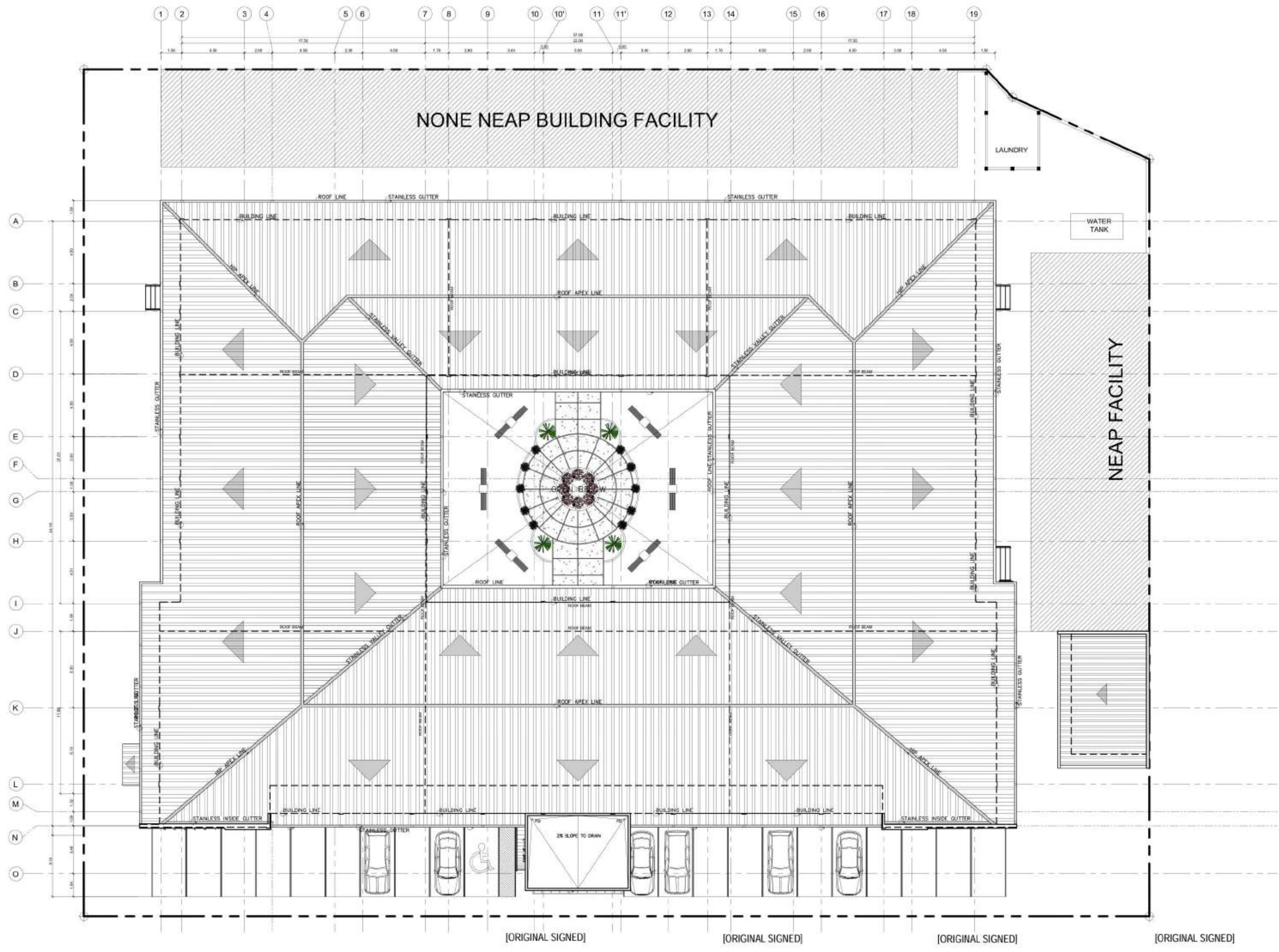


3 L O C A T I O N M A P
AR 101 SCALE NTS

TABLE OF CONTENTS		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAY
SHEET NO.	SHEET CONTENTS	OFFICE OF THE BUILDING OFFICIAL DISTRICT / CITY / MUNICIPALITY
ARCHITECTURAL		LAND USE & ZONING
AR-101	PERSPECTIVE	
	VICINITY MAP	
	LOCATION MAP	
AR-201	SITE DEVELOPMENT PLAN	
AR-301	GROUND FLOOR PLAN	
AR-302	ROOF PLAN	
AR-401	ELEVATIONS	
AR-402	SECTIONS	
AR-501	REFLECTED CEILING PLAN	
AR-601	SCHEDULE OF FINISHES	
AR-602	SCHEDULE DOOR AND WINDOWS	
AR-701	SPANDREL DETAILS	
AR-731	DETAILS OF TOILET 1	
AR-732	DETAILS OF TOILET 2 (1)	
AR-733	DETAILS OF TOILET 2 (2)	
AR-734	DETAILS OF MESS HALL COMMON TOILET (1)	
AR-735	DETAILS OF MESS HALL COMMON TOILET (2)	
AR-736	DETAILS OF MESS HALL COMMON TOILET (3)	
PLUMBING		LINE AND GARDE
PL-101	PROPOSED WATERLINE SYSTEM	
PL-102	WATERLINE ZONE 1 BLOW-UP (1)	
PL-103	WATERLINE ZONE 1 BLOW-UP (2)	
PL-104	WATERLINE ZONE 2 BLOW-UP	
PL-105	WATERLINE ZONE 3 BLOW-UP	
PL-106	PROPOSED WATERLINE SYSTEM ISOMETRIC	
PL-107	WATERLINE ZONE 1 BLOW-UP ISOMETRIC	
PL-108	WATERLINE ZONE 1 BLOW-UP DETAILS ISOMETRIC	
PL-109	WATERLINE ZONE 2 BLOW-UP ISOMETRIC	
PL-110	WATERLINE ZONE 2 BLOW-UP DETAILS ISOMETRIC	
PL-111	WATERLINE ZONE 3 BLOW-UP AND DETAILS ISOMETRIC	
PL-201	PROPOSED SANITARY SYSTEM	ARCHITECTURAL
PL-202	SANITARYLINE ZONE 1 BLOW-UP AND DETAILS	
PL-203	SANITARYLINE ZONE 2 BLOW-UP AND DETAILS	
PL-204	SANITARYLINE ZONE 3 BLOW-UP AND DETAILS	
PL-205	SANITARYLINE ZONE 4 BLOW-UP (1)	
PL-206	SANITARYLINE ZONE 4 BLOW-UP AND DETAILS (2)	
PL-207	SANITARYLINE COMMON PIPE LAYOUT	
PL-208	PROPOSED SANITARY SYSTEM ISOMETRIC	
PL-209	SANITARYLINE ZONE 1 BLOW-UP AND DETAILS ISOMETRIC	
PL-210	SANITARYLINE ZONE 2 BLOW-UP AND DETAILS ISOMETRIC	
PL-211	SANITARYLINE ZONE 3 BLOW-UP AND DETAILS ISOMETRIC	
PL-212	SANITARYLINE ZONE 4 BLOW-UP ISOMETRIC	
PL-213	SANITARYLINE ZONE 4 BLOW-UP DETAILS ISOMETRIC	
		STRUCTURAL
		SANITARY
		ELECTRICAL
		MECHANICAL

	PREPARED BY :	PREPARED BY :	PREPARED BY :	PREPARED BY :	CHECKED BY :	RECOMMENDING APPROVAL :	APPROVED BY :	PROJECT TITLE :	OWNER :	SHEET NO. :
	[ORIGINAL SIGNED] AR. ANJO H. RAQUENO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	[ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	[ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	[ORIGINAL SIGNED] ENGR. JAWACA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	[ORIGINAL SIGNED] DR. EDUARDA M. ZAPANIA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	[ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALVAR, BINTANG	DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A SHEET CONTENTS : AS SHOWN	101 AR	

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE VALID FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING, EQUIPMENT OR SYSTEM, AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, SPECIFICATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTOR THEREOF IS FIRST SECURED, AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENTIAL MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENTS AND MINISTRIAL REGULATIONS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7900.

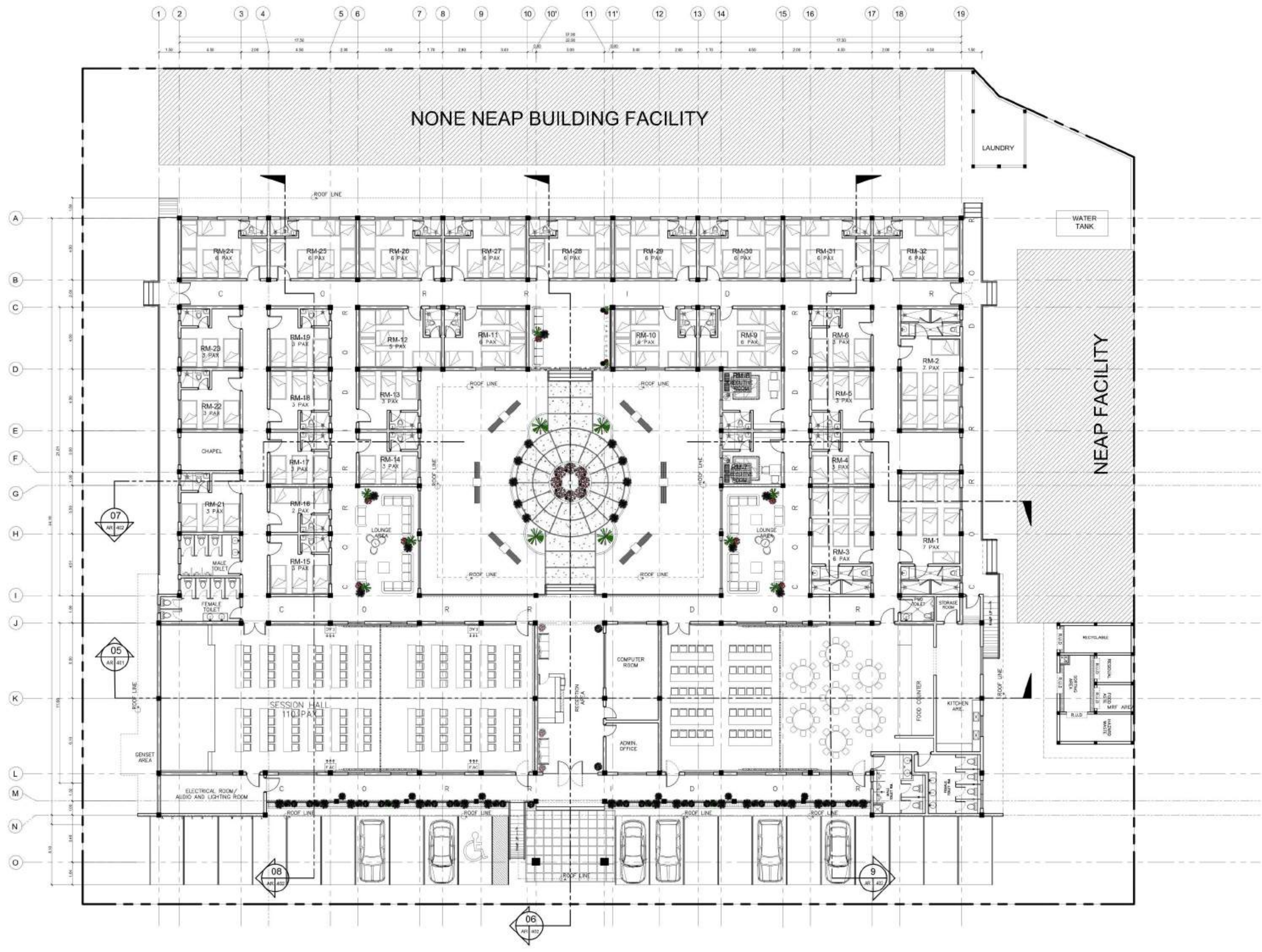


1 SITE DEVELOPMENT PLAN
AR 201 SCALE 1:175MTS

LEGENDS
NOTES
REPLAN
DRAWING PHASE

	PREPARED BY : [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO <small>REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PREPARED BY : [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. <small>REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PREPARED BY : [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS <small>REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE <small>REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	RECOMMENDING APPROVAL : [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA <small>CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	APPROVED BY : [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II <small>REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PROJECT TITLE : RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR <small>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALAY, BATAVIA</small>	OWNER : DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A SHEET CONTENTS : AS SHOWN	SHEET NO. : 201 AR
--	---	---	---	--	---	---	---	---	---------------------------------

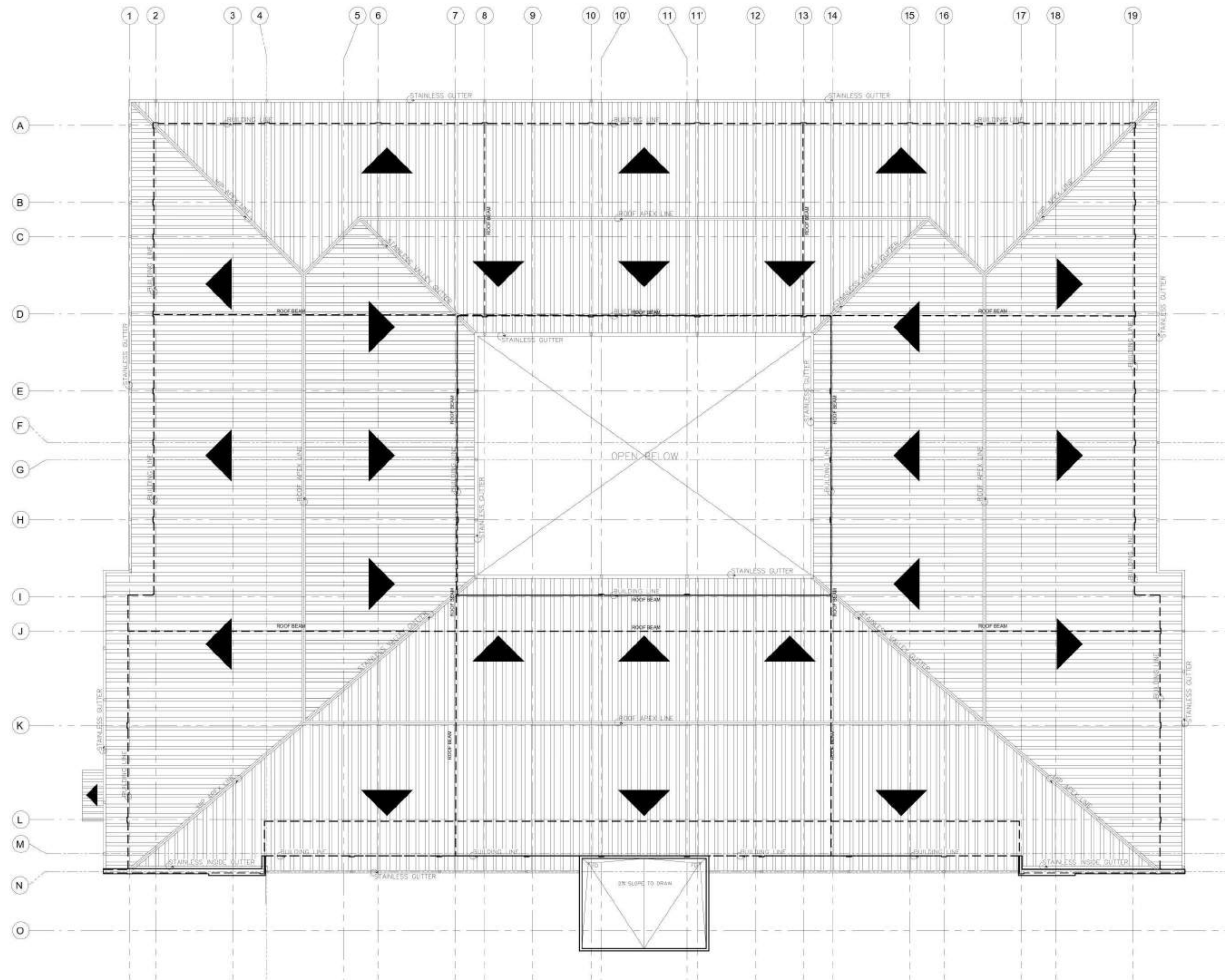
NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBILITY CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY FEES AND MATERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



1 NEAP PROPOSED FURNITURE & FIXTURE LAYOUT FLOOR PLAN
 AR 301 SCALE 1:175METS

LEGENDS
NOTES
REVISION
DRAWING PHASE

	PREPARED BY : [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO <small>REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PREPARED BY : [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. <small>REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS <small>REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAWAICA ROSE G. ROLLOQUE <small>REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	RECOMMENDING APPROVAL : [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA <small>CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	APPROVED BY : [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II <small>REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PROJECT TITLE : RELO-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR <small>GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALIBU, BATAVIA</small>	OWNER : DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO. : 301 SHEET CONTENTS : AS SHOWN AR
	<small>NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.</small>								



2 NEAP ROOF PLAN
SCALE 1:150MTS

LEGENDS

NOTES

KEYPLAN

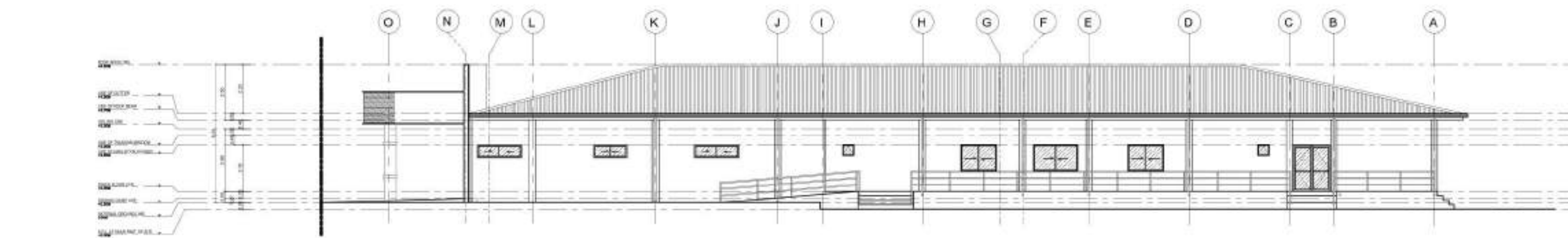
DRAWING PHASE

	PREPARED BY: [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO <small>REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. <small>REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS <small>REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA <small>REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II <small>REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PROJECT TITLE: <small>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION: MALABO, BANGAL</small>	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO. 302
	SHEET CONTENTS: AS SHOWN						AR 4	

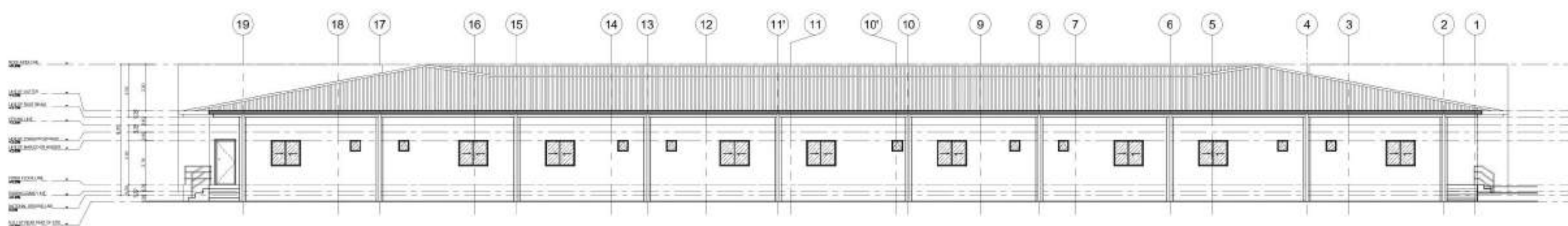
NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENCE MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENTS AND MINISTRIAL REGULATIONS OF THE GOVERNMENT AGENCY, FURTHER EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7906.



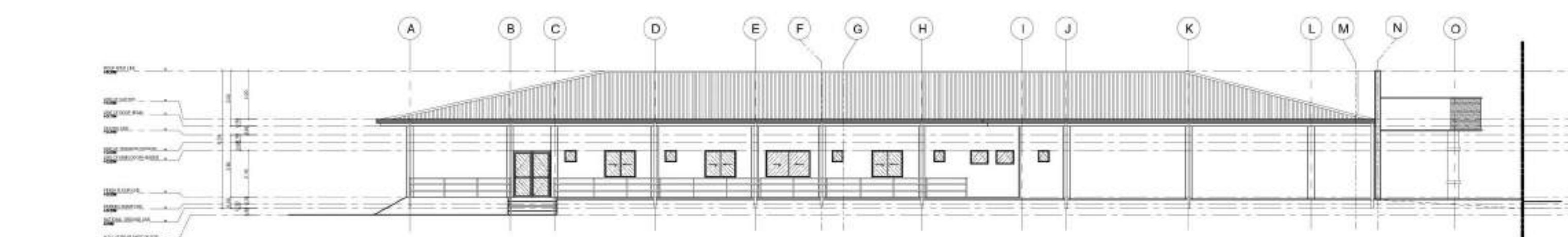
1 FRONT ELEVATION
SCALE 1:175METS



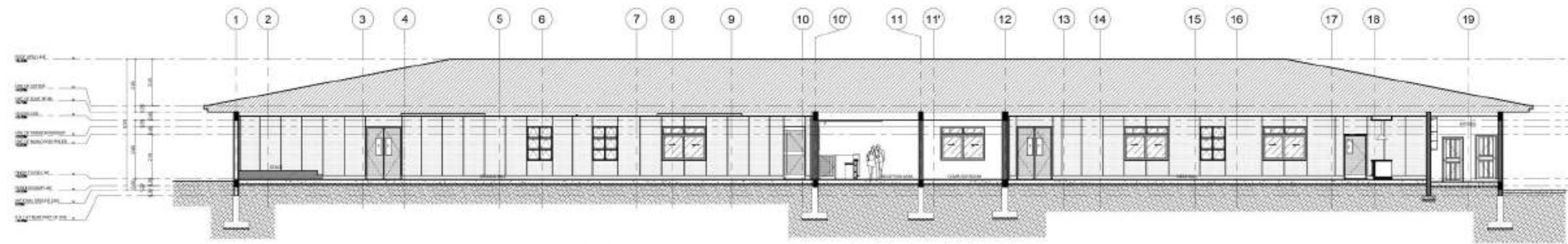
2 RIGHT SIDE ELEVATION
SCALE 1:175METS



3 REAR ELEVATION
SCALE 1:175METS



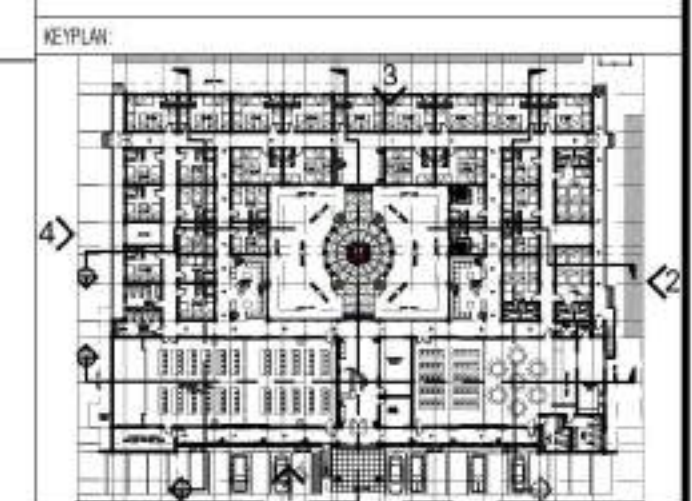
4 LEFT SIDE ELEVATION
SCALE 1:175METS



5 SECTIONAL ELEVATION
SCALE 1:175METS

LEGENDS

NOTES



DRAWING PHASE



PREPARED BY :
[ORIGINAL SIGNED]
AR. ANJO H. RAQUEÑO
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT II (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENR. EDILBERTO A. DAMILES JR.
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENR. JAMES MATWILL E. ABALOS
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY :
[ORIGINAL SIGNED]
ENR. JAWAICA ROSE G. ROLLOQUE
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

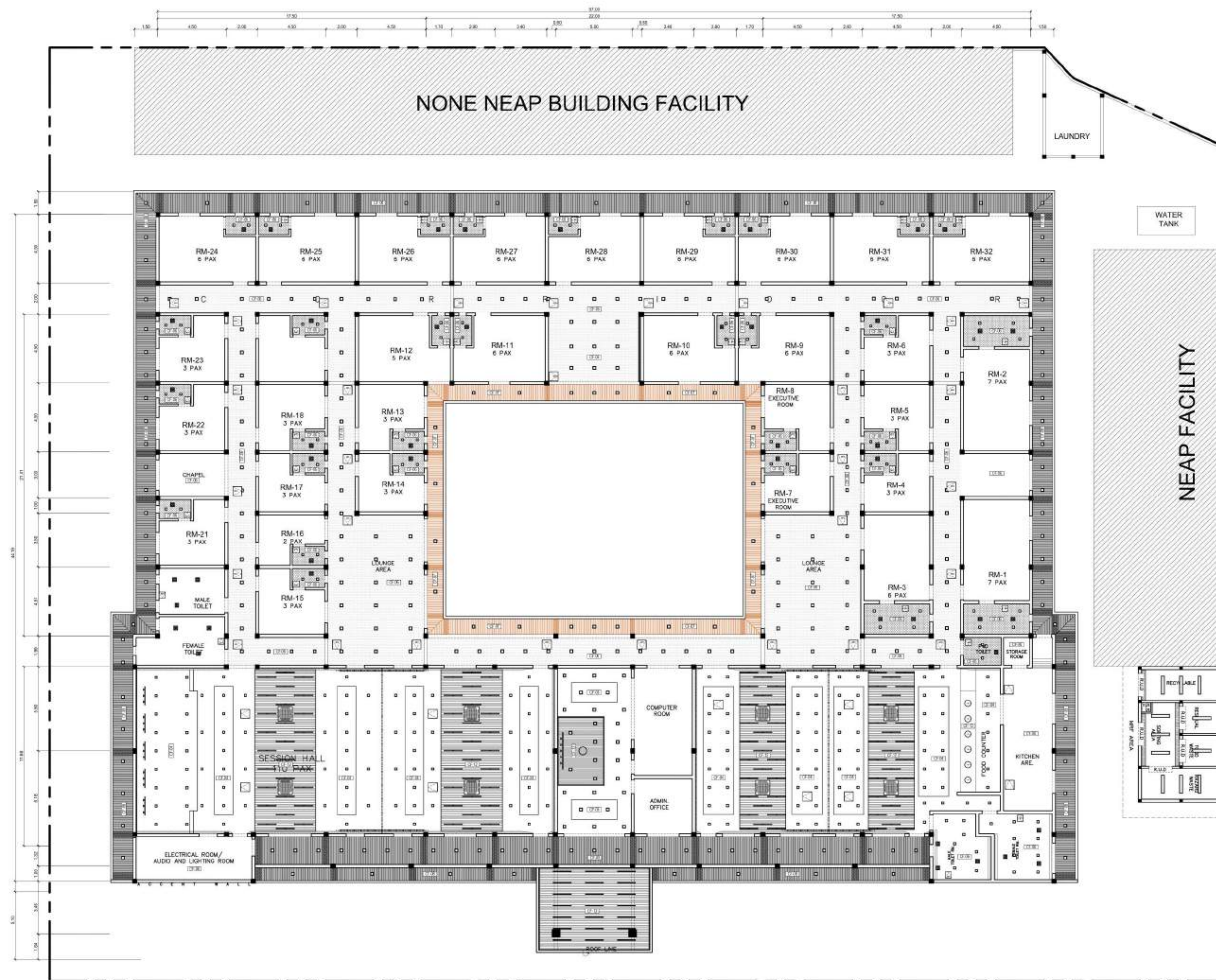
RECOMMENDING APPROVAL :
[ORIGINAL SIGNED]
DR. EDUARDA M. ZAPANIA
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY :
[ORIGINAL SIGNED]
ATTY. ALBERTO T. ESCOBARTE, CESO II
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE :
REL-C-NEAP WATERLINE AND
SANITARY SYSTEM UPGRADE
AND OTHER VARIOUS REPAIR
GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES
LOCATION : MALABO, MATAGAS

OWNER :
DEPARTMENT OF EDUCATION
REGIONAL OFFICE IV-A
SHEET CONTENTS :
AS SHOWN
SHEET NO. :
401
AR

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY FIDELITY AND BONDS REQUIRED BY THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7900.



LEGENDS			
	MANHOLE		CEILING EXHAUST
	PINLIGHT		SUSPENDED LIGHT
	CEILING EXHAUST		TRACK LIGHT
	T5 LIGHTS		DIFFUSE LINEAR LIGHT

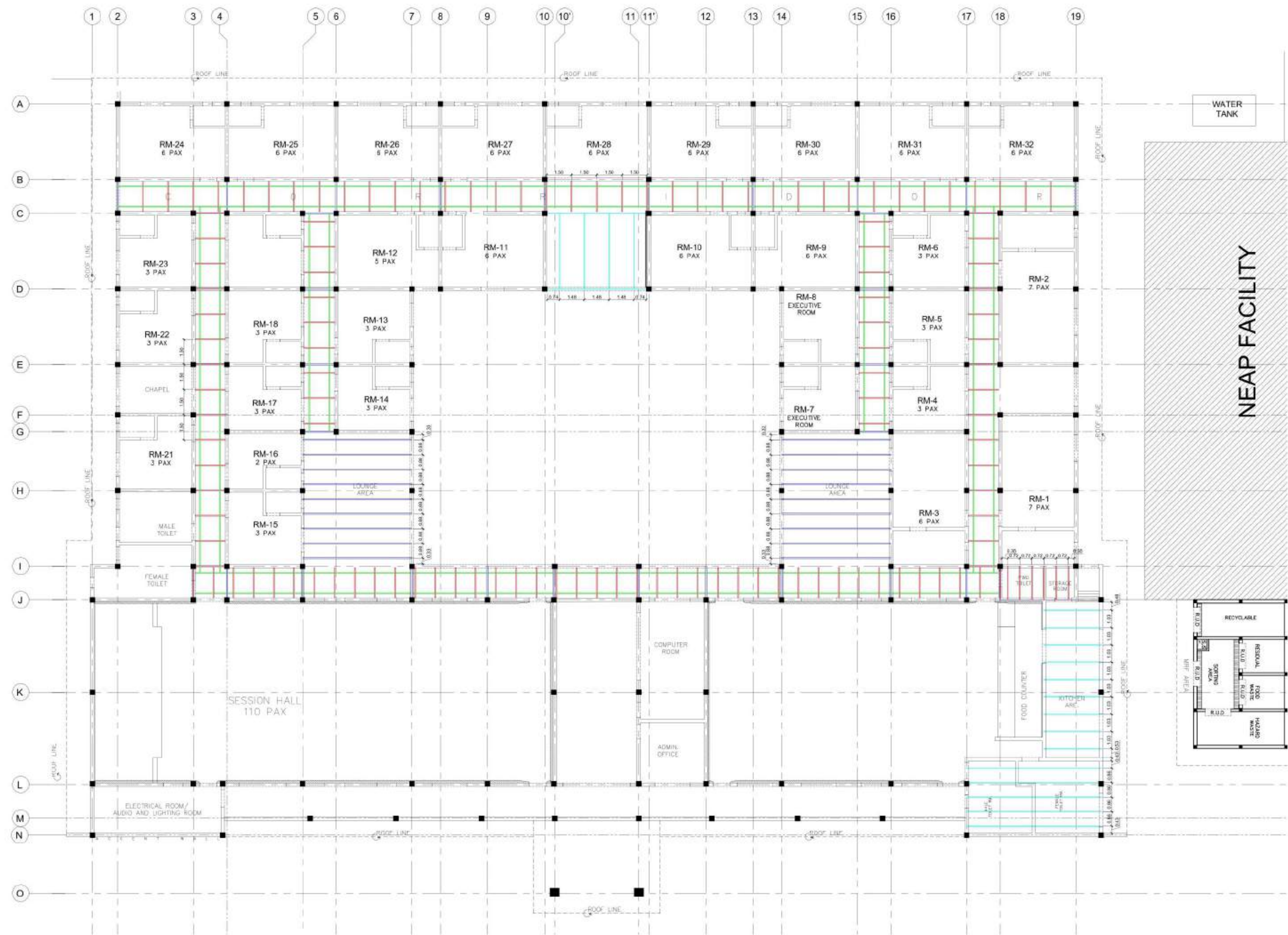
CEILING FINISHES
 CF-00 = NO CEILING MATERIAL.
 CF-01 = POURED CONCRETE OFF FORM.
 CF-02 = POURED CONCRETE OFF FORM SKIM COAT FLAT PAINTED FINISH.
 CF-03 = POURED CONCRETE OFF FORM SKIM COAT ELASTOMERIC WEATHERPROOF COATING.
 CF-04 = 12MM THK. GYPSUM BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING.
 CF-05 = 12MM THK. MOISTURE RESISTANT GYPSUM BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING.
 CF-06 = 12MM THK. FIBER CEMENT BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING.
 CF-07 = 150mm x LENGTH SPANDREL BROWN WITH WOOD GRAIN DESIGN (SHADE AND DESIGN FOR APPROVAL).
 CF-08 = 150MM X LENGTH SPANDREL WHITE DESIGN (SHADE AND DESIGN FOR APPROVAL).
 CF-09 = ALUMINUM COMPOSITE PANEL (ACP) ON STANDARD ALUMINUM FRAMING (COLOR/SHADE SUBJECT FOR APPROVAL).
 CF-10 = POLYVINYL CHLORIDE (PVC) CEILING ON STANDARD METAL FURRING SUPPORT (COLOR/SHADE SUBJECT FOR APPROVAL).
 CF-11 = WOOD PLASTIC COMPOSITE (WPC) CEILING ON STANDARD METAL FURRING SUPPORT (COLOR/SHADE SUBJECT FOR APPROVAL).
 CF-12 = 2"x4" BUFFLE CEILING ON STANDARD HANGING SYSTEM (COLOR/SHADE SUBJECT FOR APPROVAL).
 CF-13 = LAMINATE ON 20MM THK. MARINE PLYWOOD BACKING ON STANDARD HANGING SUPPORTS.
 CF-0A = AS IS AS PER ACTUAL BUT REPAINTED WHITE FINISHED.

- NOTES**
- BEDROOM REFLECTED CEILING PLAN IS AS IS AS PER ACTUAL, LIGHTING LAYOUT IS ALSO AS IS.
 - FOR ANY CLARIFICATION VERIFY ARCHITECT OR ENGINEER IN CHARGE.
 - FOR CEILING FRAMING SUBMIT METHOD OF INSTALLATION PRIOR TO INSTALLATION FOR EVALUATION IF MATCH ON THE REQUIRED CEILING FRAMING.

1 NEAP PROPOSED MASTER REFLECTED CEILING PLAN
 AR 501 SCALE 1:175METS

PREPARED BY :	PREPARED BY :	PREPARED BY :	CHECKED BY :	RECOMMENDING APPROVAL :	APPROVED BY :	PROJECT TITLE :	OWNER :	SHEET NO. :
 [ORIGINAL SIGNED] AR. ANJO H. RADEÑO <small>REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	 [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. <small>REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	 [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS <small>REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	 [ORIGINAL SIGNED] ENGR. JAMICA ROSE G. ROLLOQUE <small>REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	 [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA <small>CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	 [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II <small>REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR <small>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALABAR, BATAVIA</small>	DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A SHEET CONTENTS : AS SHOWN	501 AR

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE - IT SHALL BE VALID FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MATERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, CONCERNING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



LEGENDS

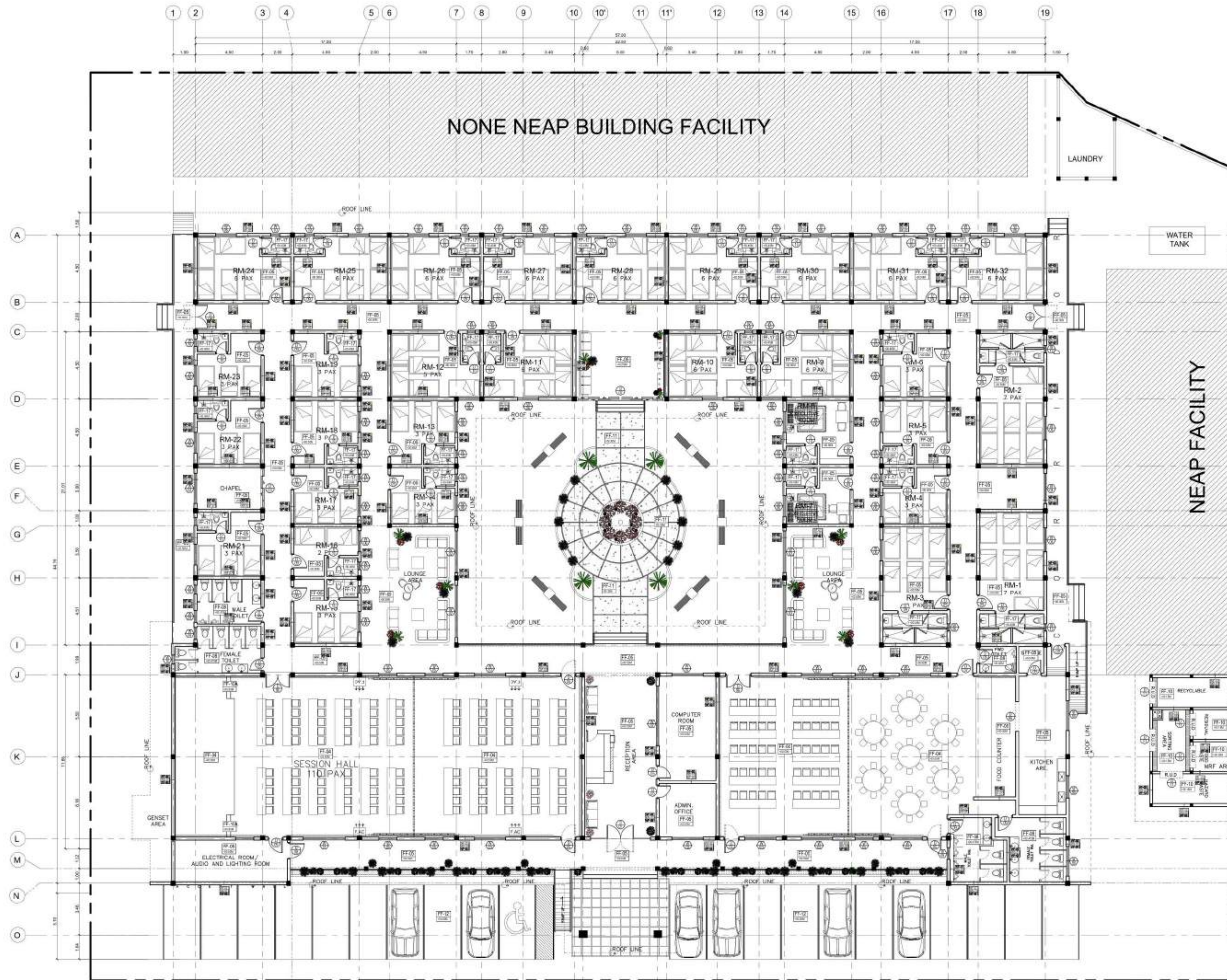
CEILING FRAMING

■	L 50 X 50 X 3MM
■	LC 75 X 50 X 15 X 2.5MM
■	LC 100 X 50 X 15 X 2.5MM
■	LC 150 X 65 X 20 X 2.0MM

- NOTES**
1. PROVIDE INSPECTION PRIOR TO INSTALLATION OF METAL FURRING OR ENCLOSURE OF CEILING WITH THE REGIONAL ARCHITECT OR ENGINEER. FAILURE TO COMPLY WILL NOT BE ACKNOWLEDGE AS ACCOMPLISHMENT.
 2. FOR ANY CONFLICT FOR MOUNTING OF THE CEILING FRAMING MUST BE COORDINATED WITH THE REGIONAL ARCHITECT OR ENGINEER.
 3. ALL CHIPPED PARTS OF MASONRY WALL AND STRUCTURAL MEMBERS OF THE BUILDING MUST REPAIR ON ITS ORIGINAL FORM AND SHAPE.
 4. ALL STEEL FRAMING AND ALL WELDING CONNECTIONS MUST BE REPAINTED TO ENSURE A RUST RESISTANT WORKMANSHIP.

1 PROPOSED CEILING FRAMING PLAN
1:100MMS

	PREPARED BY : [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO <small>REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PREPARED BY : [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. <small>REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS <small>REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	RECOMMENDING APPROVAL : [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA <small>CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	APPROVED BY : [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II <small>REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PROJECT TITLE : RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR <small>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALIBU, BANGALAS</small>	OWNER : DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A SHEET CONTENTS : AS SHOWN	SHEET NO. 502 AR
	<small>NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE VALIDABLE FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICAL, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MATERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION, HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7905.</small>							



- LEGENDS**
- WF-00 WS-00 WF-00
FF-00 +00.00M
CF-00 +00.00M
- D 09 W 00
- FLOOR FINISHES**
 FF-04 = 1200MM X 600MM HOMOGENOUS TILES (VERIFY ARCHITECT)
 FF-05 = 600MM X 600MM HOMOGENOUS TILES (VERIFY ARCHITECT)
 FF-08 = 600MM X 600MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
 FF-10 = 300MM X 300MM VITRIFIED CERAMIC TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
 FF-11 = POURED CONCRETE STRAIGHT TO SMOOTH FINISH.
 FF-12 = POURED CONCRETE WITH TOPPING FINISH TO BE EPOXY PAINTED.
 FF-17 = 300MM X 300MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT).
- WALL SCHEDULE**
 WS-1 = 150MM CHB WALL ON TIE BEAM WITH 25MM PLASTER EACH FACE.
 WS-2 = 100MM CHB WALL ON TIE BEAM WITH 25MM PLASTER EACH FACE.
- WALL FINISHES**
 WF-02 = PLAIN CEMENT WITH SKIMCOAT PAINTED FINISH.
 WF-03 = PLAIN CEMENT WITH ELASTOMERIC WEATHERPROOF COATING FINISH.
 WF-05 = ACOUSTIC WALL PANEL WITH WOOD ACCENT LININGS.
 WF-07 = 600MM X 600MM HOMOGENOUS WALL TILES (VERIFY ARCHITECT)
 WF-08 = 300MM X 600MM HOMOGENOUS WALL TILES (VERIFY ARCHITECT)
 WF-09 = WOOD PLASTIC COMPOSITE PANELS (WPC)
 WF-12 = 1.80M HIGH 300MM X300MM CERAMIC GLAZED TILES, THE REST IN GERMICIDAL PAINT FINISH.
 WF-16 = 20mm Thk. SYNTHETIC TILES (size to verify on plan).
 WF-17 = 200mmX400mm HOMOGENOUS WALL TILES (VERIFY ARCHITECT).

1 NEAP PROPOSED DOOR/WINDOW AND SPECS PLAN
 AR 601 SCALE 1:175METS

	PREPARED BY : [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO <small>REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PREPARED BY : [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. <small>REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS <small>REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE <small>REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	RECOMMENDING APPROVAL : [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA <small>CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	APPROVED BY : [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II <small>REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PROJECT TITLE : RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR <small>GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALABO, BATAVIA</small>	OWNER : DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A SHEET CONTENTS : AS SHOWN	SHEET NO. 601 AR
	<small>NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE - IT SHALL BE VALIDABLE FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY FEE AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7926.</small>								

TABLE OF SPECIFICATIONS	TAGS	AREAS
200MM X 200MM LITRA TILES, 3000psi	FF-01	MESS HALL
100MM X 100MM X 100MM PAVEN BLOCKS, 3000psi	FF-02	MESS HALL
POURED CONCRETE WITH TYPICAL BRIDGE FINISH SCRATCH	FF-03	MESS HALL
1200MM X 600MM HOMOGENOUS TILES (VERIFY ARCHITECT)	FF-04	MESS HALL
600MM X 600MM HOMOGENOUS TILES (VERIFY ARCHITECT)	FF-05	MESS HALL
300MM X 600MM HOMOGENOUS TILES (VERIFY ARCHITECT)	FF-06	MESS HALL
1200MM X 600MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-07	MESS HALL
600MM X 600MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-08	MESS HALL
300MM X 600MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-09	MESS HALL
300MM X 300MM VITREOUS CERAMIC TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-10	MESS HALL
POURED CONCRETE STRAIGHT TO SMOOTH FINISH EXPOSED AGGREGATE	FF-11	MESS HALL
POURED CONCRETE STRAIGHT TO SMOOTH FINISH	FF-12	MESS HALL
POURED CONCRETE WITH TOPPING FINISH TO BE EPOXY PAINTED	FF-13	MESS HALL
PLAIN CEMENT FINISH WITH ANGLUAR NOSING	FF-14	MESS HALL
POURED CONCRETE WITH 4.00% TORCH-ON WATERPROOFING THERMAL INSULATION, 50MM THK AND FIBER MIX FOR TOPPING (ROOF DECK)	FF-15	MESS HALL
POURED CONCRETE WITH (CEMENTITIOUS WATERPROOFING)	FF-16	MESS HALL
300MM X 300MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-17	MESS HALL
PLAIN CEMENT FINISH	WF-1	MESS HALL
PLAIN CEMENT WITH SHIMCOAT PAINTED FINISH	WF-2	MESS HALL
PLAIN CEMENT WITH ELASTOMERIC WEATHERPROOF COATING FINISH	WF-3	MESS HALL
SHIMCOAT PAINTED FINISH (COLOR TO VERIFY THE INCHARGE OF THE PROJECT)	WF-4	MESS HALL
ACOUSTIC WALL PANEL WITH WOOD ACCENT LININGS	WF-5	MESS HALL
1200MM X 600MM HOMOGENOUS WALL TILES (VERIFY ARCHITECT)	WF-6	MESS HALL
600MM X 600MM HOMOGENOUS WALL TILES (VERIFY ARCHITECT)	WF-7	MESS HALL
300MM X 600MM HOMOGENOUS WALL TILES (VERIFY ARCHITECT)	WF-8	MESS HALL
WOOD PLASTIC COMPOSITE PANELS (WPC)	WF-9	MESS HALL
ALUMINUM COMPOSITE PANELS (ACP)	WF-10	MESS HALL
1.80M HIGH 3000MM X 3000MM HOMOGENOUS TILES, THE REST N 90MM GLASS PAINT FINISH	WF-11	MESS HALL
1.80M HIGH 3000MM X 3000MM CERAMIC GLAZED TILES, THE REST IN CERAMIC PAINT FINISH	WF-12	MESS HALL
PLAIN CEMENT WITH CAPILARY WATERPROOFING	WF-13	MESS HALL
VANCOX SUPER CAPILARY WITH EPOXY PORCELAIN LINING (FOOD GRADE), NON TOXIC TYPE OF WATERPROOFING	WF-14	MESS HALL
MOISTURE PROTECTION WITH BITUMSTONE	WF-15	MESS HALL
20mm THK SYNTHETIC TILES (ask to verify on plan)	WF-16	MESS HALL
200mm X 400mm HOMOGENOUS WALL TILES (VERIFY ARCHITECT)	WF-17	MESS HALL
AS IS AS PER ACTUAL BUT REPAINTED FINISH	CF-0A	MESS HALL
NO CEILING MATERIAL	CF-0B	MESS HALL
POURED CONCRETE OFF FORM	CF-0C	MESS HALL
POURED CONCRETE OFF FORM SHIM COAT FLAT PAINTED FINISH	CF-0D	MESS HALL
POURED CONCRETE OFF FORM SHIM COAT ELASTOMERIC WEATHERPROOF COATING	CF-0E	MESS HALL
12MM THK GYPSUM BOARD PAINTED FINISH ON STANDARD METAL FURRING FRAMING	CF-0F	MESS HALL
12MM THK MOISTURE RESISTANT GYPSUM BOARD PAINTED FINISH ON STANDARD METAL FURRING FRAMING	CF-0G	MESS HALL
12MM THK FIBER CEMENT BOARD PAINTED FINISH ON STANDARD METAL FURRING FRAMING	CF-0H	MESS HALL
150mm x LENGTH BRANDREL BROWN WITH WOOD GRAIN DESIGN (SHADE AND DESIGN FOR APPROVAL)	CF-0I	MESS HALL
150mm x LENGTH BRANDREL WHITE DESIGN (SHADE AND DESIGN FOR APPROVAL)	CF-0J	MESS HALL
ALUMINUM COMPOSITE PANEL (ACP) ON STANDARD ALUMINUM FRAMING (COLOR SHADE SUBJECT FOR APPROVAL)	CF-0K	MESS HALL
POLYVINYL CHLORIDE (PVC) CEILING ON STANDARD METAL FURRING SUPPORT (COLOR SHADE SUBJECT FOR APPROVAL)	CF-0L	MESS HALL
WOOD PLASTIC COMPOSITE (WPC) CEILING ON STANDARD METAL FURRING SUPPORT (COLOR SHADE SUBJECT FOR APPROVAL)	CF-0M	MESS HALL
224" BUFILE CEILING ON STANDARD HANGING SYSTEM (COLOR SHADE SUBJECT FOR APPROVAL)	CF-0N	MESS HALL
LAMINATE ON 20MM THK MARINE PLYWOOD BACKING ON STANDARD HANGING SUPPORTS	CF-0O	MESS HALL

DESIGNATION	DOOR / WINDOW TYPE	LOCATION	JAMB	LOCKSET/DEVICE	HINGES	NO. OF SETS	REMARKS
D-01	12MM THK. TEMPERED GLASS (FRAMELESS) W/ FROSTED STICKER	MAIN ENTRANCE	N/A	38MMØ S.S PIPES ON MIRROR FINISH, FLOOR CHECK	PIVOT HINGES	1 SET	NEW PROPOSAL
D-02	ALUMINUM ANALOK FINISH SLIDING DOOR WITH SLIDING WINDOW AND FIXED GLASS	DORMITORY MAIN ENTRANCE	ALUMINUM ANALOK	VERIFY ACTUAL	N/A	1 SET	AS IS AS PER ACTUAL
D-03	ALUMINUM ANALOK FINISH SLIDING DOOR WITH FIXED GLASS	CHAPEL	ALUMINUM ANALOK	VERIFY ACTUAL	N/A	1 SET	AS IS AS PER ACTUAL
D-04	ALUMINUM ANALOK SWING GLASS DOOR	DORMITORY HALLWAY	ALUMINUM ANALOK	VERIFY ACTUAL	N/A	2 SETS	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)
D-05	12MM THK. TEMPERED GLASS W/ FROSTED STICKER	SESSION, MESS HALL, COMPUTER & ADMIN OFFICE	N/A	38MMØ S.S PIPES ON MIRROR FINISH, FLOOR CHECK	PIVOT HINGES	6 SETS	NEW PROPOSAL
D-06	DOUBLE METAL PANEL DOOR WITH ACOUSTIC MATERIAL	SESSION AND MESS HALL	GA#14 GALVANIZED STEEL SINGLE RABBIT JAMB, PAINTED W/ AUTOMOTIVE PAINT FINISH	LEVER TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)	3 SETS	NEW PROPOSAL
D-07	SINGLE METAL PANEL DOOR WITH ACOUSTIC MATERIAL	SESSION AND MESS HALL	GA#14 GALVANIZED STEEL SINGLE RABBIT JAMB, PAINTED W/ AUTOMOTIVE PAINT FINISH	LEVER TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)	1 SET	NEW PROPOSAL
D-08	SINGLE METAL PANEL DOOR	ELECTRICAL ROOM	GA#14 GALVANIZED STEEL SINGLE RABBIT JAMB, PAINTED W/ AUTOMOTIVE PAINT FINISH	LEVER TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)	1 SET	AS IS PER ACTUAL
D-09	SINGLE SOLID WOOD PANEL DOOR	DORMITORY ROOMS	SOLID WOOD SINGLE RABBIT JAMB	DOORKNOB TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)	41 SETS	AS IS PER ACTUAL
D-10	PVC FLUSH DOOR	DORMITORY T&B ROOMS	PVC SINGLE RABBIT JAMB	DOORKNOB TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (3PCS)	28 SETS	AS IS AS PER ACTUAL
D-11	GA#18 GALVALUME SHEET ROLL-UP DOOR	MRF	N/A	MANUAL OPERATED	N/A	5 SETS	NEW PROPOSAL
WS-01	150MM CHB WALL ON THE BEAM.						WITH 25MM PLASTER EACH FACE.
WS-02	100MM CHB WALL ON THE BEAM.						WITH 25MM PLASTER EACH FACE.
W-10	ALUMINUM ANALOK AWNING WINDOW	DORMITORY T&B	ALUMINUM ANALOK	CAM HANDLE LOCK (VERIFY ACTUAL)	STAINLESS 4 BAR HINGES (SIDE OPEN)	34 SETS	AS IS PER ACTUAL

LEGENDS

WF-00 WS-00 WF-00

FF-00 +00.00M

CF-00 +00.00M

D 09

W 00

DESIGNATION	DOOR / WINDOW TYPE	LOCATION	JAMB	LOCKSET/DEVICE	HINGES	NO. OF SETS	REMARKS
W-01	ALUMINUM ANALOK SLIDING WINDOW WITH FIXED TRANSOM	SESSION HALL	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	1 SET	AS IS PER ACTUAL	
W-02	ALUMINUM ANALOK SLIDING WINDOW WITH FIXED TRANSOM	LOUNGE AREA/ BREAK OUT ROOM	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	4 SETS	AS IS PER ACTUAL	
W-03	ALUMINUM ANALOK SLIDING WINDOW WITH FIXED TRANSOM	SESSION/MESS HALL, ADMIN & COMPUTER ROOM	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	8 SETS	AS IS PER ACTUAL	
W-04	ALUMINUM ANALOK SLIDING WINDOW	CHAPEL AND STORAGE AREA	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	2 SETS	AS IS PER ACTUAL	
W-05	ALUMINUM ANALOK 3 LAYER AWNING WINDOW	SESSION AND MESS HALL	ALUMINUM ANALOK CAM HANDLE LOCK (VERIFY ACTUAL)	STAINLESS 4 BAR HINGES (SIDE OPEN)	6 SETS	NEW PROPOSAL	
W-06	ALUMINUM ANALOK SLIDING WINDOW	DORMITORY ROOM	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	32 SETS	AS IS PER ACTUAL	
W-07	ALUMINUM ANALOK FIXED WINDOW	COMPUTER ROOM	ALUMINUM ANALOK	N/A	1 SET	AS IS PER ACTUAL	
W-08	ALUMINUM ANALOK SLIDING WINDOW	KITCHEN AND FEMALE TOILET	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	3 SETS	AS IS PER ACTUAL	
W-09	ALUMINUM ANALOK AWNING WINDOW	COMMON TOILET	ALUMINUM ANALOK CAM HANDLE LOCK (VERIFY ACTUAL)	STAINLESS 4 BAR HINGES (SIDE OPEN)	6 SETS	NEW PROPOSAL	

DepEd MATATAG BACOGON PHILIPPINES

PREPARED BY: [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO

PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAWILES JR.

PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS

CHECKED BY: [ORIGINAL SIGNED] ENGR. JAWAICA ROSE G. ROLLOQUE

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA

APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II

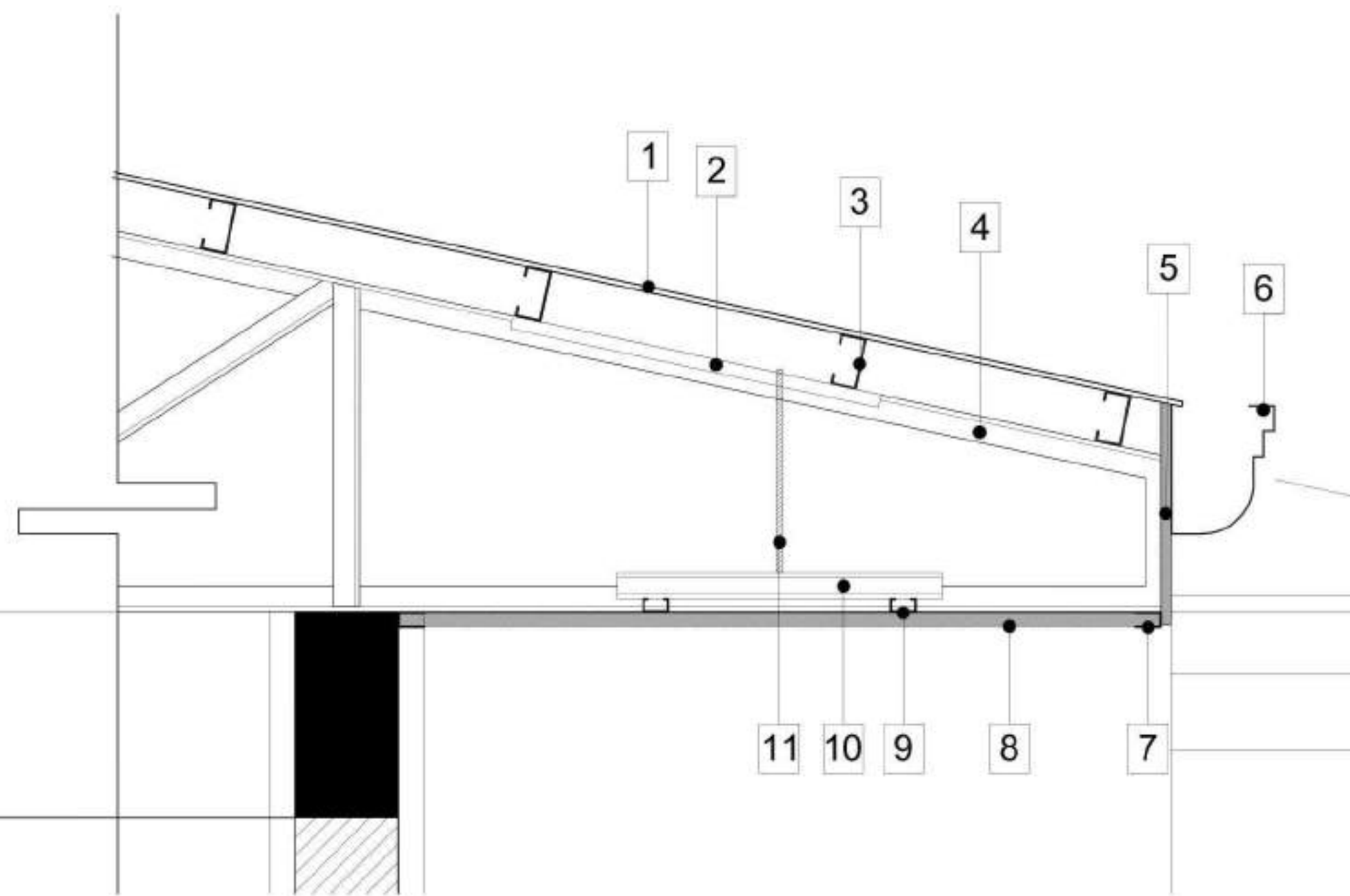
PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR

OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A

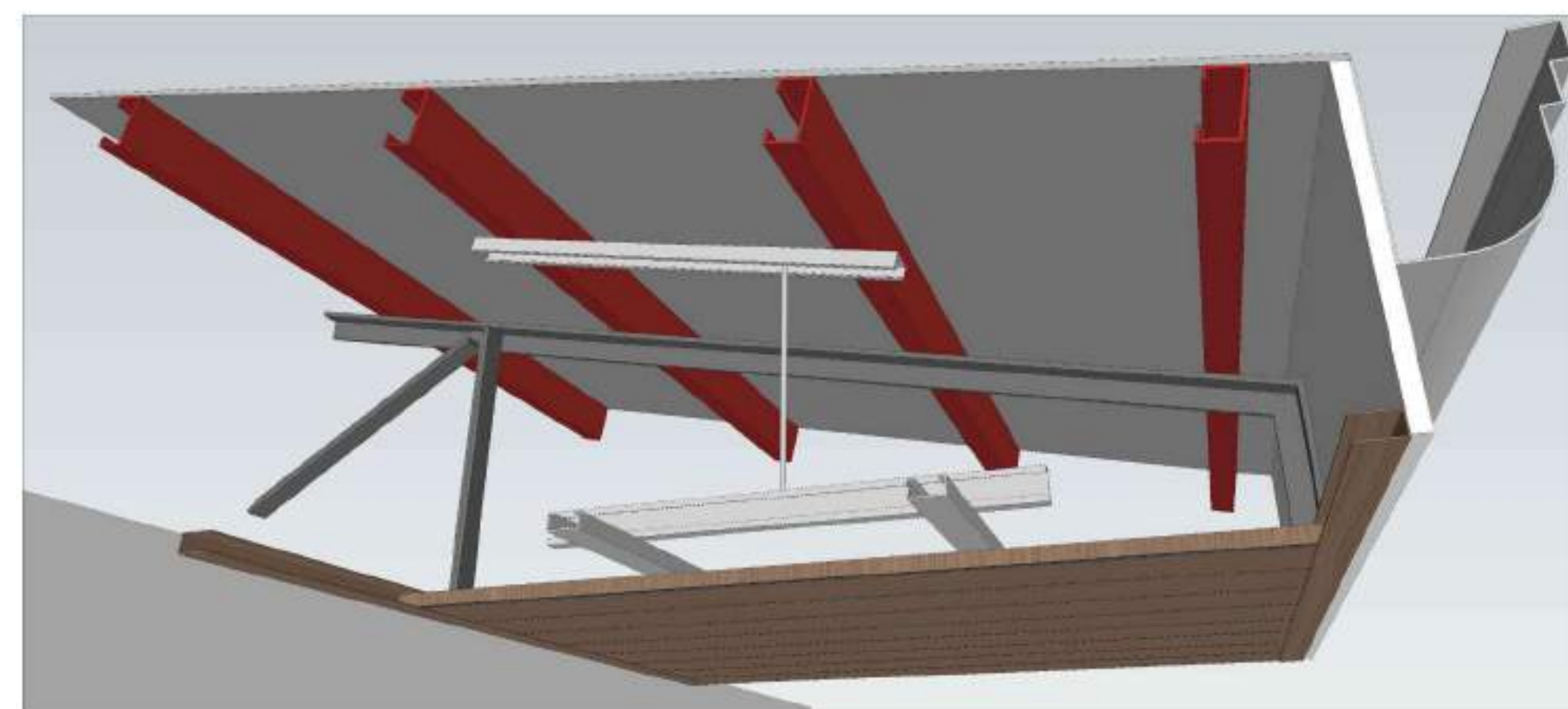
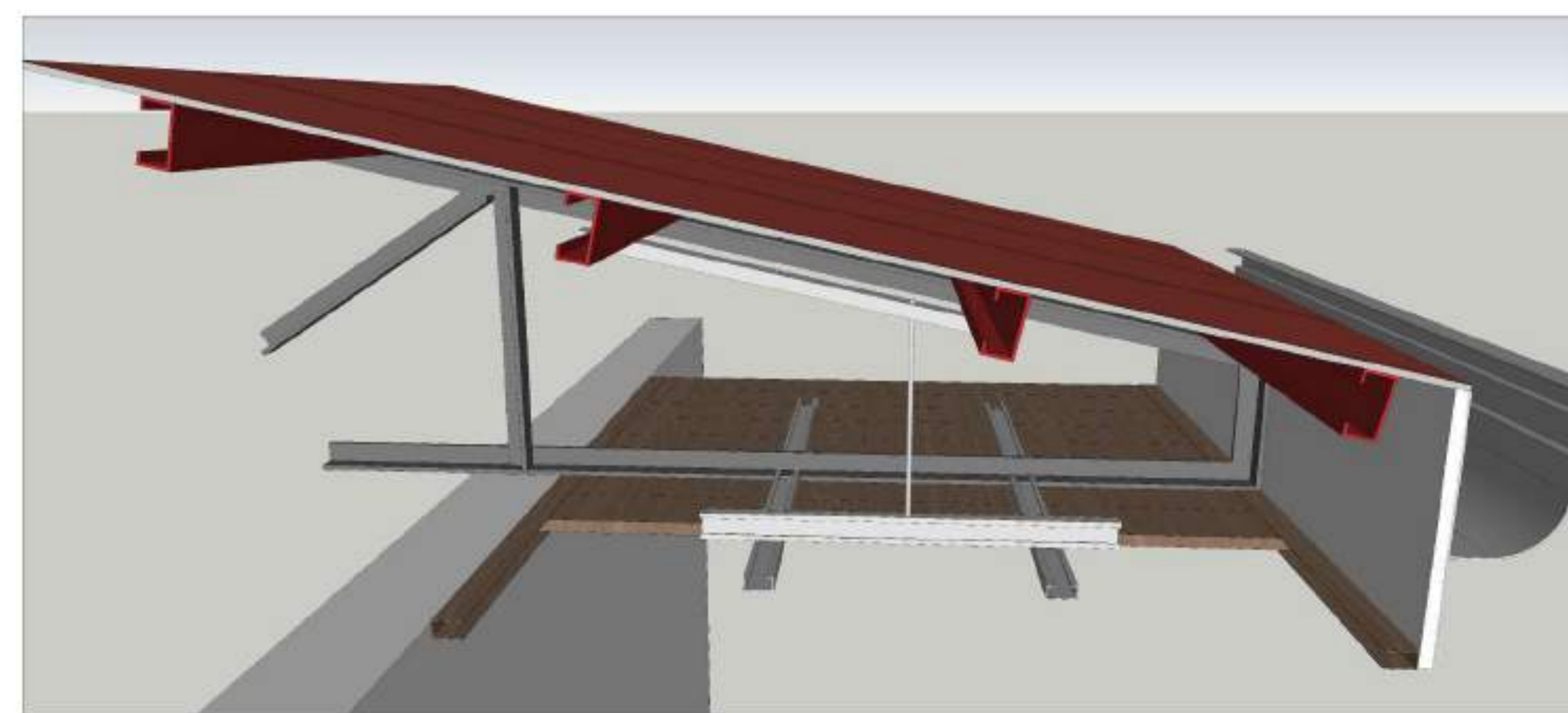
SHEET NO. 602

AS SHOWN

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE, CLAIM, ELECTRICAL, VALUATION OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO IS A REGISTERED ELECTRICAL ENGINEER, AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS CERTIFIED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTERED DESIGN AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7950.



1 SPANDREL SECTION DETAIL
AR 721 SCALE 1:10M TS



2 SPANDREL SECTION DETAIL (3D)
AR 721 N

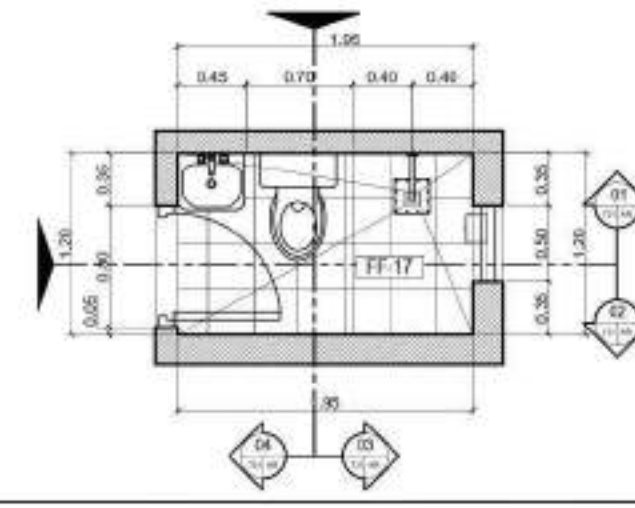
- LEGENDS**
1. GA#24 RIB TYPE ROOFING.
 2. METAL FURRING SUPPORT.
 3. 2"x4" C PURLINS 0.60M ON CENTER.
 4. ANGLE BAR TRUSS FRAMING.
 5. 20mm Thk. Foam Board Senepa.
 6. Stainless Gutter w/ water strainer.
 7. Spandrel End Cap Moulding.
 8. 150mm Spandrel (Normal & Vent).
 9. 0.5mm Thk Metal Furring.
 10. C-Channel Support
 11. 12mm Thk. Threaded Rod Support every 1.50m

- NOTES**
1. BEDROOM REFLECTED CEILING PLAN IS AS IS AS PER ACTUAL. LIGHTING LAYOUT IS ALSO AS IS.
 2. FOR ANY CLARIFICATION VERIFY ARCHITECT OR ENGINEER IN CHARGE.
 3. FOR CEILING FRAMING SUBMIT METHOD OF INSTALLATION PRIOR TO INSTALLATION FOR EVALUATION IF MATCH ON THE REQUIRED CEILING FRAMING.

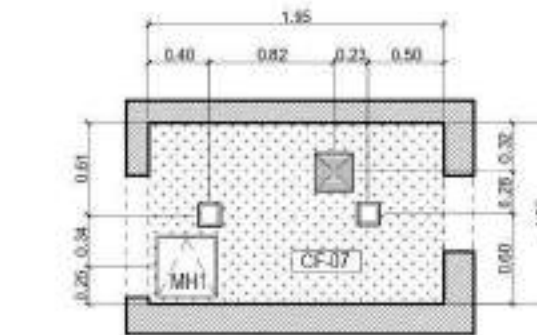
REPLAN

DRAWING PHASE

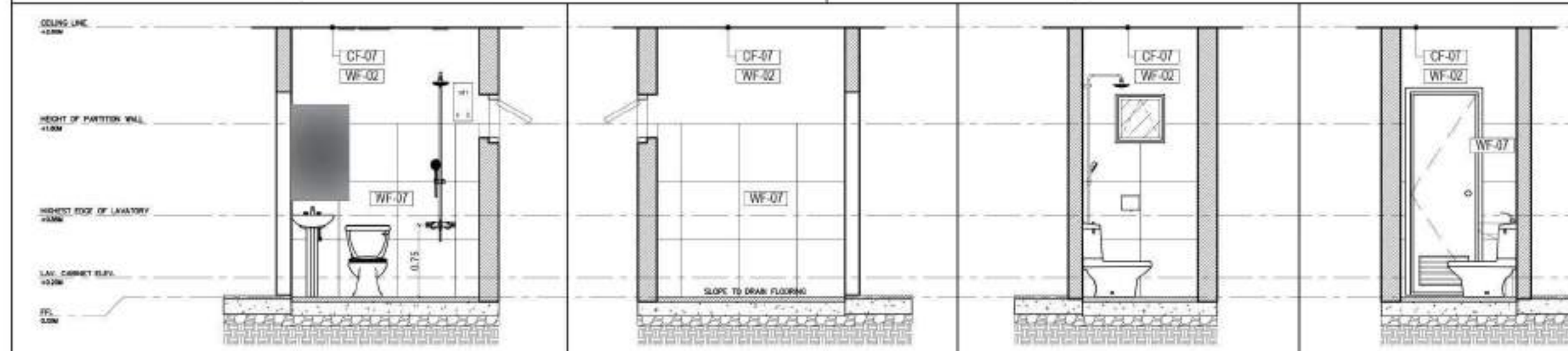
	PREPARED BY : [ORIGINAL SIGNED] AR. ANJO H. RADUEÑO <small>REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PREPARED BY : [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAVILES JR. <small>REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS <small>REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	RECOMMENDING APPROVAL : [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA <small>CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	APPROVED BY : [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II <small>REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PROJECT TITLE : RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR <small>GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALABO, BINTANGAS</small>	OWNER : DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO. : 721 SHEET CONTENTS : AS SHOWN AR
	<p><small>NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING, EQUIPMENT OR SYSTEM, AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, SPECIFICATIONS AND PRESCRIPTIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED, AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENTS AND MINISTRIAL REGULATIONS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7900.</small></p>							



2 BEDROOMS TYPICAL TOILET 1
BLOW-UP PLAN
SCALE: 1:50METS



3 BEDROOMS TYPICAL TOILET 1
REFLECTED CEILING PLAN
SCALE: 1:50METS



4 BEDROOMS TYPICAL TOILET 1
SECTIONAL ELEVATION-1
SCALE: 1:50METS

5 BEDROOMS TYPICAL TOILET 1
SECTIONAL ELEVATION-2
SCALE: 1:50METS

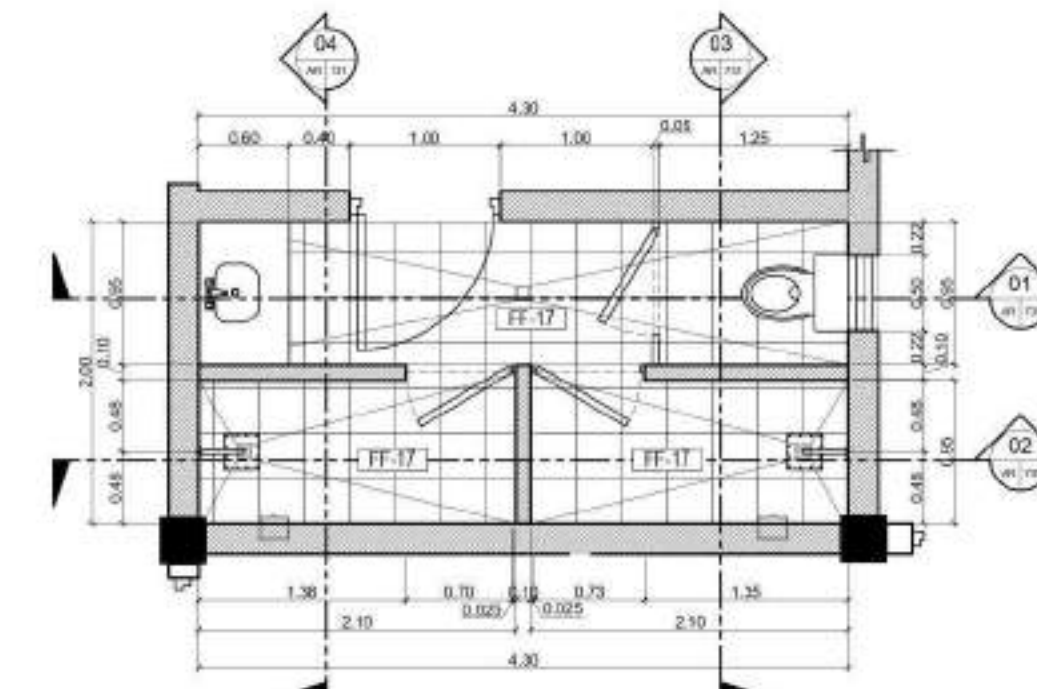
6 BEDROOMS TYPICAL TOILET 1
SECTIONAL ELEVATION-3
SCALE: 1:50METS

7 BEDROOMS TYPICAL TOILET 1
SECTIONAL ELEVATION-4
SCALE: 1:50METS

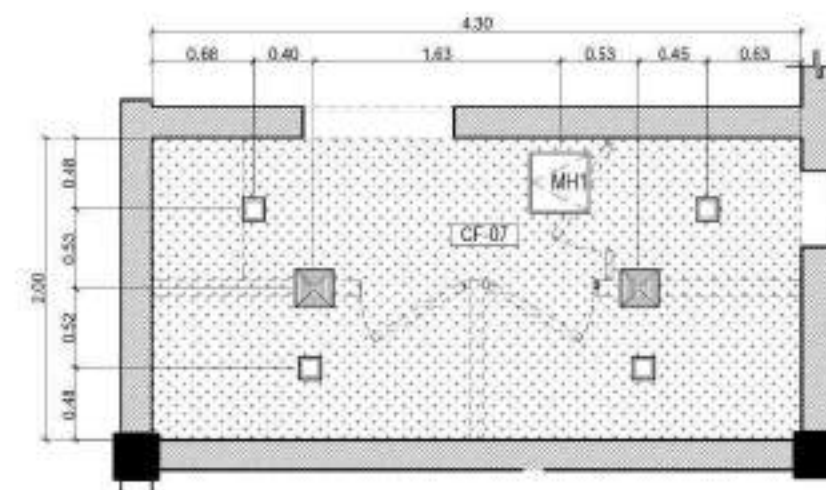
1 BEDROOM TYPICAL TOILET 1
PERSPECTIVE
SCALE: 1:50METS

LEGENDS

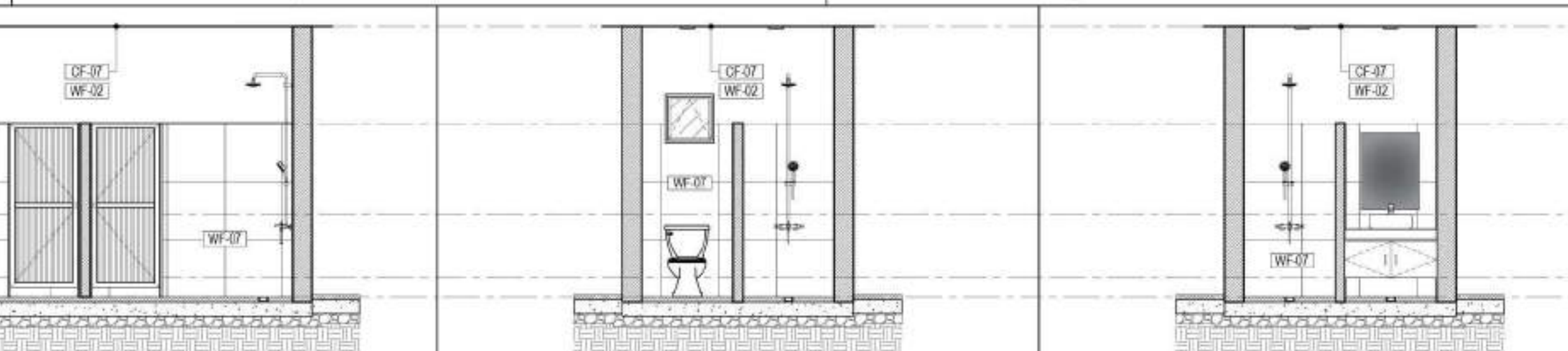
FLOOR FINISHES	
FF-06	600MM X 600MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-17	300MM X 300MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-18	NON-SKD CEMENT FLOORS FINISH WITH 10mm x 10mm HORIZONTAL GROOVE LINES
WALL FINISHES	
WF-02	PLAIN CEMENT WITH SKIMCOAT PAINTED FINISHED
WF-07	600MM X 600MM HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)
WF-16	20mm THK. SYNTHETIC TILES (SIZE TO VERIFY ON PLAN)
WF-17	200mm X 400mm HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)
CEILING FINISHES	
CF-07	12MM THK. FIBER CEMENT BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING



9 BEDROOMS TYPICAL TOILET 2
BLOW-UP PLAN
SCALE: 1:50METS



10 BEDROOMS TYPICAL TOILET 2
REFLECTED CEILING PLAN
SCALE: 1:50METS



11 BEDROOMS TYPICAL TOILET 2
SECTIONAL ELEVATION-1
SCALE: 1:50METS

12 BEDROOMS TYPICAL TOILET 2
SECTIONAL ELEVATION-2
SCALE: 1:50METS

13 BEDROOMS TYPICAL TOILET 2
SECTIONAL ELEVATION-3
SCALE: 1:50METS

14 BEDROOMS TYPICAL TOILET 2
SECTIONAL ELEVATION-4
SCALE: 1:50METS

8 BEDROOMS TYPICAL TOILET 2
PERSPECTIVE
SCALE: 1:50METS

- NOTES
1. ALL TOILET FLOOR TILES MUST BE SLOPE TO DRAIN TOILETS WITH INCORRECT SLOPE OR PONDED PART WILL BE SUBJECT FOR REPAIR C/O OF CONTRACTOR.
 2. ALL ANGLE VALVES FOR WATER CLOSET MUST BE 5-WAY GATE VALVE TO ACCOMMODATE BIDET SPRAY WITH SEPARATE SHUT OFF MECHANISM.
 3. ALL CORNER TILES MUST BE CHAMFERED 45° TO ATTAIN SMOOTH CORNER TERMINATION.
 4. PRESSURE TEST OF WATERLINE PRIOR TO ANY FINISHING WORKS. NO APPROVE PRESSURE TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 5. WATERPROOFING AND FLOOD TESTING PRIOR TO ANY FINISHING WORKS. NO APPROVE FLOOD TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 6. SANITARY AND VENTILATION TESTING AND COMMISSIONING PRIOR TO ANY FINISHING WORKS. NO APPROVE TESTING AND COMMISSIONING OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR DAMAGES ON EMBEDDED PIPINGS DURING INSTALLATION OF TOILET WARES MUST BE COORDINATED TO THE CONTRACTORS PLUMBER TO AVOID REPAIRS.
 7. HANGER SUPPORT FOR CEILING PIPES MUST BE EVERY 1.2M OR LESS WITH COMPLETE SET OF HANGER SUPPORT, TIE WIRE AND METAL FURRING SUPPORT IS NOT ALLOWED.
 8. TOTAL HEIGHT OF LAVATORY MUST BE 0.85M FROM FFL TO THE HIGHEST LIP OF VESSEL TYPE LAVATORY. VERIFY THE ACTUAL HEIGHT OF VESSEL TYPE LAVATORY TO ACHIEVE THE 0.85M REQUIRED HEIGHT.

REPLAN

DRAWING PHASE

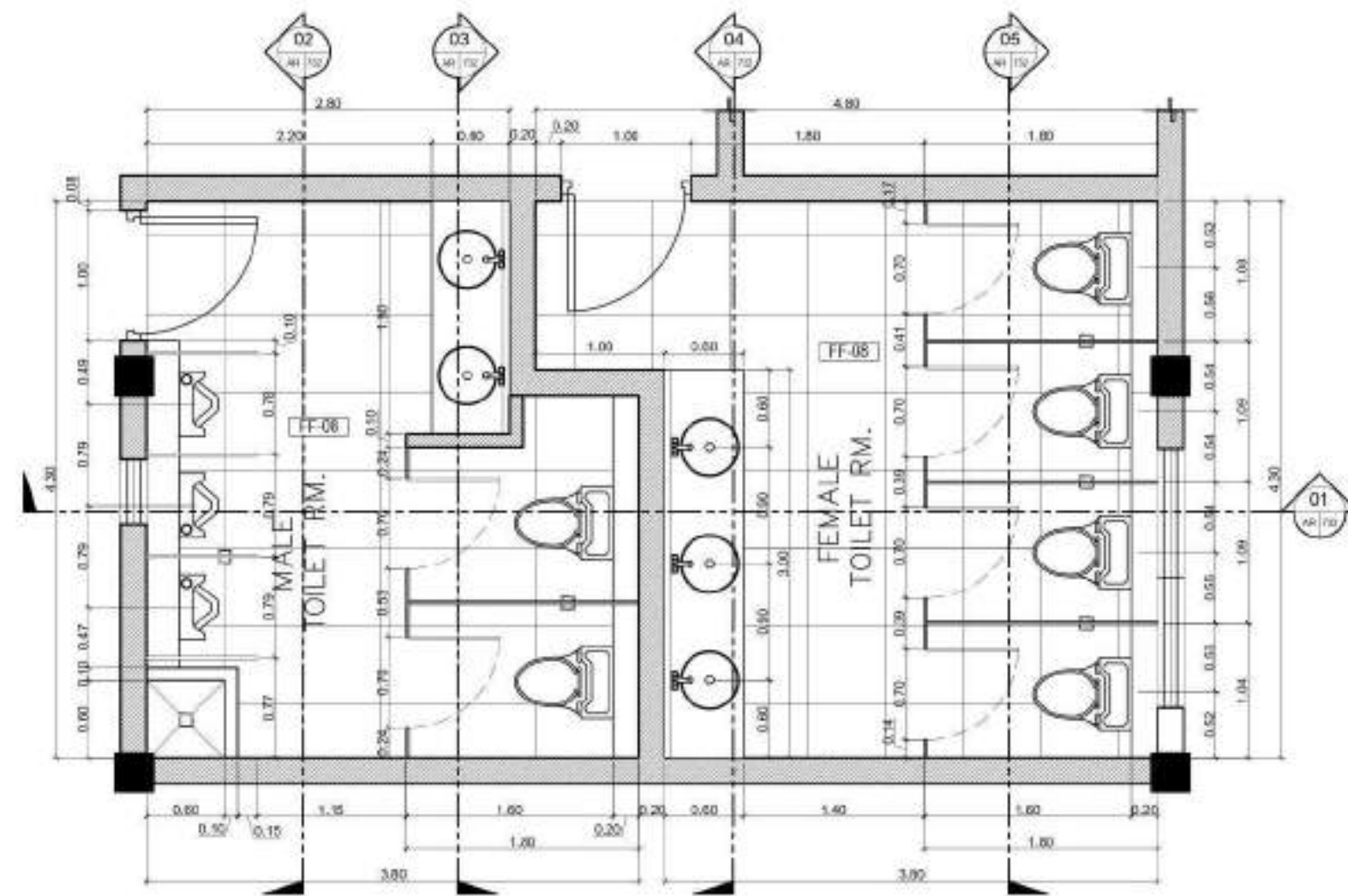
	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT II (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>CHECKED BY :</p> <p>[ORIGINAL SIGNED] ENGR. JAWAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>RECOMMENDING APPROVAL :</p> <p>[ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>APPROVED BY :</p> <p>[ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PROJECT TITLE :</p> <p>REL-C-NAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR</p>	<p>OWNER :</p> <p>DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A</p>	<p>SHEET NO. :</p> <p>731</p>
	<p>Address: GATE 2, KARANGALAN VILLAGE, CANTIA, BZAL</p> <p>Telephone NO: 02-8862-2114</p>	<p>Website: depededucation.ph</p>	<p>SHEET CONTENTS :</p> <p>AS SHOWN</p>	<p>AR</p>					

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL CALCULATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, CALCULATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY A PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTOR THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE SUPERVISION AND SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTERED DESIGN AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7900.

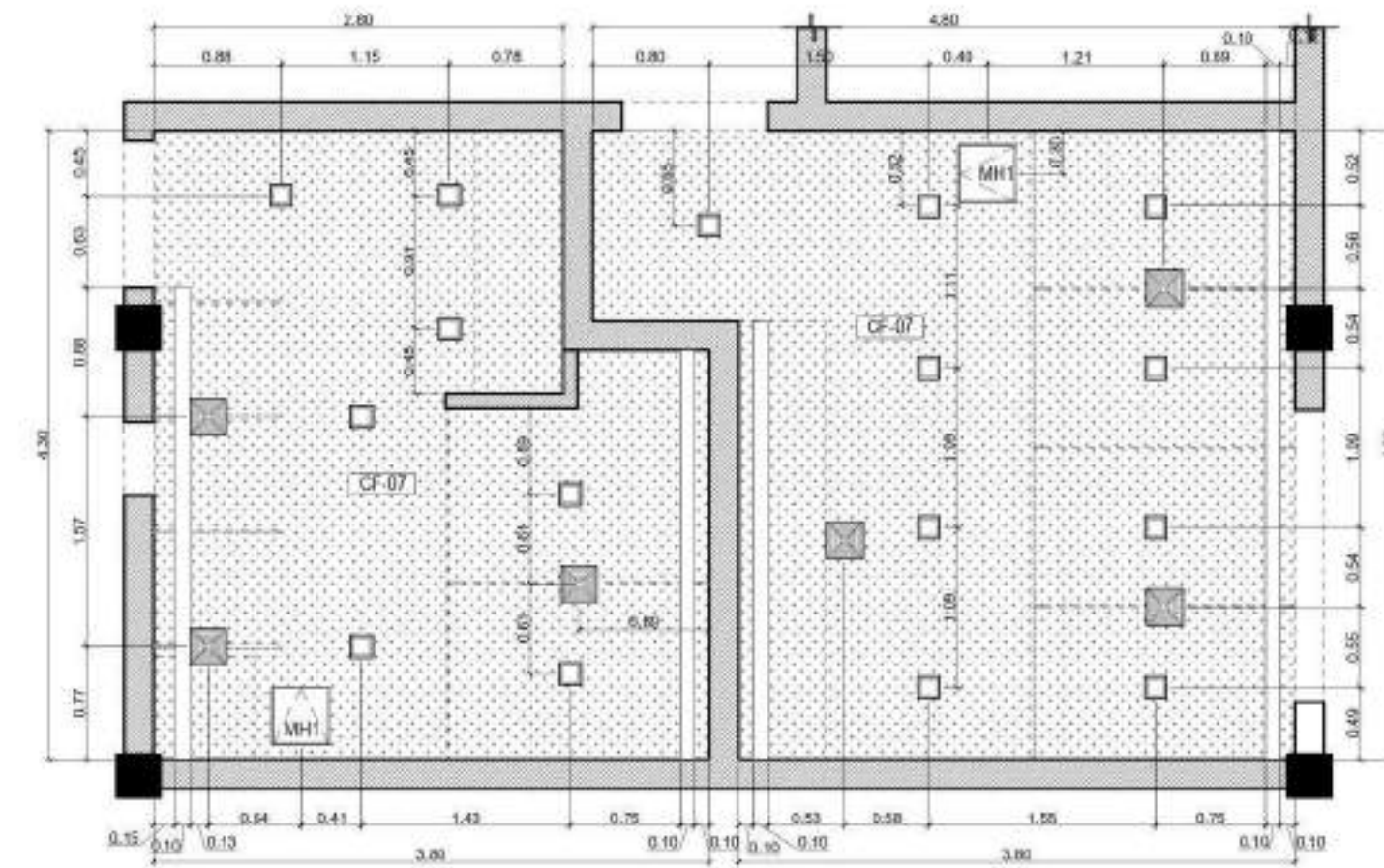


16 PERSPECTIVE

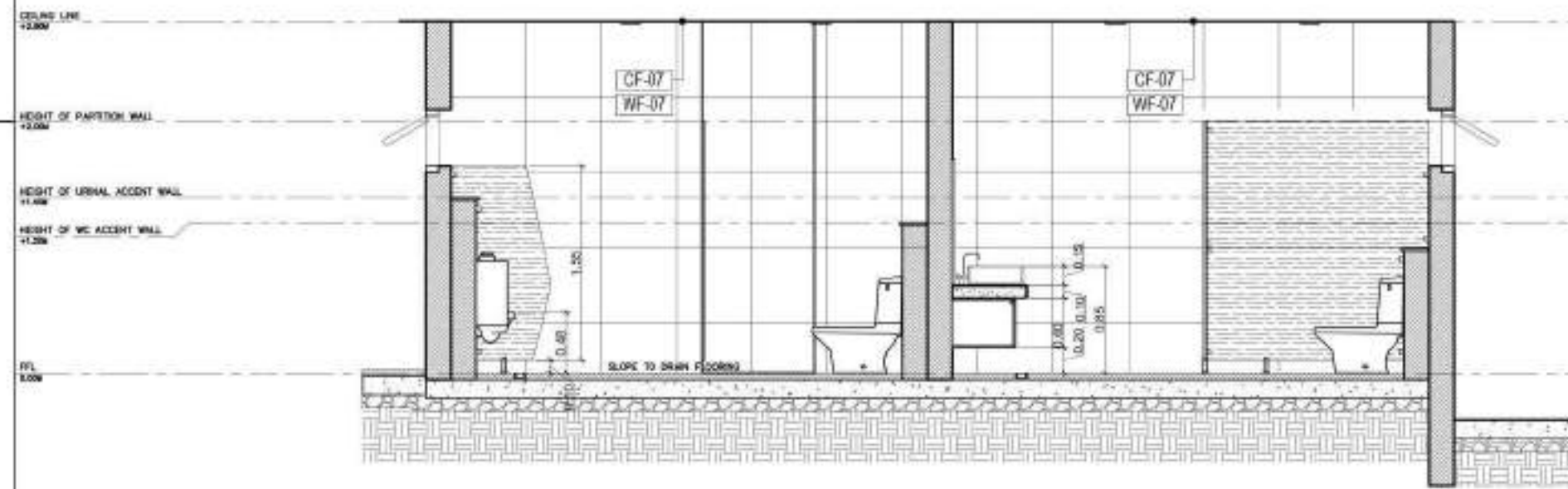
15 PERSPECTIVE



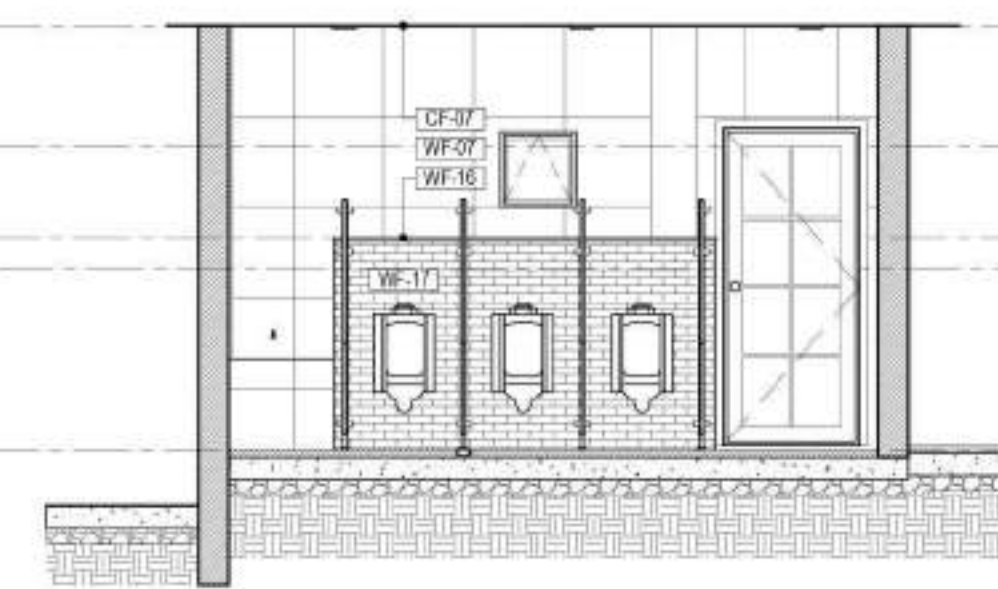
17 MESS HALL COMMON TOILET
BLOW-UP PLAN
SCALE 1:50MTS



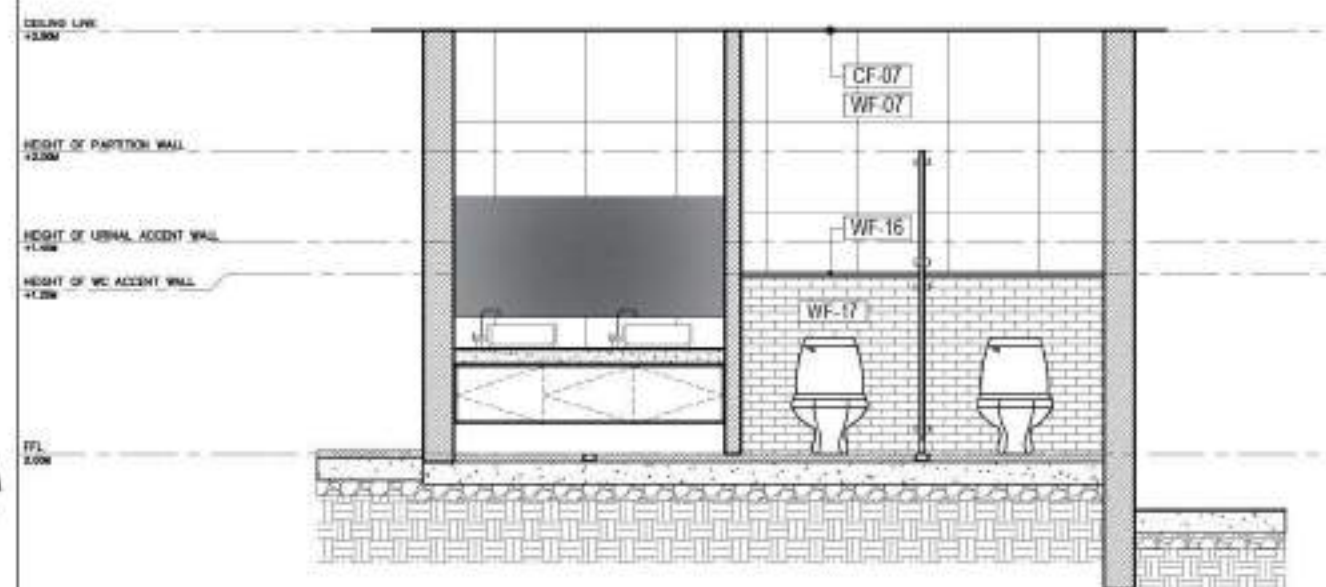
18 MESS HALL COMMON TOILET
REFLECTED CEILING PLAN
SCALE 1:50MTS



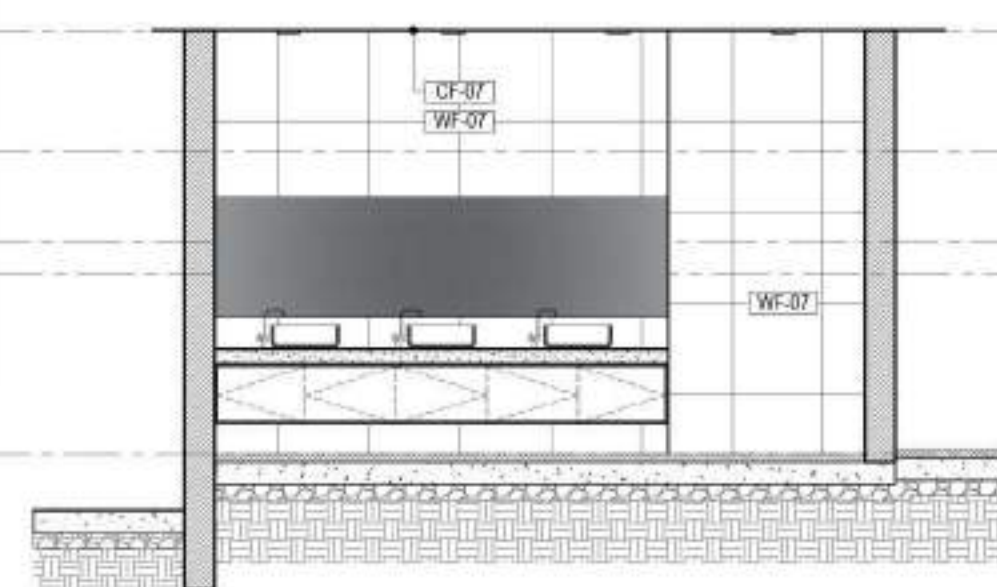
19 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-1
SCALE 1:50MTS



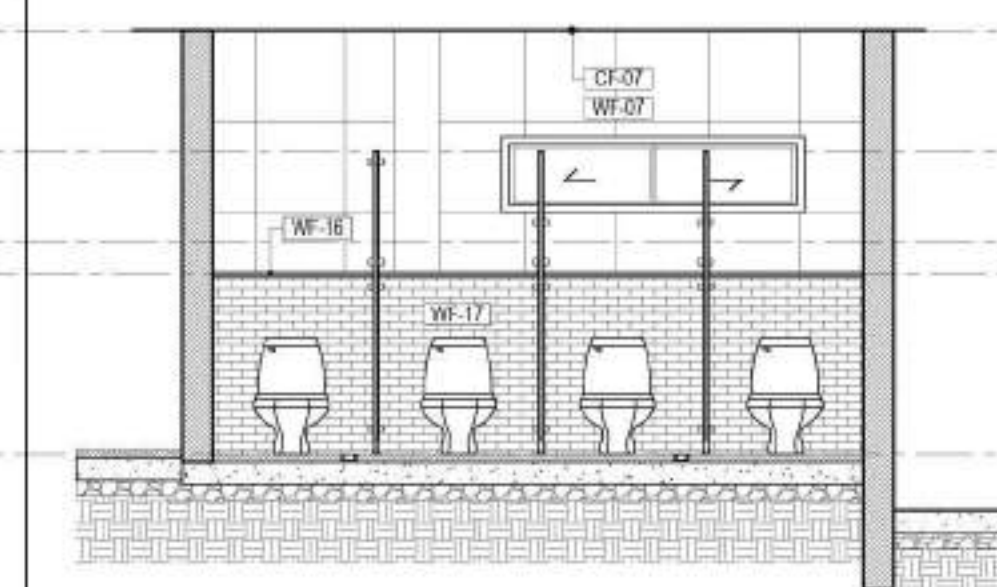
20 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-2
SCALE 1:50MTS



21 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-3
SCALE 1:50MTS



22 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-4
SCALE 1:50MTS



23 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-5
SCALE 1:50MTS

LEGENDS	
FLOOR FINISHES	
FF-06	600MM X 600MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-17	300MM X 300MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-18	NON-SKD CEMENT FLOOR FINISH WITH 10mm x 10mm HORIZONTAL GROOVE LINES
WALL FINISHES	
WF-02	PLAIN CEMENT WITH SKIMCOAT PAINTED FINISHED
WF-07	600MM X 600MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
WF-16	20mm THK. SYNTHETIC TILES (SIZE TO VERIFY ON PLAN)
WF-17	200mm X 400mm HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)
CEILING FINISHES	
CF-07	12MM THK. FIBER CEMENT BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING

- NOTES:
1. ALL TOILET FLOOR TILES MUST BE SLOPE TO DRAIN TOILETS WITH INCORRECT SLOPE OR PONDED PART WILL BE SUBJECT FOR REPAIR C/O OF CONTRACTOR.
 2. ALL ANGLE VALVES FOR WATER CLOSET MUST BE 5-WAY GATE VALVE TO ACCOMMODATE BIDET SPRAY WITH SEPARATE SHUT OFF MECHANISM
 3. ALL CORNER TILES MUST BE CHAMFERED 45° TO ATTAIN SMOOTH CORNER TERMINATION.
 4. PRESSURE TEST OF WATERLINE PRIOR TO ANY FINISHING WORKS. NO APPROVE PRESSURE TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 5. WATERPROOFING AND FLOOD TESTING PRIOR TO ANY FINISHING WORKS. NO APPROVE FLOOD TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 6. SANITARY AND VENTILATION TESTING AND COMMISSIONING PRIOR TO ANY FINISHING WORKS. NO APPROVE TESTING AND COMMISSIONING OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 7. DAMAGES ON EMBEDDED PIPINGS DURING INSTALLATION OF TOILET WARES MUST BE COORDINATED TO THE CONTRACTORS PLUMBER TO AVOID REPAIRS.
 8. HANGER SUPPORT FOR CEILING PIPES MUST BE EVERY 1.2M OR LESS WITH COMPLETE SET OF HANGER SUPPORT, TIE WIRE AND METAL FURRING SUPPORT IS NOT ALLOWED.
 9. TOTAL HEIGHT OF LAVATORY MUST BE 0.85M FROM FFL TO THE HIGHEST LIP OF VESSEL TYPE LAVATORY. VERIFY THE ACTUAL HEIGHT OF VESSEL TYPE LAVATORY TO ACHIEVE THE 0.85M REQUIRED HEIGHT.

REPLAN

DRAWING PHASE



PREPARED BY :
[ORIGINAL SIGNED]
AR. ANJO H. RAQUEÑO
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT II (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENGR. EDILBERTO A. DAMILES JR.
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENGR. JAMES MATWILL E. ABALOS
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT II (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY :
[ORIGINAL SIGNED]
ENGR. JAMAICA ROSE G. ROLLOQUE
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL :
[ORIGINAL SIGNED]
DR. EDUARDA M. ZAPANTA
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

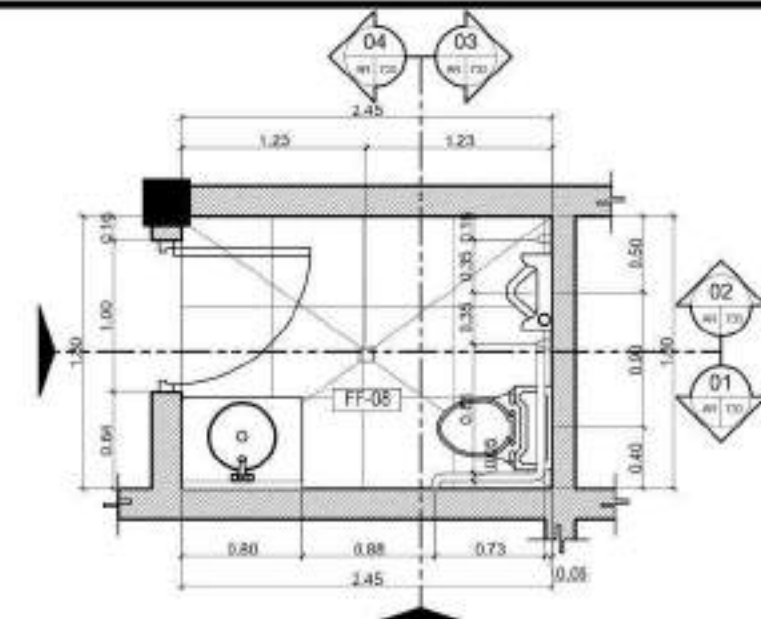
APPROVED BY :
[ORIGINAL SIGNED]
ATTY. ALBERTO T. ESCOBARTE, CESO II
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE :
REL-C-NAP WATERLINE AND
SANITARY SYSTEM UPGRADE
AND OTHER VARIOUS REPAIR
GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES
LOCATION : MALAB, MINDANAO

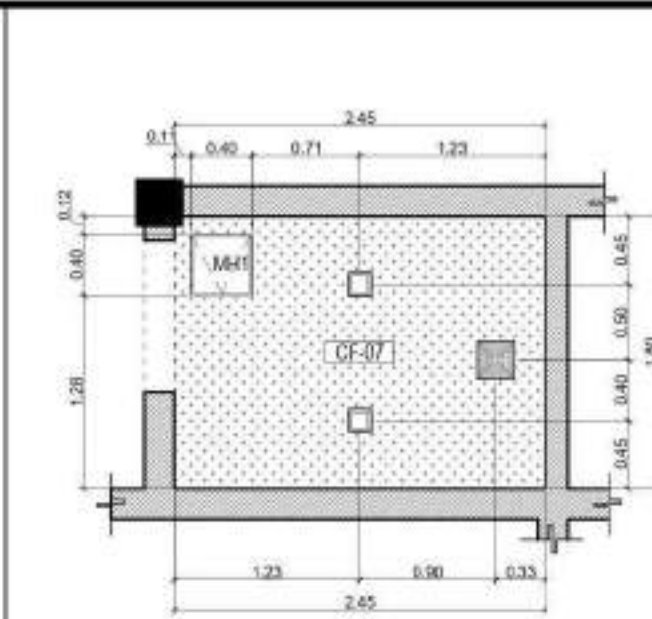
OWNER :
DEPARTMENT OF EDUCATION
REGIONAL OFFICE IV-A
SHEET CONTENTS :
AS SHOWN

SHEET NO.
732
AR

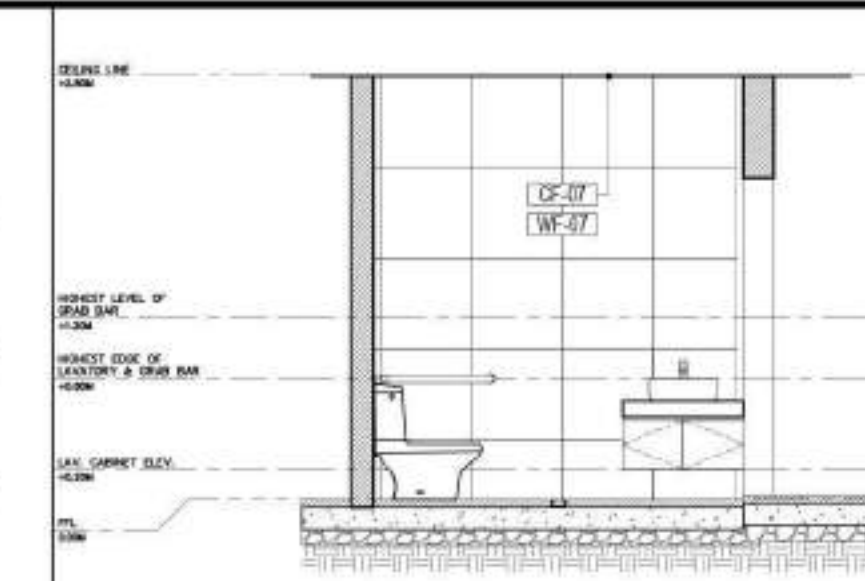
NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, SPECIFICATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTOR THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7905.



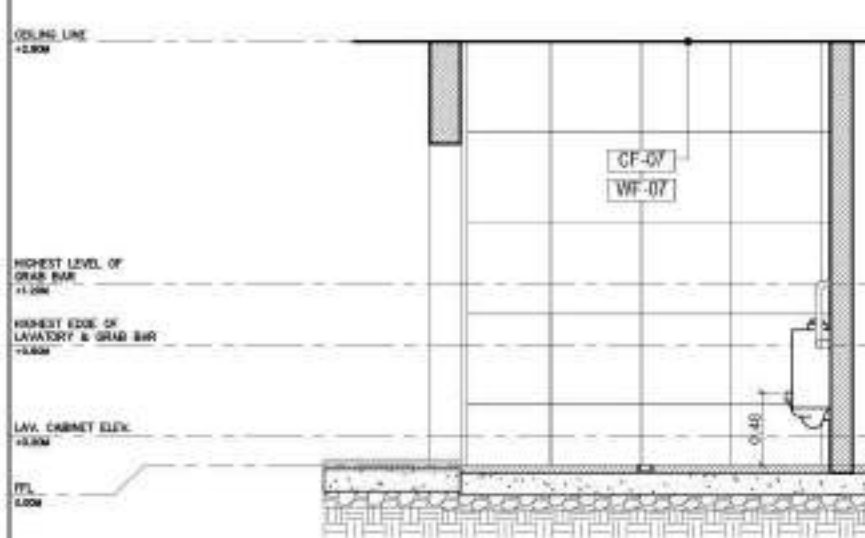
25 PWD TOILET BLOW-UP PLAN
AR 733 SCALE 1:50M/T5



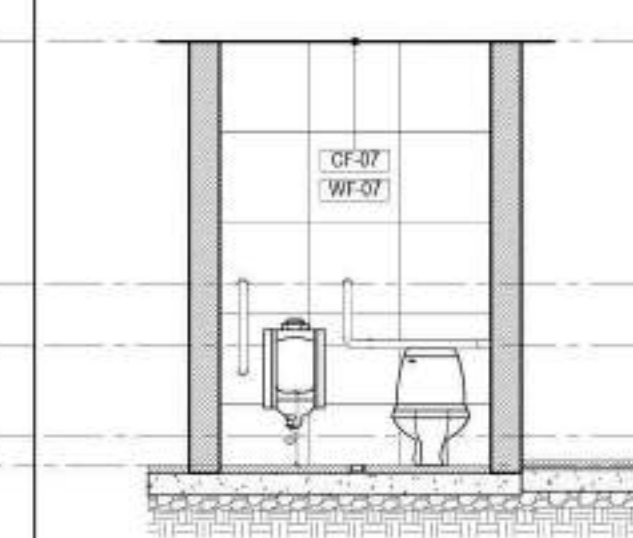
26 REFLECTED CEILING PLAN
AR 733 SCALE 1:50M/T5



27 SECTIONAL ELEVATION-1
AR 733 SCALE 1:50M/T5



28 SECTIONAL ELEVATION-2
AR 733 SCALE 1:50M/T5

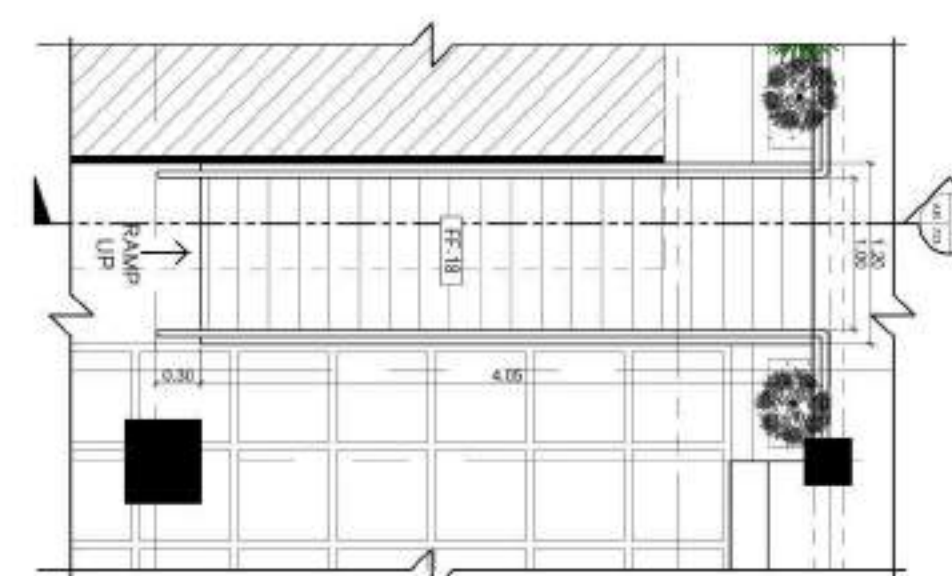


29 SECTIONAL ELEVATION-3
AR 733 SCALE 1:50M/T5

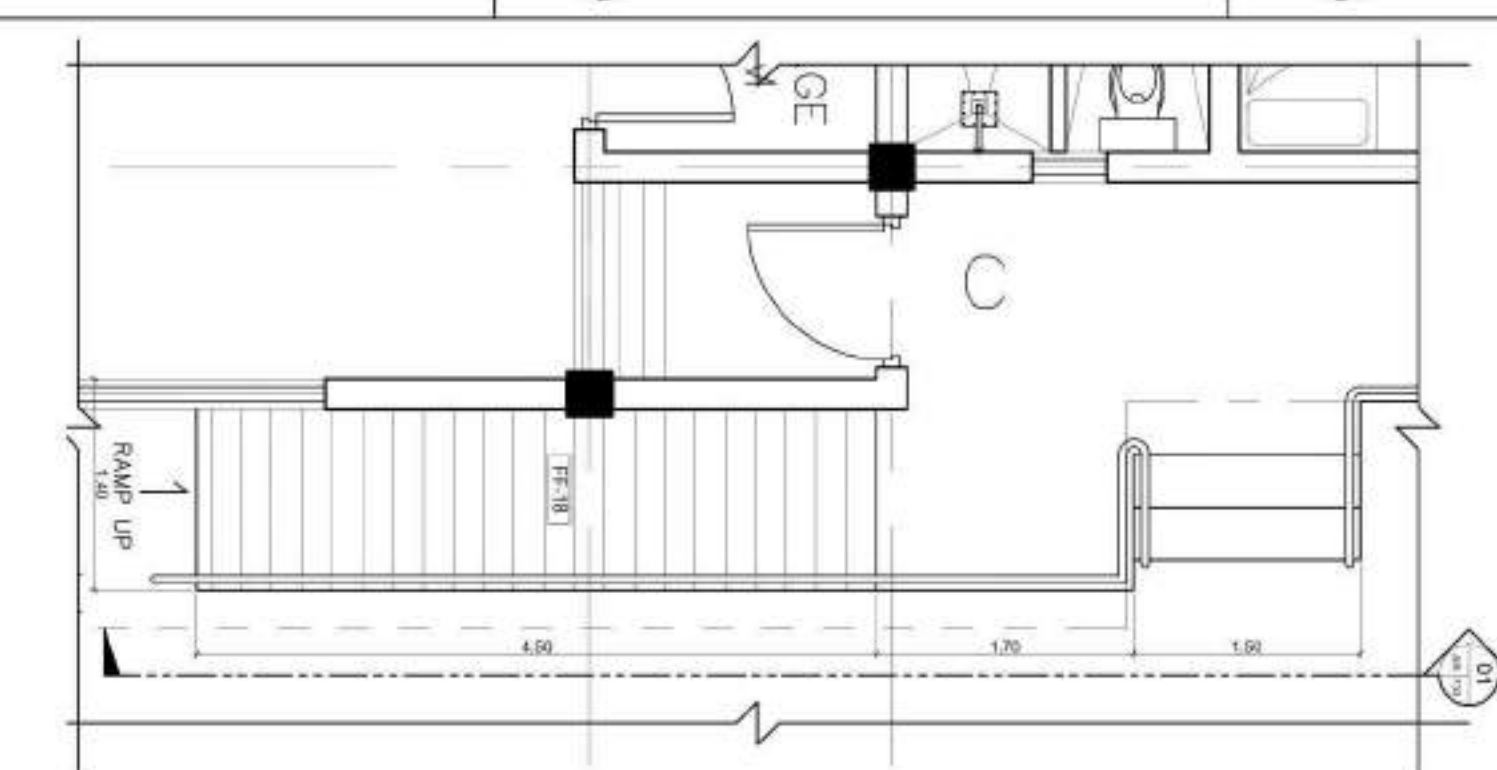


30 SECTIONAL ELEVATION-4
AR 733 SCALE 1:50M/T5

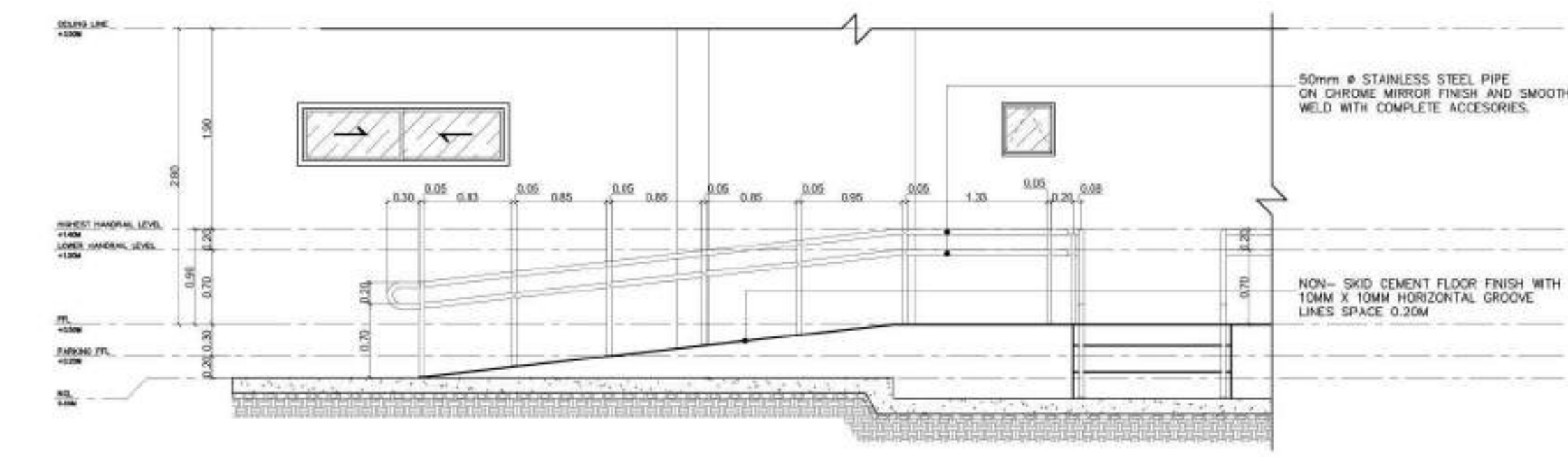
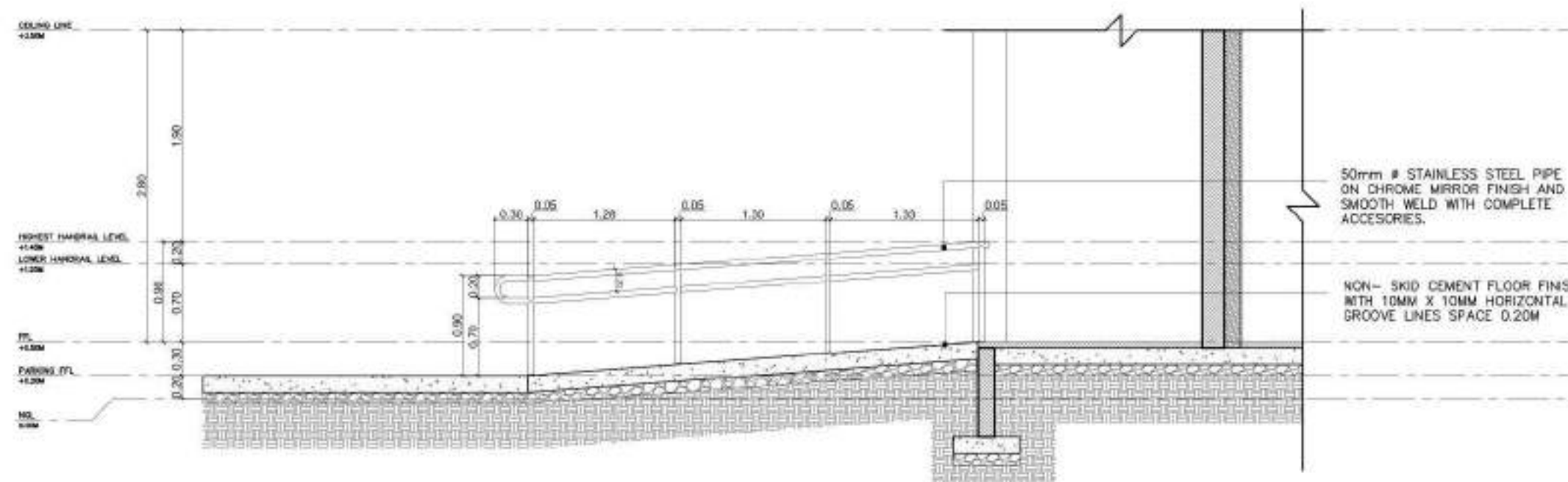
24 PWD TOILET PERSPECTIVE
AR 733 SCALE



31 PWD RAMP NEAR MAIN ENTRANCE BLOW-UP PLAN AND SECTION DETAILS-1
AR 733 SCALE 1:50M/T5



32 UTILITY RAMP NEAR KITCHEN BLOW-UP PLAN AND SECTION DETAILS-1
AR 733 SCALE 1:50M/T5



LEGENDS

FLOOR FINISHES	
FF-06	600MM X 600MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-17	300MM X 300MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-18	NON-SKID CEMENT FLOOR FINISH WITH 10mm x 10mm HORIZONTAL GROOVE LINES
WALL FINISHES	
WF-02	PLAIN CEMENT WITH SKIMCOAT PAINTED FINISHED
WF-07	600MM X 600MM HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)
WF-16	20mm Thk. SYNTHETIC TILES (size to verify on plan)
WF-17	200mmX400mm HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)
CEILING FINISHES	
CF-07	12MM THK. FIBER CEMENT BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING

- NOTES:
1. ALL TOILET FLOOR TILES MUST BE SLOPE TO DRAIN TOILETS WITH INCORRECT SLOPE OR POUNDED PART WILL BE SUBJECT FOR REPAIR C/O OF CONTRACTOR.
 2. ALL ANGLE VALVES FOR WATER CLOSET MUST BE 5-WAY GATE VALVE TO ACCOMMODATE BIDET SPRAY WITH SEPARATE SHUT OFF MECHANISM
 3. ALL CORNER TILES MUST BE CHAMFERED 45° TO ATTAIN SMOOTH CORNER TERMINATION.
 4. PRESSURE TEST OF WATERLINE PRIOR TO ANY FINISHING WORKS. NO APPROVE PRESSURE TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 5. WATERPROOFING AND FLOOD TESTING PRIOR TO ANY FINISHING WORKS. NO APPROVE FLOOD TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 6. SANITARY AND VENTILATION TESTING AND COMMISSIONING PRIOR TO ANY FINISHING WORKS. NO APPROVE TESTING AND COMMISSIONING OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR DAMAGES ON EMBEDDED PIPINGS DURING INSTALLATION OF TOILET WARES MUST BE COORDINATED TO THE CONTRACTORS PLUMBER TO AVOID REPAIRS.
 7. HANGER SUPPORT FOR CEILING PIPES MUST BE EVERY 1.20M OR LESS WITH COMPLETE SET OF HANGER SUPPORT, TIE WIRE AND METAL FURRING SUPPORT IS NOT ALLOWED.
 8. TOTAL HEIGHT OF LAVATORY MUST BE 0.85M FROM FFL TO THE HIGHEST LIP OF VESSEL TYPE LAVATORY. VERIFY THE ACTUAL HEIGHT OF VESSEL TYPE LAVATORY TO ACHIEVE THE 0.85M REQUIRED HEIGHT.

REPLAN

DRAWING PHASE



PREPARED BY :
[ORIGINAL SIGNED]
AR. ANJO H. RAQUEÑO
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT II (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENGR. EDILBERTO A. DAMILES JR.
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENGR. JAMES MATWILL E. ABALOS
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY :
[ORIGINAL SIGNED]
ENGR. JAMAICA ROSE G. ROLLOQUE
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL :
[ORIGINAL SIGNED]
DR. EDUARDA M. ZAPANTA
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY :
[ORIGINAL SIGNED]
ATTY. ALBERTO T. ESCOBARTE, CESO II
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE :
REL-C NEAR WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR

GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES

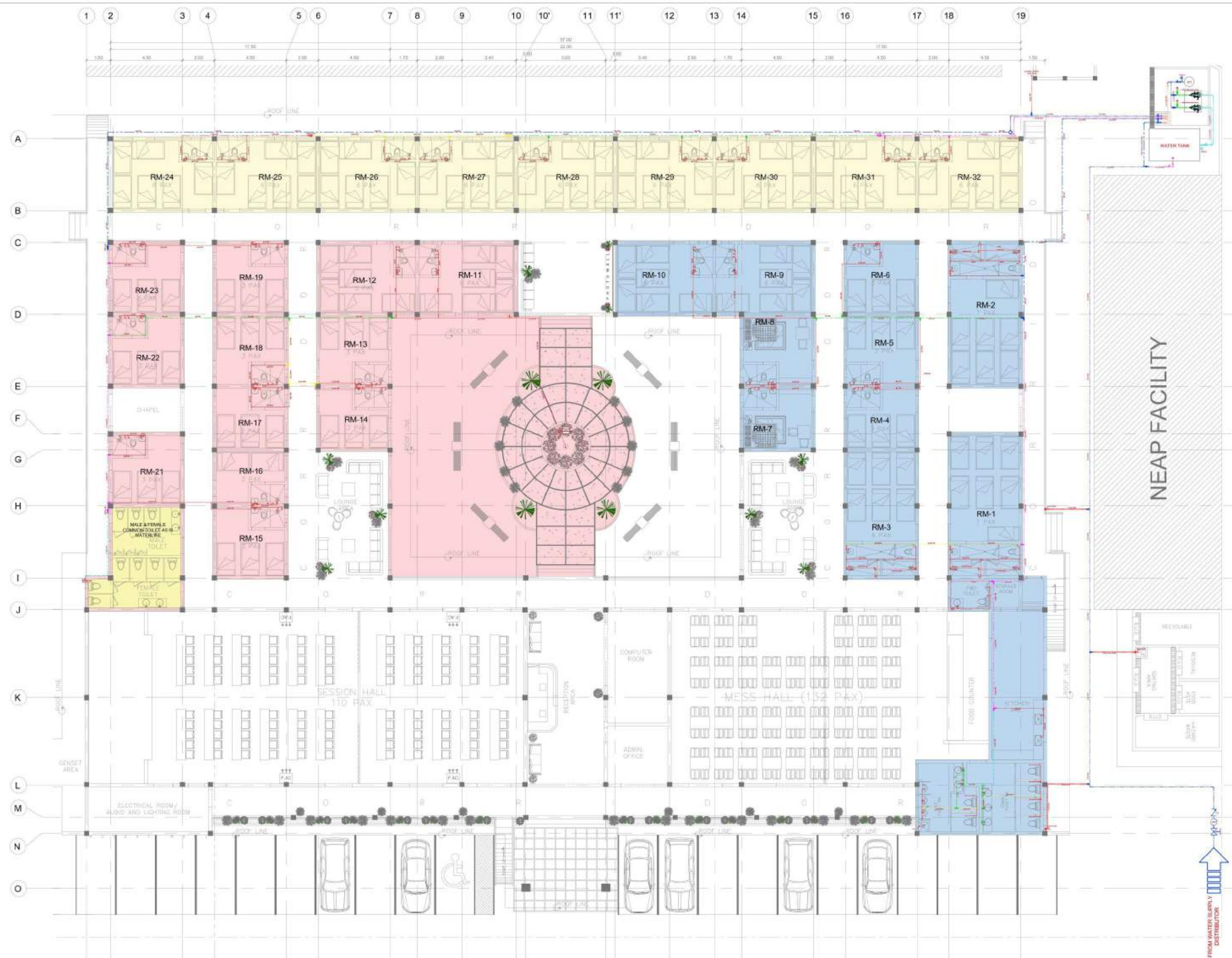
LOCATION : MALABAR, BATAVIA

OWNER :
DEPARTMENT OF EDUCATION
REGIONAL OFFICE IV-A

SHEET CONTENTS :
AS SHOWN

SHEET NO. :
733
AR

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTOR THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT LOCAL AND NATIONAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7905.



LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Blue
630	2 1/2"	Orange
500	1 7/8"	Purple
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIBB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	ELBOW 90°
1/2"	ELBOW 90° THREADED	TEE	TEE
1/2"	TEE THREADED	GV	GATE VALVE
1/2"	CHECK VALVE	UP	UNION PATENTE
1/2"	FLOAT VALVE	HOSEBIBB	HOSEBIBB

- NOTES**
1. ALL WATER CLOSET MUST HAVE DUAL/S-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

1 PROPOSED NEW WATERLINE SYSTEM
 PL 101 SCALE 1:150METS



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
 REGISTERED & LICENSED ARCHITECT
 TECHNICAL ASSISTANT II (ARCHITECT II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
 REGISTERED CIVIL ENGINEER
 TECHNICAL ASSISTANT II (ENGINEER II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

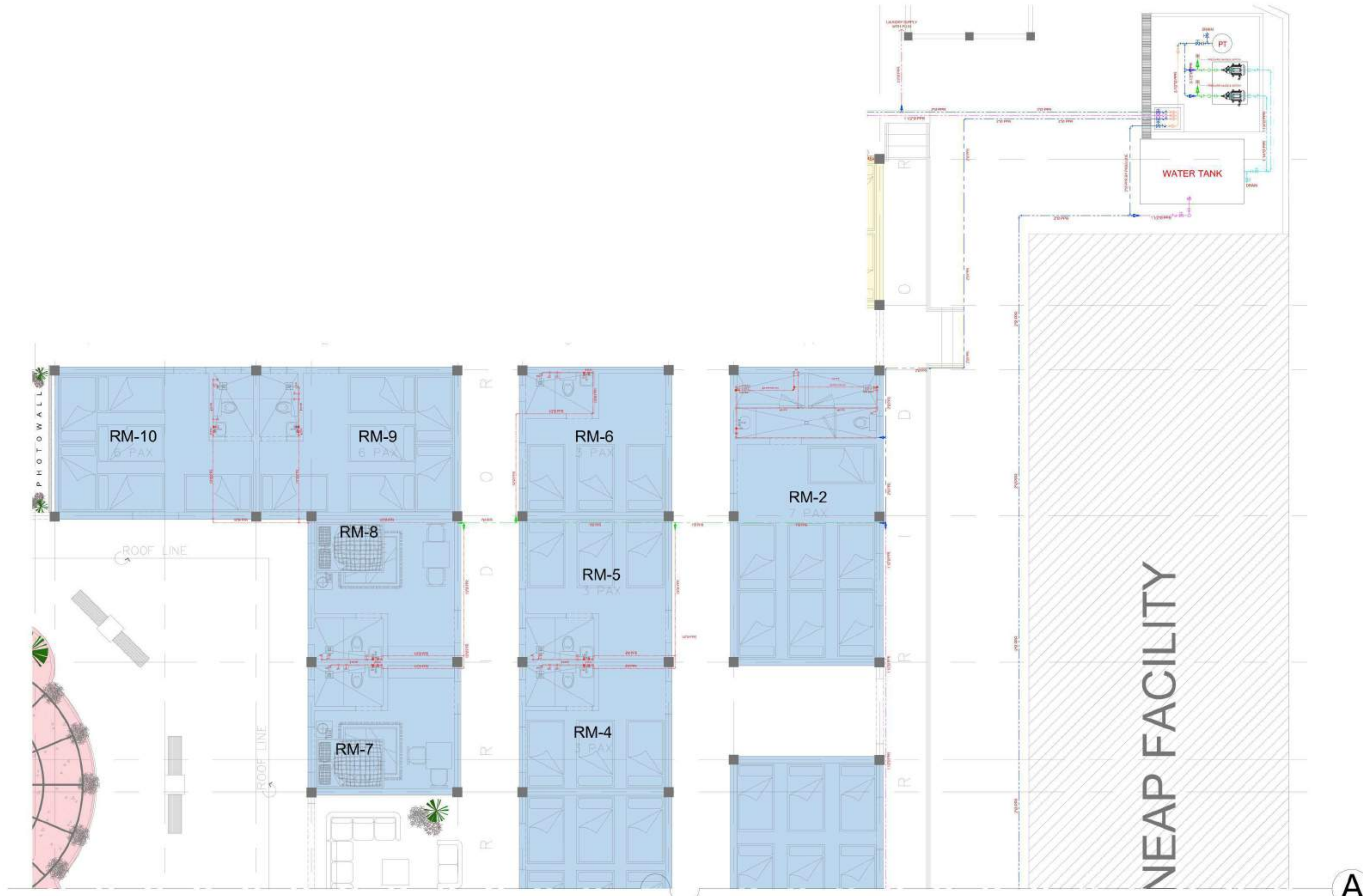
CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAMAICA ROSE G. ROLLOQUE**
 REGIONAL ENGINEER II
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
 CHIEF EDUCATION SUPERVISOR
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
 REGIONAL DIRECTOR
 OFFICE OF THE REGIONAL DIRECTOR
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
 OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A
 SHEET NO: 101
 SHEET CONTENTS: AS SHOWN
 PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SALAMPAHA FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SEALED AND SIGNED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICAL AS THE CASE MAY BE, AND THE REGULATORY, FISCAL AND MINISTERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W.P. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7926.



LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2"	Purple
500	1 7/8"	Blue
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Orange	WATERLINE ZONE 1
Blue	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	ELBOW 90°
1/4"	ELBOW 90° THREADED	TEE	TEE
1/4"	TEE THREADED	GV	GATE VALVE
1/4"	CHECK VALVE	UP	UNION PATENTE
1/4"	FLOAT VALVE	HOSEBIB	HOSEBIB

- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL/S- WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

2 ZONE 1 BLOW-UP WATERLINE SYSTEM (PG-1)
 PL 102 SCALE 1:75MTS

	<p>PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR</p> <p>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, BANGAL</p>	<p>OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A</p> <p>SHEET CONTENTS: AS SHOWN</p>	<p>SHEET NO. 102</p> <p>PL</p>
	<p><small>NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, SPECIFICATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENTS AND MINISTRIAL REGULATIONS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7905.</small></p>								

A

LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2 1/2"	Purple
500	1 7/8"	Blue
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

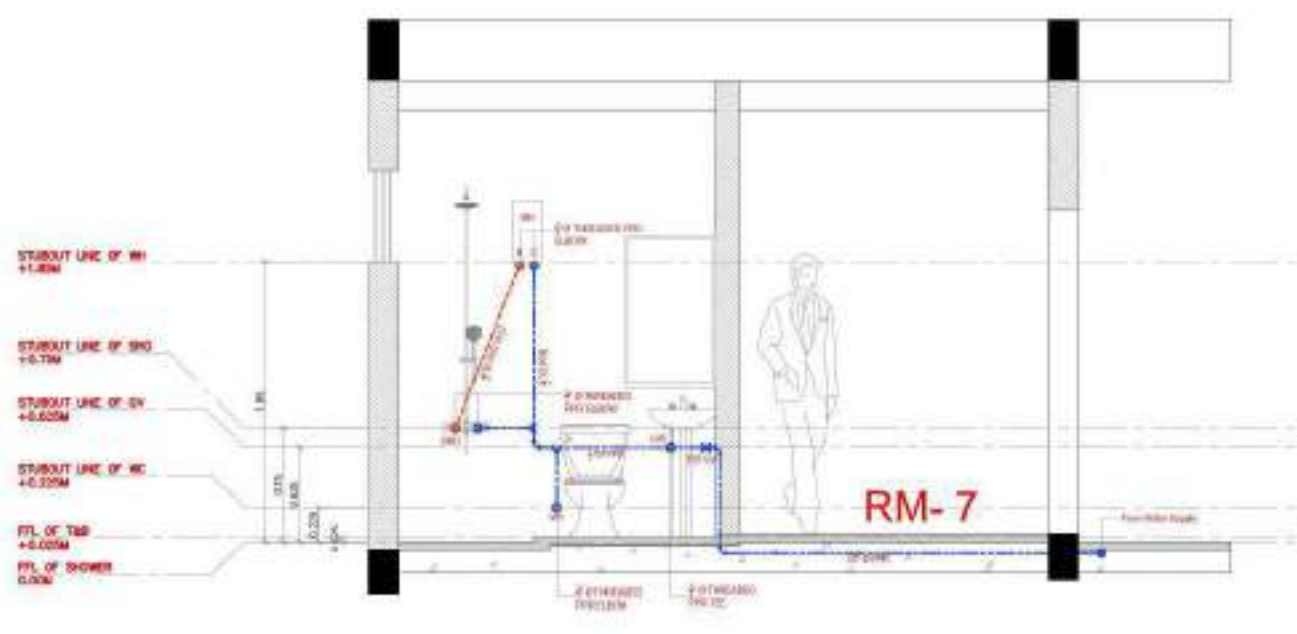
Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	
1/2"	ELBOW 90° THREADED	TEE	
1/2"	TEE THREADED	GV	GATE VALVE
1/2"	CHECK VALVE	UP	UNION PATENTE
1/2"	FLOAT VALVE	HOSEBIB	

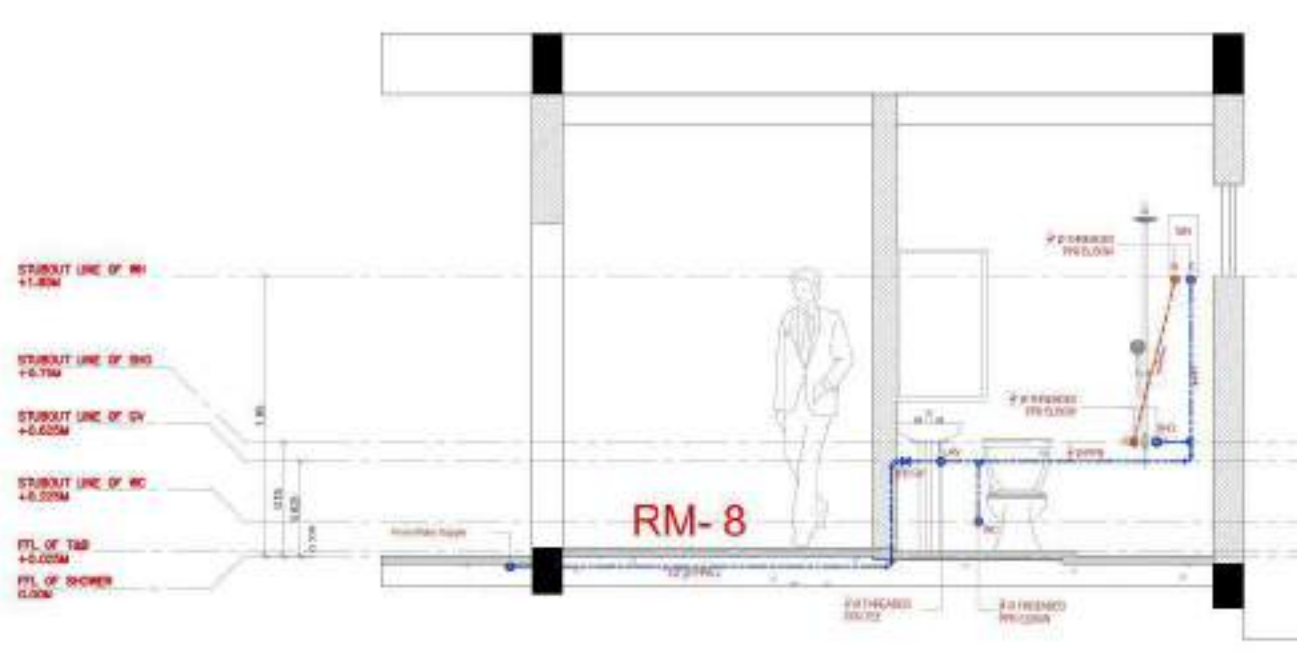
- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL 5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN

DRAWING PHASE



4 TOILET & BATH SECTION DETAIL WATER SUPPLY FROM RIGHT SIDE
SCALE 1:50MTS



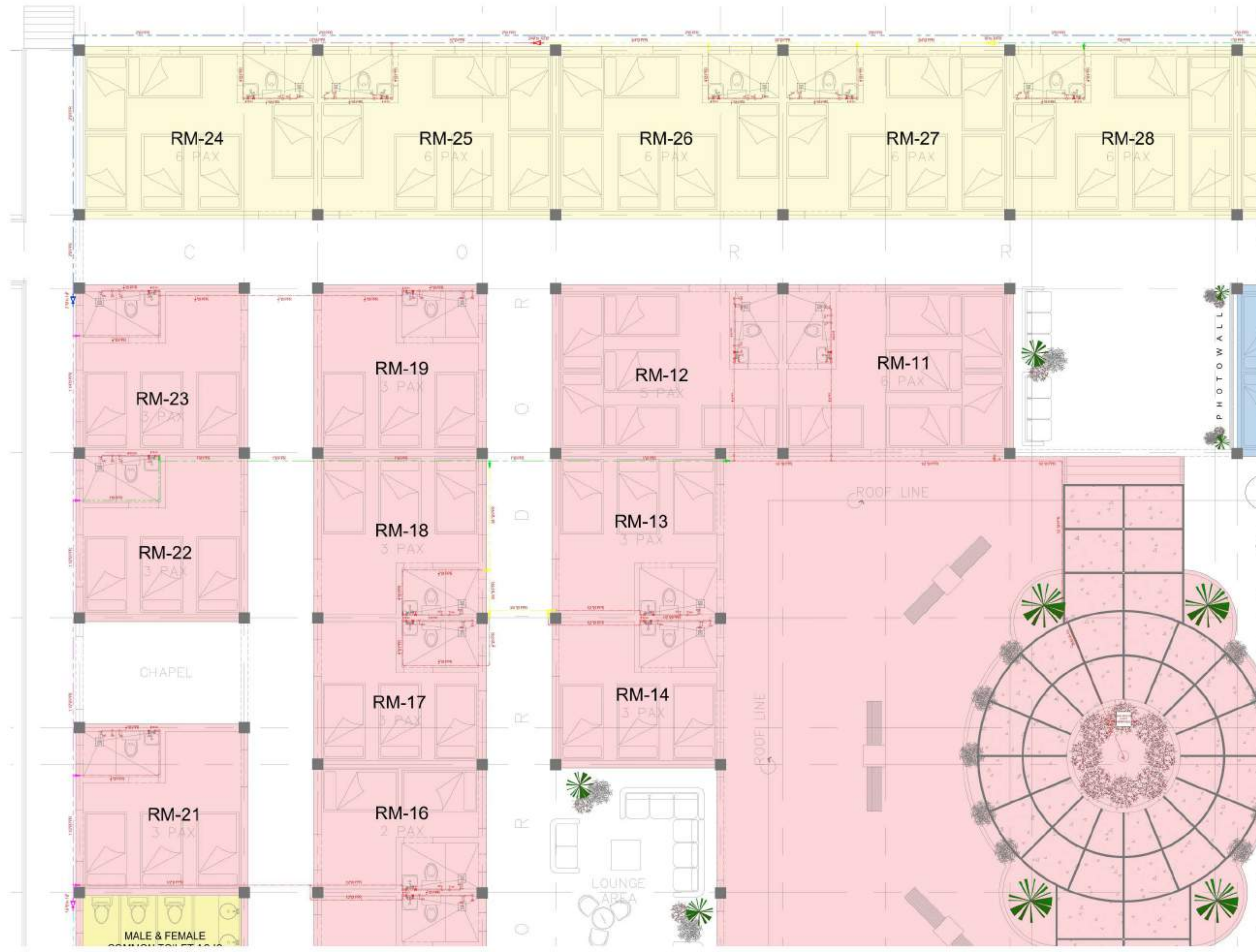
5 TOILET & BATH SECTION DETAIL WATER SUPPLY FROM RIGHT SIDE
SCALE 1:50MTS



3 ZONE 1 BLOW-UP WATERLINE SYSTEM (PG-1)
SCALE 1:75MTS

	PREPARED BY:	PREPARED BY:	PREPARED BY:	CHECKED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE:	OWNER:	SHEET NO.:
	<p>[ORIGINAL SIGNED] MR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>RELIC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR</p> <p>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES</p> <p>LOCATION: MALABO, BANGALAS</p>	<p>DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A</p>	<p>SHEET CONTENTS: AS SHOWN</p>

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, CALCULATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENTIAL MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FURTHER EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7905.



6 ZONE 2 BLOW-UP WATERLINE SYSTEM
 PL 104 SCALE 1:75M/T5

LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2 1/2"	Purple
500	1 7/8"	Blue
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	
ELBOW 90° THREADED		TEE	
TEE THREADED		GATE VALVE	
CHECK VALVE		UNION PATENTE	
FLOAT VALVE		HOSEBIB	

- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL 5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN

DRAWING PHASE



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
 REGISTERED & LICENSED ARCHITECT
 TECHNICAL ASSISTANT II (ARCHITECT II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
 REGISTERED CIVIL ENGINEER
 TECHNICAL ASSISTANT II (ENGINEER II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAWAICA ROSE G. ROLLOQUE**
 REGIONAL ENGINEER II
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
 CHIEF EDUCATION SUPERVISOR
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
 REGIONAL DIRECTOR
 OFFICE OF THE REGIONAL DIRECTOR
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
 GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
 NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES
 LOCATION: MALABO, BAYANAG

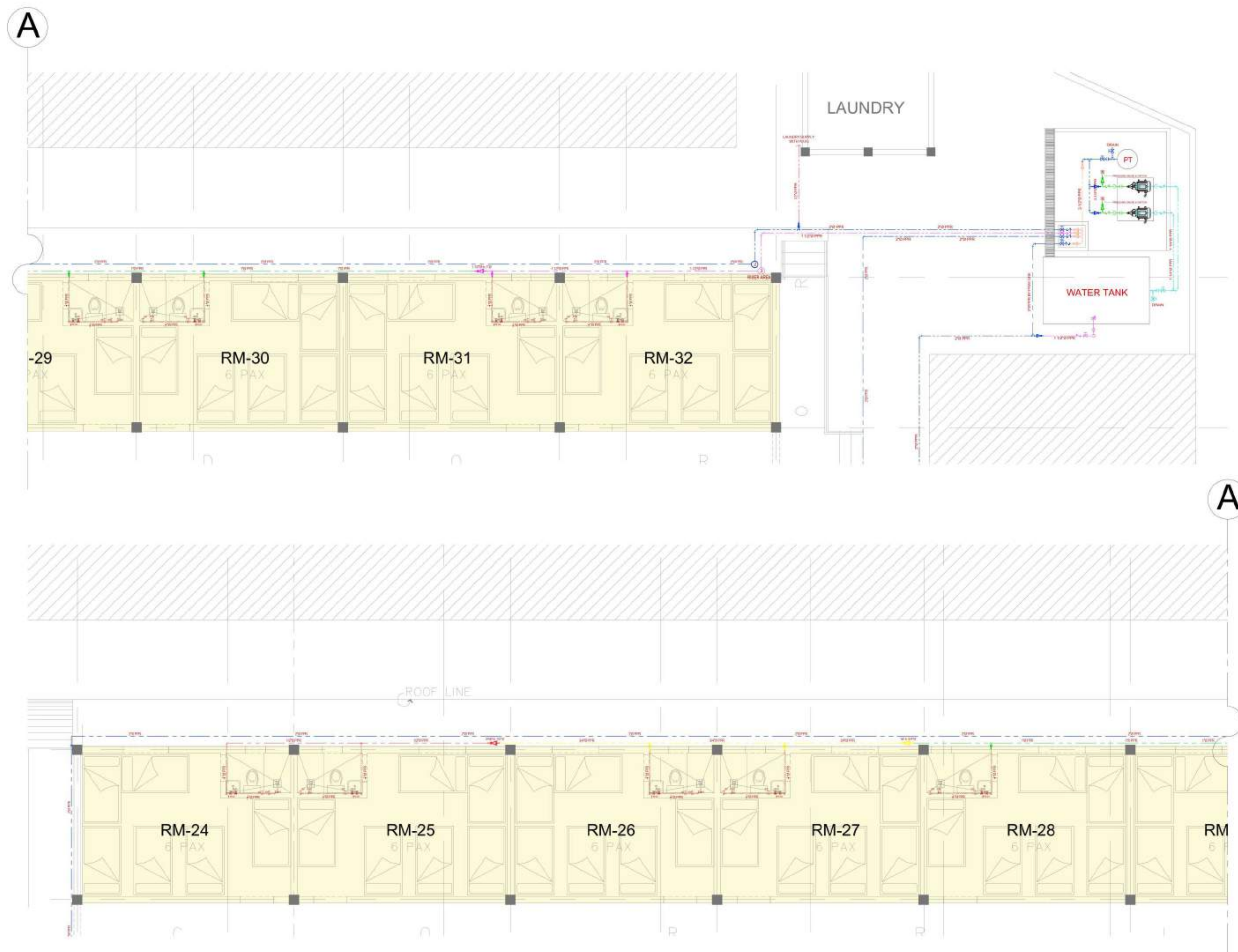
OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A

SHEET CONTENTS: AS SHOWN

SHEET NO. **104**

PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, OR A REGISTERED ELECTRICAL ENGINEER, AS THE CASE MAY BE, AND THE REGISTRY, FEES, AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W.V. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2 1/2"	Blue
500	1 7/8"	Purple
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	
1/2"	ELBOW 90° THREADED	TEE	
1/2"	TEE THREADED	GATE VALVE	
1/2"	CHECK VALVE	UNION PATENTE	
1/2"	FLOAT VALVE	HOSEBIB	

- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL 5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

7 ZONE 3 BLOW-UP WATERLINE SYSTEM
 PL 105 SCALE 1:75M

	PREPARED BY : [ORIGINAL SIGNED] DR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY : [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAVILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY : [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL : [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY : [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE : RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALIBU, BAYANAG	OWNER : DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO. : 105 SHEET CONTENTS : AS SHOWN PL
	<small>NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE. - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBILITY CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENT FOR THE REGISTRY FEE AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W.V. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7926.</small>								

TABLE OF SPECIFICATIONS	TAGS	AREAS
200MM X 200MM LITRA TILES, 3000psi	FF-01	MESS HALL
100MM X 100MM X 100MM PAVEN BLOCKS, 3000psi	FF-02	MESS HALL
POURED CONCRETE WITH TYPICAL BRIDGE FINISH SCRATCH	FF-03	MESS HALL
1200MM X 600MM HOMOGENOUS TILES (VERIFY ARCHITECT)	FF-04	MESS HALL
600MM X 600MM HOMOGENOUS TILES (VERIFY ARCHITECT)	FF-05	MESS HALL
300MM X 600MM HOMOGENOUS TILES (VERIFY ARCHITECT)	FF-06	MESS HALL
1200MM X 600MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-07	MESS HALL
600MM X 600MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-08	MESS HALL
300MM X 600MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-09	MESS HALL
300MM X 300MM VITREOUS CERAMIC TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-10	MESS HALL
POURED CONCRETE STRAIGHT TO SMOOTH FINISH EXPOSED AGGREGATE	FF-11	MESS HALL
POURED CONCRETE STRAIGHT TO SMOOTH FINISH	FF-12	MESS HALL
POURED CONCRETE WITH TOPPING FINISH TO BE EPOXY PAINTED	FF-13	MESS HALL
PLAIN CEMENT FINISH WITH ANGLUAR NOSING	FF-14	MESS HALL
POURED CONCRETE WITH 4.00% TORCH-ON WATERPROOFING THERMAL INSULATION, 50MM THK AND FIBER MIX FOR TOPPING (ROOF DECK)	FF-15	MESS HALL
POURED CONCRETE WITH (CEMENTITIOUS WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-16	MESS HALL
300MM X 300MM HOMOGENOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)	FF-17	MESS HALL
PLAIN CEMENT FINISH	WF-1	MESS HALL
PLAIN CEMENT WITH SHIMCOAT PAINTED FINISH	WF-2	MESS HALL
PLAIN CEMENT WITH ELASTOMERIC WEATHERPROOF COATING FINISH	WF-3	MESS HALL
SHIMCOAT PAINTED FINISH (COLOR TO VERIFY THE INCHARGE OF THE PROJECT)	WF-4	MESS HALL
ACOUSTIC WALL PANEL WITH WOOD ACCENT LININGS	WF-5	MESS HALL
1200MM X 600MM HOMOGENOUS WALL TILES (VERIFY ARCHITECT)	WF-6	MESS HALL
600MM X 600MM HOMOGENOUS WALL TILES (VERIFY ARCHITECT)	WF-7	MESS HALL
300MM X 600MM HOMOGENOUS WALL TILES (VERIFY ARCHITECT)	WF-8	MESS HALL
WOOD PLASTIC COMPOSITE PANELS (WPC)	WF-9	MESS HALL
ALUMINUM COMPOSITE PANELS (ACP)	WF-10	MESS HALL
1.80M HIGH 3000MM X 3000MM HOMOGENOUS TILES, THE REST IN SEMI GLOSS PAINT FINISH	WF-11	MESS HALL
1.80M HIGH 3000MM X 3000MM CERAMIC GLAZED TILES, THE REST IN SEMI GLOSS PAINT FINISH	WF-12	MESS HALL
PLAIN CEMENT WITH CAPILARY WATERPROOFING	WF-13	MESS HALL
VANCOX SUPER CAPILARY WITH EPOXY PORCELAIN LINING (FOOD GRADE), NON TOXIC TYPE OF WATERPROOFING	WF-14	MESS HALL
MOISTURE PROTECTION WITH BITUMENITE	WF-15	MESS HALL
20mm THK SYNTHETIC TILES (ask to verify on plan)	WF-16	MESS HALL
200mm X 400mm HOMOGENOUS WALL TILES (VERIFY ARCHITECT)	WF-17	MESS HALL
AS IS AS PER ACTUAL BUT REPAINTED FINISH	CF-0A	MESS HALL
NO CEILING MATERIAL	CF-0B	MESS HALL
POURED CONCRETE OFF FORM	CF-0C	MESS HALL
POURED CONCRETE OFF FORM SHIM COAT FLAT PAINTED FINISH	CF-0D	MESS HALL
POURED CONCRETE OFF FORM SHIM COAT ELASTOMERIC WEATHERPROOF COATING	CF-0E	MESS HALL
12MM THK GYPSUM BOARD PAINTED FINISH ON STANDARD METAL FURRING FRAMING	CF-0F	MESS HALL
12MM THK MOISTURE RESISTANT GYPSUM BOARD PAINTED FINISH ON STANDARD METAL FURRING FRAMING	CF-0G	MESS HALL
12MM THK FIBER CEMENT BOARD PAINTED FINISH ON STANDARD METAL FURRING FRAMING	CF-0H	MESS HALL
150mm x LENGTH BRANDREL BROWN WITH WOOD GRAIN DESIGN (SHADE AND DESIGN FOR APPROVAL)	CF-0I	MESS HALL
150mm x LENGTH BRANDREL WHITE DESIGN (SHADE AND DESIGN FOR APPROVAL)	CF-0J	MESS HALL
ALUMINUM COMPOSITE PANEL (ACP) ON STANDARD ALUMINUM FRAMING (COLOR/SHADE SUBJECT FOR APPROVAL)	CF-0K	MESS HALL
POLYVINYL CHLORIDE (PVC) CEILING ON STANDARD METAL FURRING SUPPORT (COLOR/SHADE SUBJECT FOR APPROVAL)	CF-0L	MESS HALL
WOOD PLASTIC COMPOSITE (WPC) CEILING ON STANDARD METAL FURRING SUPPORT (COLOR/SHADE SUBJECT FOR APPROVAL)	CF-0M	MESS HALL
224" BUFILE CEILING ON STANDARD HANGING SYSTEM (COLOR/SHADE SUBJECT FOR APPROVAL)	CF-0N	MESS HALL
LAMINATE ON 20MM THK MARINE PLYWOOD BACKING ON STANDARD HANGING SUPPORTS	CF-0O	MESS HALL

DESIGNATION	DOOR / WINDOW TYPE	LOCATION	JAMB	LOCKSET/DEVICE	HINGES	NO. OF SETS	REMARKS
D-01	12MM THK. TEMPERED GLASS (FRAMELESS) W/ FROSTED STICKER	MAIN ENTRANCE	N/A	38MMØ S.S PIPES ON MIRROR FINISH, FLOOR CHECK	PIVOT HINGES	1 SET	NEW PROPOSAL
D-02	ALUMINUM ANALOK FINISH SLIDING DOOR WITH SLIDING WINDOW AND FIXED GLASS	DORMITORY MAIN ENTRANCE	ALUMINUM ANALOK	VERIFY ACTUAL	N/A	1 SET	AS IS AS PER ACTUAL
D-03	ALUMINUM ANALOK FINISH SLIDING DOOR WITH FIXED GLASS	CHAPEL	ALUMINUM ANALOK	VERIFY ACTUAL	N/A	1 SET	AS IS AS PER ACTUAL
D-04	ALUMINUM ANALOK SWING GLASS DOOR	DORMITORY HALLWAY	ALUMINUM ANALOK	VERIFY ACTUAL	N/A	2 SETS	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)
D-05	12MM THK. TEMPERED GLASS W/ FROSTED STICKER	SESSION, MESS HALL, COMPUTER & ADMIN OFFICE	N/A	38MMØ S.S PIPES ON MIRROR FINISH, FLOOR CHECK	PIVOT HINGES	6 SETS	NEW PROPOSAL
D-06	DOUBLE METAL PANEL DOOR WITH ACOUSTIC MATERIAL	SESSION AND MESS HALL	GA#14 GALVANIZED STEEL SINGLE RABBIT JAMB, PAINTED W/ AUTOMOTIVE PAINT FINISH	LEVER TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)	3 SETS	NEW PROPOSAL
D-07	SINGLE METAL PANEL DOOR WITH ACOUSTIC MATERIAL	SESSION AND MESS HALL	GA#14 GALVANIZED STEEL SINGLE RABBIT JAMB, PAINTED W/ AUTOMOTIVE PAINT FINISH	LEVER TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)	1 SET	NEW PROPOSAL
D-08	SINGLE METAL PANEL DOOR	ELECTRICAL ROOM	GA#14 GALVANIZED STEEL SINGLE RABBIT JAMB, PAINTED W/ AUTOMOTIVE PAINT FINISH	LEVER TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)	1 SET	AS IS PER ACTUAL
D-09	SINGLE SOLID WOOD PANEL DOOR	DORMITORY ROOMS	SOLID WOOD SINGLE RABBIT JAMB	DOORKNOB TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (4PCS)	41 SETS	AS IS PER ACTUAL
D-10	PVC FLUSH DOOR	DORMITORY T&B ROOMS	PVC SINGLE RABBIT JAMB	DOORKNOB TYPE LOCKSET	HEAVY DUTY S.S 3 1/2" X 3 1/2" X 4MM (3PCS)	28 SETS	AS IS AS PER ACTUAL
D-11	GA#18 GALVALUME SHEET ROLL-UP DOOR	MRF	N/A	MANUAL OPERATED	N/A	5 SETS	NEW PROPOSAL
WS-01	150MM CHB WALL ON THE BEAM.						WITH 25MM PLASTER EACH FACE.
WS-02	100MM CHB WALL ON THE BEAM.						WITH 25MM PLASTER EACH FACE.
W-10	ALUMINUM ANALOK AWNING WINDOW	DORMITORY T&B	ALUMINUM ANALOK	CAM HANDLE LOCK (VERIFY ACTUAL)	STAINLESS 4 BAR HINGES (SIDE OPEN)	34 SETS	AS IS PER ACTUAL

LEGENDS

WF-00 WS-00 WF-00

FF-00 +00.00M

CF-00 +00.00M

D 09

W 00

DESIGNATION	DOOR / WINDOW TYPE	LOCATION	JAMB	LOCKSET/DEVICE	HINGES	NO. OF SETS	REMARKS
W-01	ALUMINUM ANALOK SLIDING WINDOW WITH FIXED TRANSOM	SESSION HALL	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	1 SET	AS IS PER ACTUAL	
W-02	ALUMINUM ANALOK SLIDING WINDOW WITH FIXED TRANSOM	LOUNGE AREA/ BREAK OUT ROOM	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	4 SETS	AS IS PER ACTUAL	
W-03	ALUMINUM ANALOK SLIDING WINDOW WITH FIXED TRANSOM	SESSION/MESS HALL, ADMIN & COMPUTER ROOM	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	8 SETS	AS IS PER ACTUAL	
W-04	ALUMINUM ANALOK SLIDING WINDOW	CHAPEL AND STORAGE AREA	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	2 SETS	AS IS PER ACTUAL	
W-05	ALUMINUM ANALOK 3 LAYER AWNING WINDOW	SESSION AND MESS HALL	ALUMINUM ANALOK CAM HANDLE LOCK (VERIFY ACTUAL)	STAINLESS 4 BAR HINGES (SIDE OPEN)	6 SETS	NEW PROPOSAL	
W-06	ALUMINUM ANALOK SLIDING WINDOW	DORMITORY ROOM	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	32 SETS	AS IS PER ACTUAL	
W-07	ALUMINUM ANALOK FIXED WINDOW	COMPUTER ROOM	ALUMINUM ANALOK	N/A	1 SET	AS IS PER ACTUAL	
W-08	ALUMINUM ANALOK SLIDING WINDOW	KITCHEN AND FEMALE TOILET	ALUMINUM ANALOK CENTER LOCK (VERIFY ACTUAL)	N/A	3 SETS	AS IS PER ACTUAL	
W-09	ALUMINUM ANALOK AWNING WINDOW	COMMON TOILET	ALUMINUM ANALOK CAM HANDLE LOCK (VERIFY ACTUAL)	STAINLESS 4 BAR HINGES (SIDE OPEN)	6 SETS	NEW PROPOSAL	

PREPARED BY: [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO

PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR.

PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS

CHECKED BY: [ORIGINAL SIGNED] ENGR. JAWAICA ROSE G. ROLLOQUE

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA

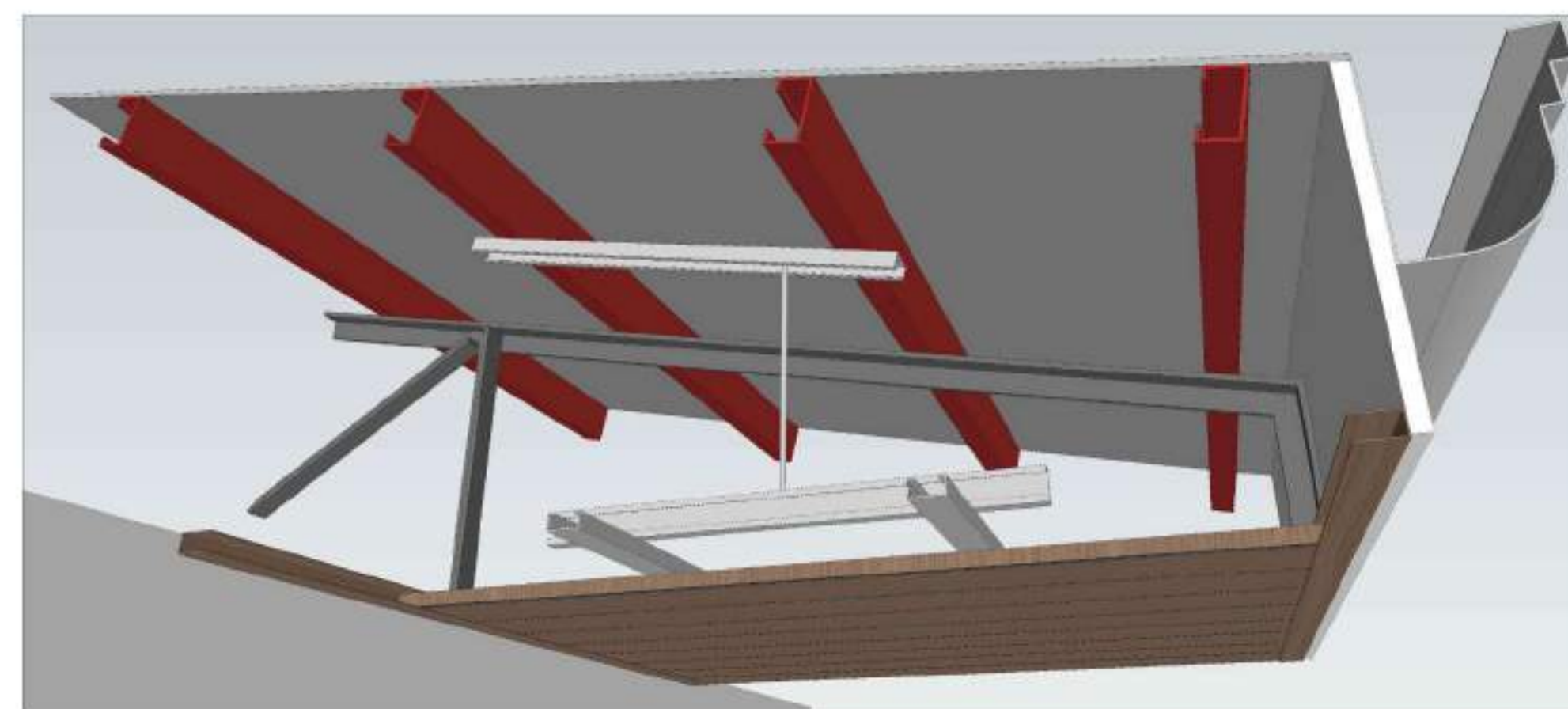
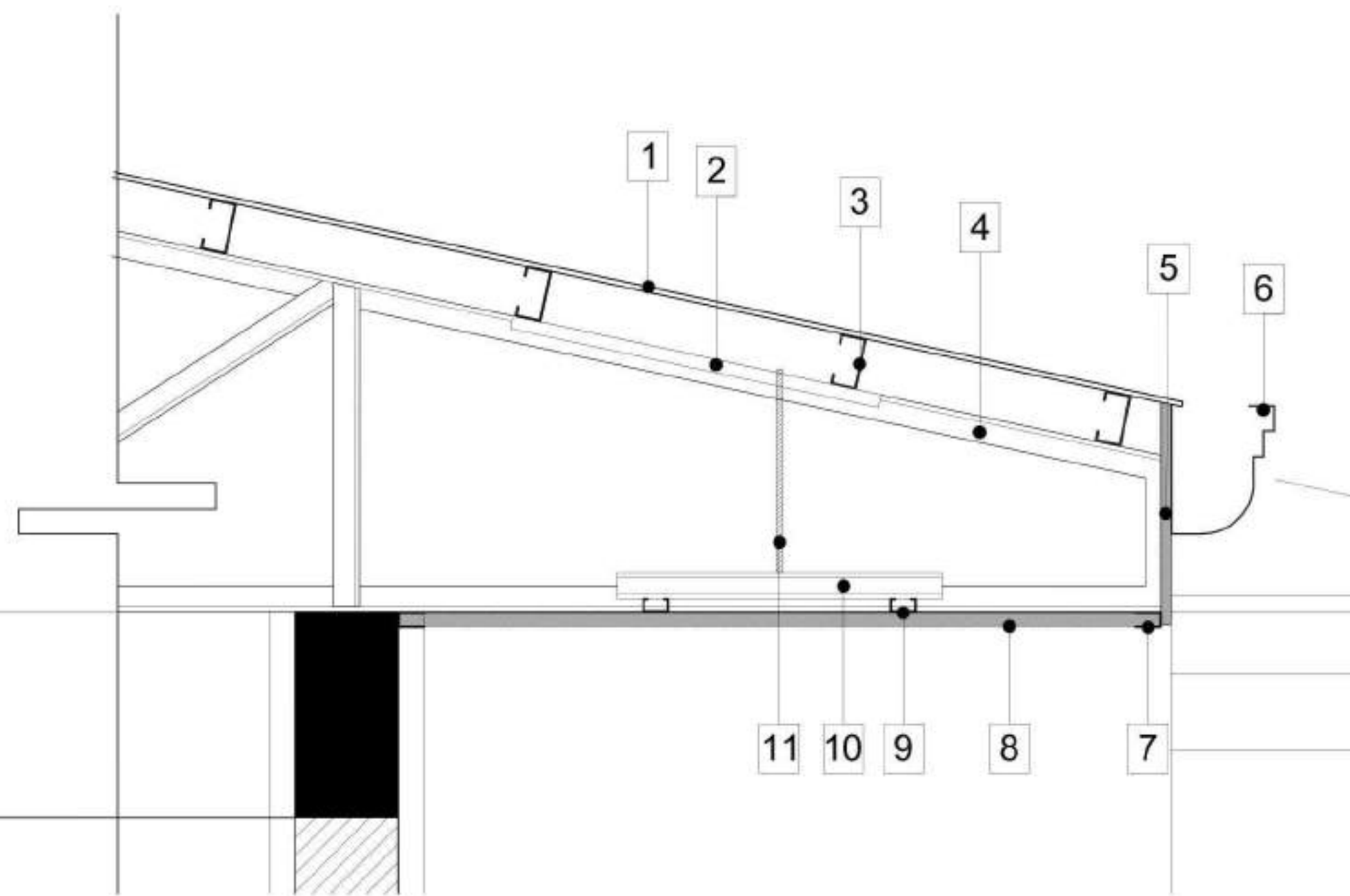
APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR

OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A

SHEET NO. 602

AS SHOWN



- LEGENDS
1. GA424 RIB TYPE ROOFING.
 2. METAL FURRING SUPPORT.
 3. 2"x4" C PURLINS 0.60M ON CENTER.
 4. ANGLE BAR TRUSS FRAMING.
 5. 20mm Thk. Foam Board Senepa.
 6. Stainless Gutter w/ water strainer.
 7. Spandrel End Cap Moulding.
 8. 150mm Spandrel (Normal & Vent).
 9. 0.5mm Thk Metal Furring.
 10. C-Channel Support
 11. 12mm Thk. Threaded Rod Support every 1.50m

- NOTES
1. BEDROOM REFLECTED CEILING PLAN IS AS IS AS PER ACTUAL. LIGHTING LAYOUT IS ALSO AS IS.
 2. FOR ANY CLARIFICATION VERIFY ARCHITECT OR ENGINEER IN CHARGE.
 3. FOR CEILING FRAMING SUBMIT METHOD OF INSTALLATION PRIOR TO INSTALLATION FOR EVALUATION IF MATCH ON THE REQUIRED CEILING FRAMING.

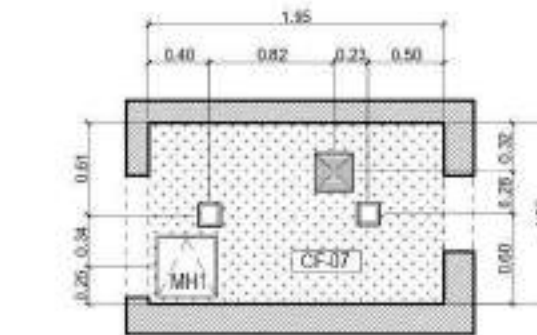
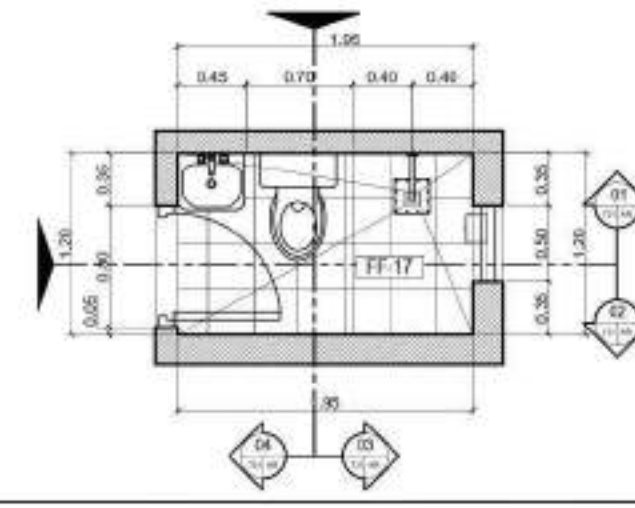
REPLAN

DRAWING PHASE

1 SPANDREL SECTION DETAIL
AR 721 SCALE 1:10MTS

2 SPANDREL SECTION DETAIL (3D)
AR 721

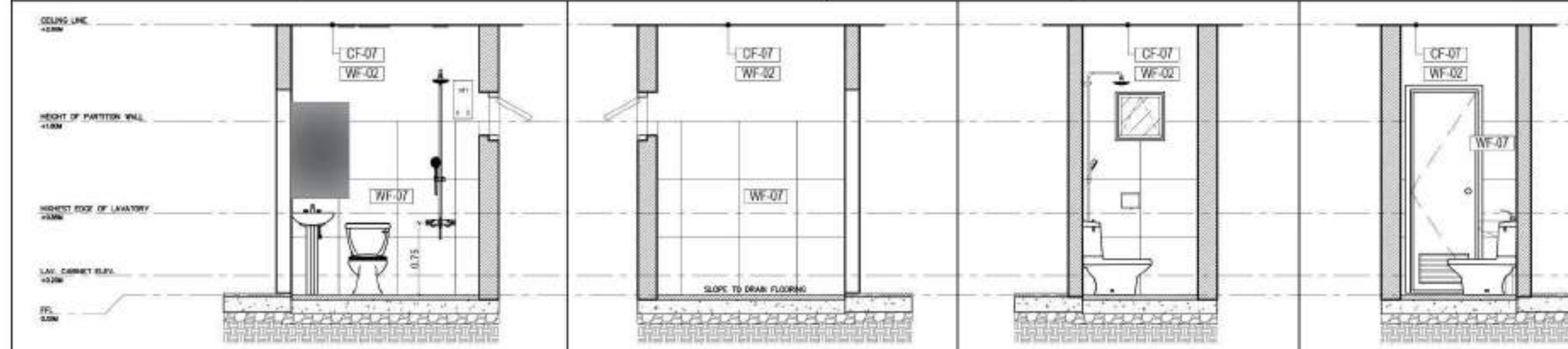
	PREPARED BY : [ORIGINAL SIGNED] AR. ANJO H. RADUEÑO <small>REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PREPARED BY : [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. <small>REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS <small>REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	RECOMMENDING APPROVAL : [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA <small>CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	APPROVED BY : [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II <small>REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</small>	PROJECT TITLE : RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR <small>GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALABO, BINTANGAS</small>	OWNER : DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO. : 721 SHEET CONTENTS : AS SHOWN AR
	<small>NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENTS AND MINISTRIAL REGULATIONS OF THE GOVERNMENT AGENCY, FURTHER EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7920.</small>							



1 BEDROOM TYPICAL TOILET 1
P E R S P E C T I V E

2 BEDROOMS TYPICAL TOILET 1
BLOW-UP PLAN

3 BEDROOMS TYPICAL TOILET 1
REFLECTED CEILING PLAN

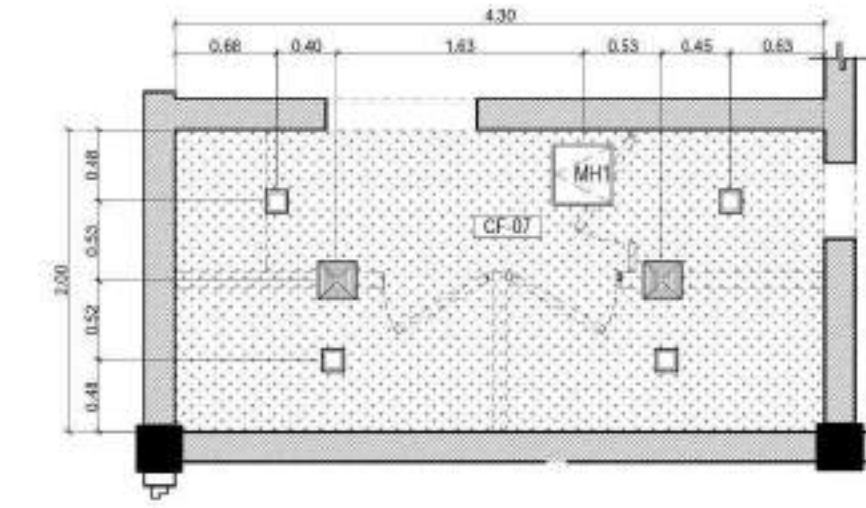
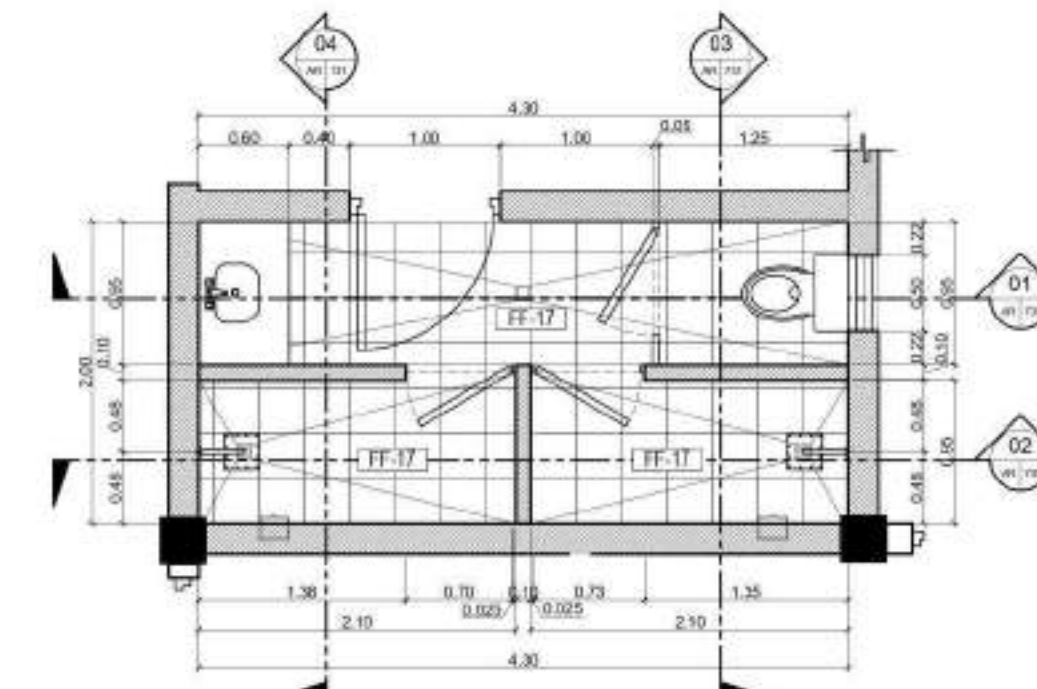


4 BEDROOMS TYPICAL TOILET 1
SECTIONAL ELEVATION-1

5 BEDROOMS TYPICAL TOILET 1
SECTIONAL ELEVATION-2

6 BEDROOMS TYPICAL TOILET 1
SECTIONAL ELEVATION-3

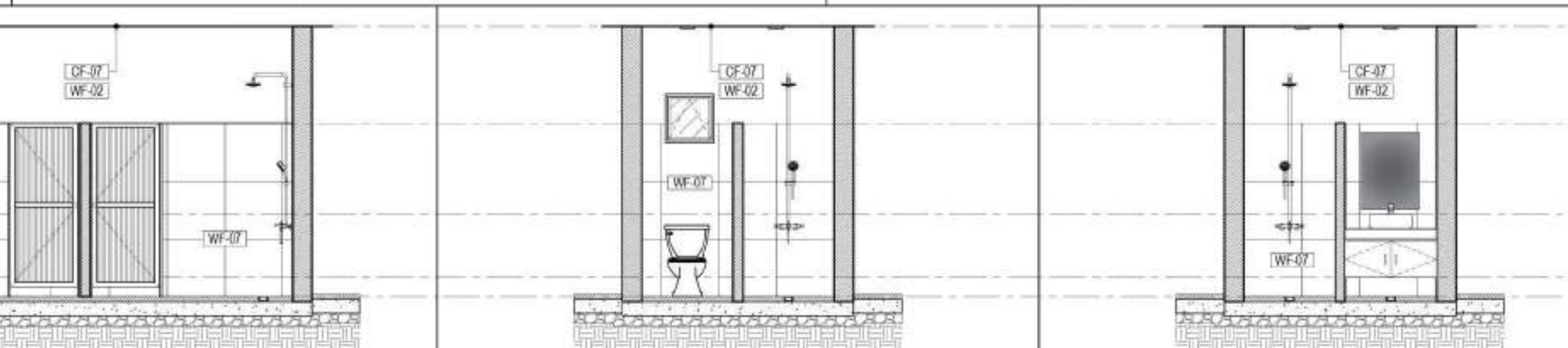
7 BEDROOMS TYPICAL TOILET 1
SECTIONAL ELEVATION-4



8 BEDROOMS TYPICAL TOILET 2
P E R S P E C T I V E

9 BEDROOMS TYPICAL TOILET 2
BLOW-UP PLAN

10 BEDROOMS TYPICAL TOILET 2
REFLECTED CEILING PLAN



11 BEDROOMS TYPICAL TOILET 2
SECTIONAL ELEVATION-1

12 BEDROOMS TYPICAL TOILET 2
SECTIONAL ELEVATION-2

13 BEDROOMS TYPICAL TOILET 2
SECTIONAL ELEVATION-3

14 BEDROOMS TYPICAL TOILET 2
SECTIONAL ELEVATION-4

LEGENDS

FLOOR FINISHES	
FF-06	600MM X 600MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-17	300MM X 300MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-18	NON-SKD CEMENT FLOORS FINISH WITH 10mm x 10mm HORIZONTAL GROOVE LINES
WALL FINISHES	
WF-02	PLAIN CEMENT WITH SKIMCOAT PAINTED FINISHED
WF-07	600MM X 600MM HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)
WF-16	20mm THK. SYNTHETIC TILES (SIZE TO VERIFY ON PLAN)
WF-17	200mm X 400mm HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)
CEILING FINISHES	
CF-07	12MM THK. FIBER CEMENT BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING

- NOTES
1. ALL TOILET FLOOR TILES MUST BE SLOPE TO DRAIN TOILETS WITH INCORRECT SLOPE OR PONDED PART WILL BE SUBJECT FOR REPAIR C/O OF CONTRACTOR.
 2. ALL ANGLE VALVES FOR WATER CLOSET MUST BE 5-WAY GATE VALVE TO ACCOMMODATE BIDET SPRAY WITH SEPARATE SHUT OFF MECHANISM.
 3. ALL CORNER TILES MUST BE CHAMFERED 45° TO ATTAIN SMOOTH CORNER TERMINATION.
 4. PRESSURE TEST OF WATERLINE PRIOR TO ANY FINISHING WORKS. NO APPROVE PRESSURE TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 5. WATERPROOFING AND FLOOD TESTING PRIOR TO ANY FINISHING WORKS. NO APPROVE FLOOD TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 6. SANITARY AND VENTILATION TESTING AND COMMISSIONING PRIOR TO ANY FINISHING WORKS. NO APPROVE TESTING AND COMMISSIONING OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR DAMAGES ON EMBEDDED PIPINGS DURING INSTALLATION OF TOILET WARES MUST BE COORDINATED TO THE CONTRACTORS PLUMBER TO AVOID REPAIRS.
 8. HANGER SUPPORT FOR CEILING PIPES MUST BE EVERY 1.2M OR LESS WITH COMPLETE SET OF HANGER SUPPORT, TIE WIRE AND METAL FURRING SUPPORT IS NOT ALLOWED.
 9. TOTAL HEIGHT OF LAVATORY MUST BE 0.85M FROM FFL TO THE HIGHEST LIP OF VESSEL TYPE LAVATORY. VERIFY THE ACTUAL HEIGHT OF VESSEL TYPE LAVATORY TO ACHIEVE THE 0.85M REQUIRED HEIGHT.

REPLAN

DRAWING PHASE

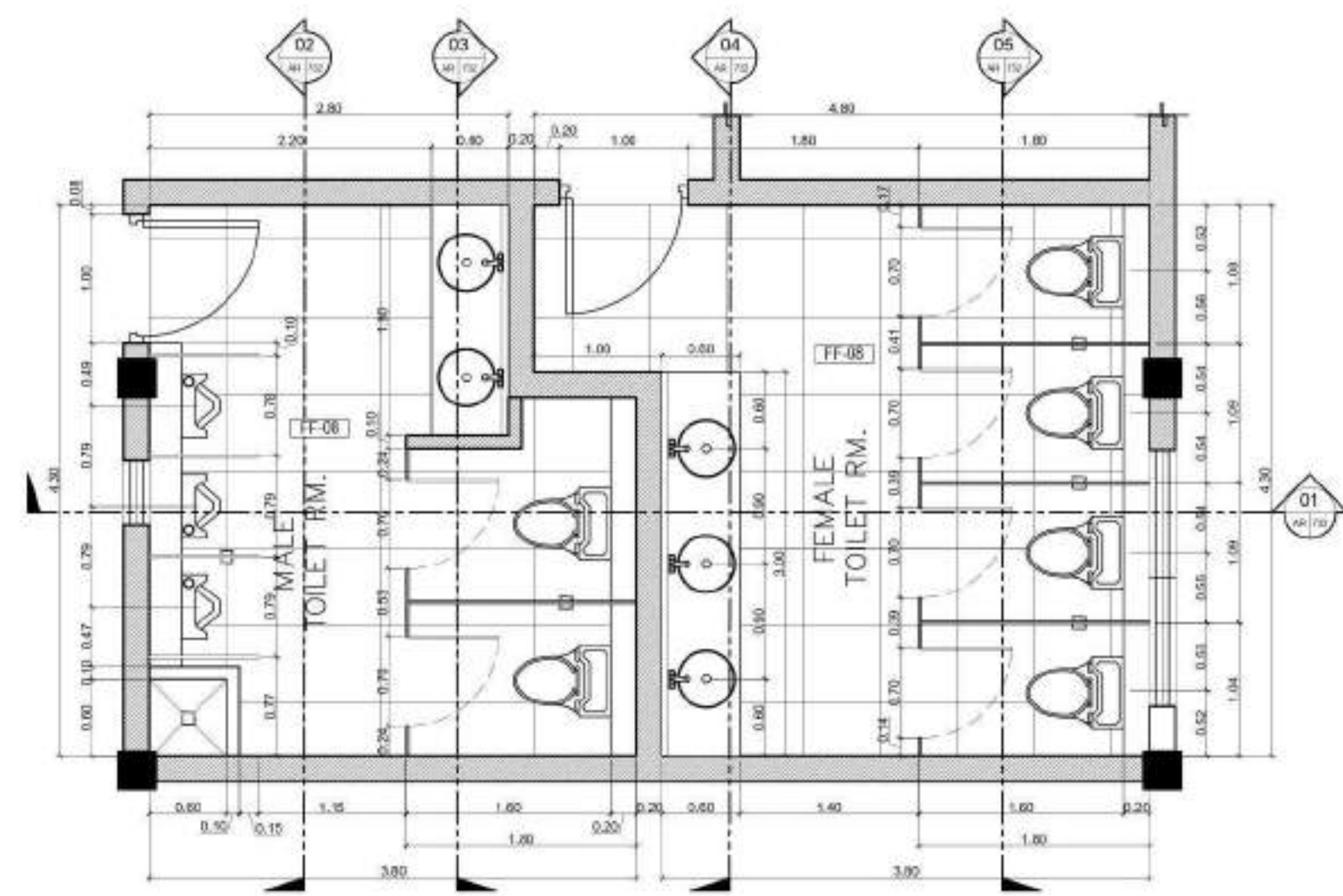
	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT II (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>CHECKED BY :</p> <p>[ORIGINAL SIGNED] ENGR. JAWAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>RECOMMENDING APPROVAL :</p> <p>[ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>APPROVED BY :</p> <p>[ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PROJECT TITLE :</p> <p>REL-C-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR</p>	<p>OWNER :</p> <p>DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A</p>	<p>SHEET NO. :</p> <p>731</p>
	<p>Address: GATE 2, KARANGALAN VILLAGE, CANTIA, BZAL</p> <p>Website: depededucation.ph</p>	<p>SHEET CONTENTS :</p> <p>AS SHOWN</p>	<p>AR</p>						

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL CALCULATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, CALCULATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY A PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTOR THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE SUPERVISION AND SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTERED DESIGN AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7950.

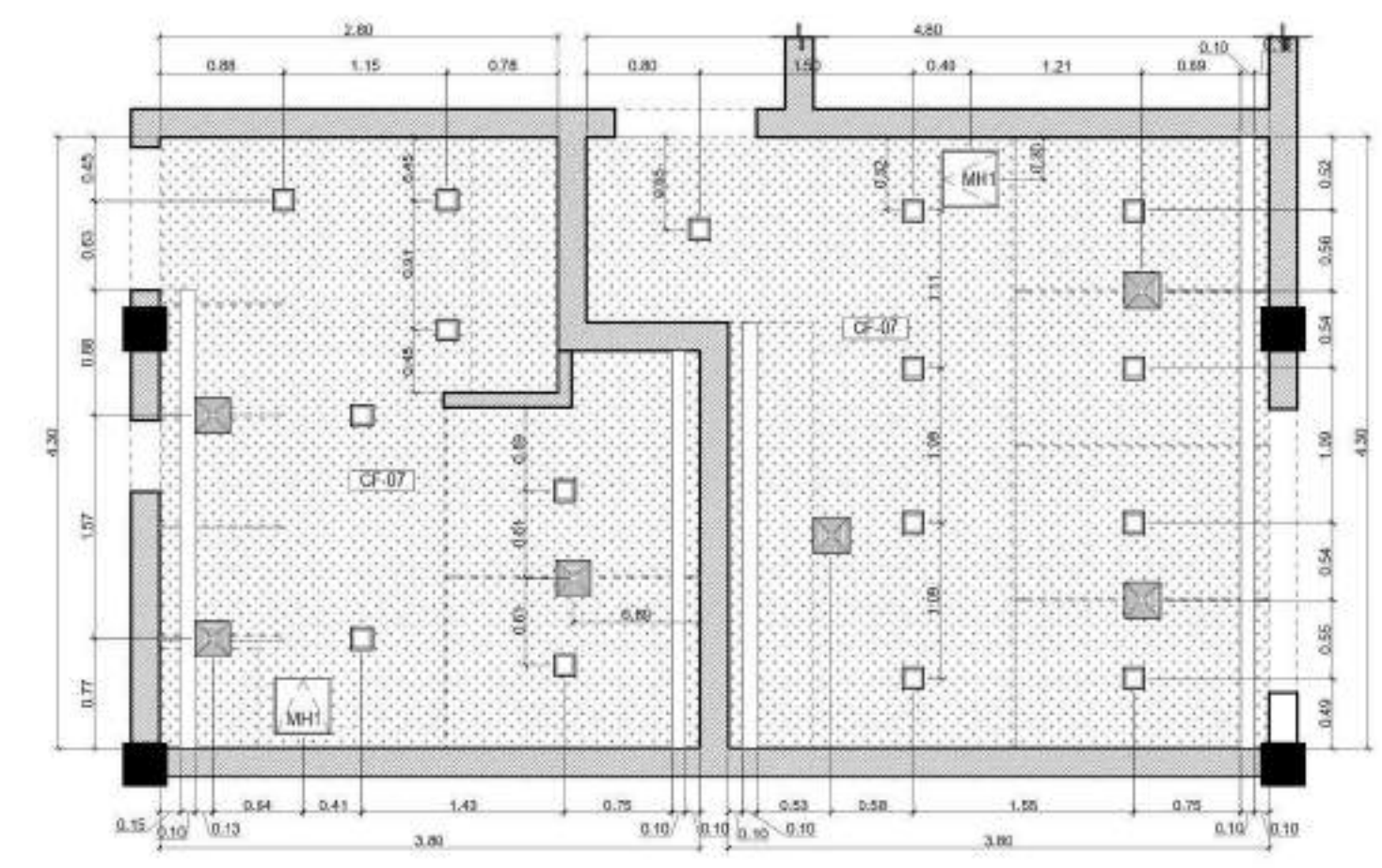


16 PERSPECTIVE

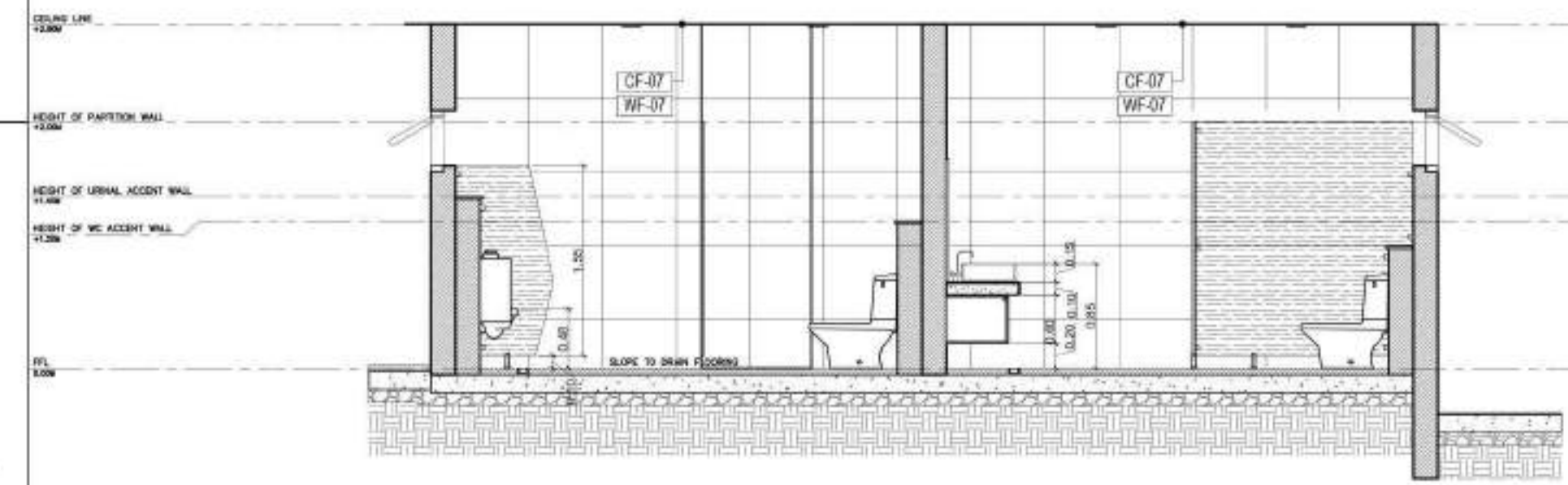
15 PERSPECTIVE



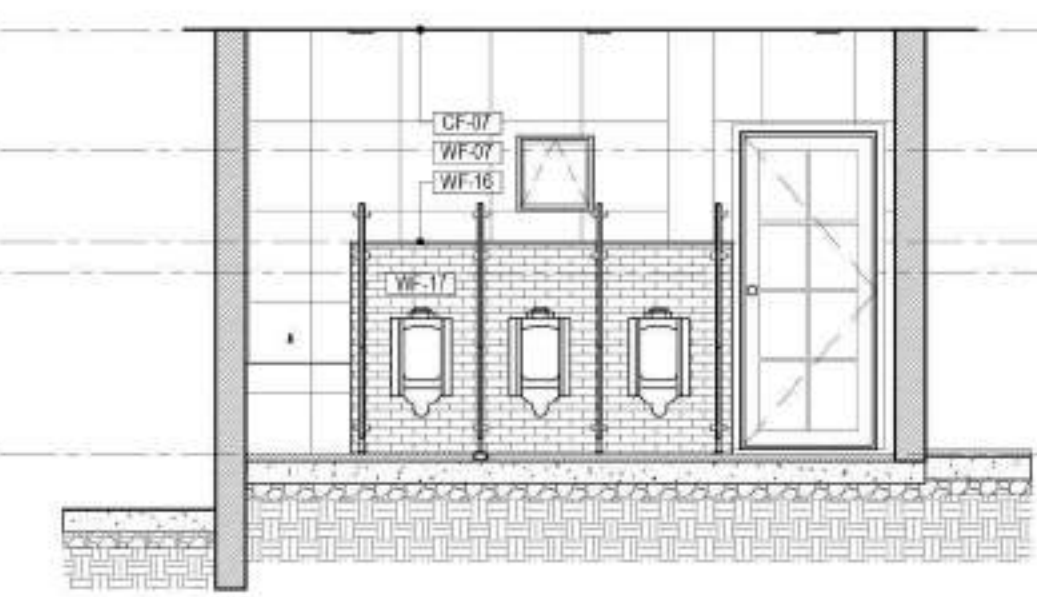
17 MESS HALL COMMON TOILET
BLOW-UP PLAN
SCALE 1:50MTS



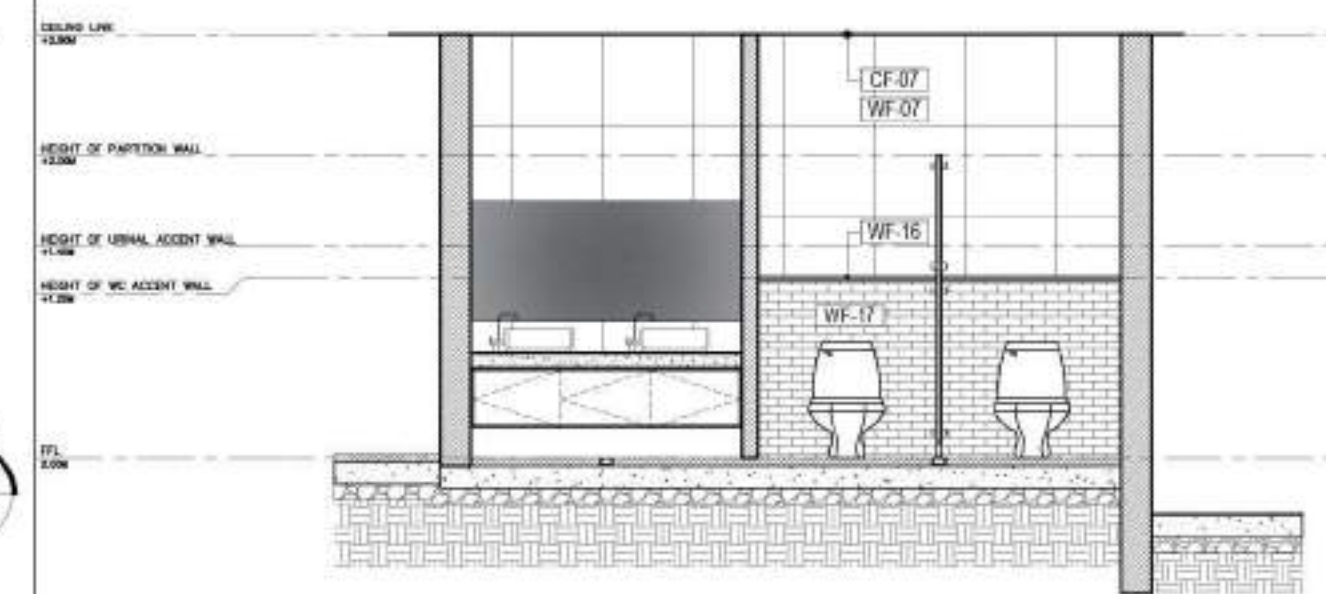
18 MESS HALL COMMON TOILET
REFLECTED CEILING PLAN
SCALE 1:50MTS



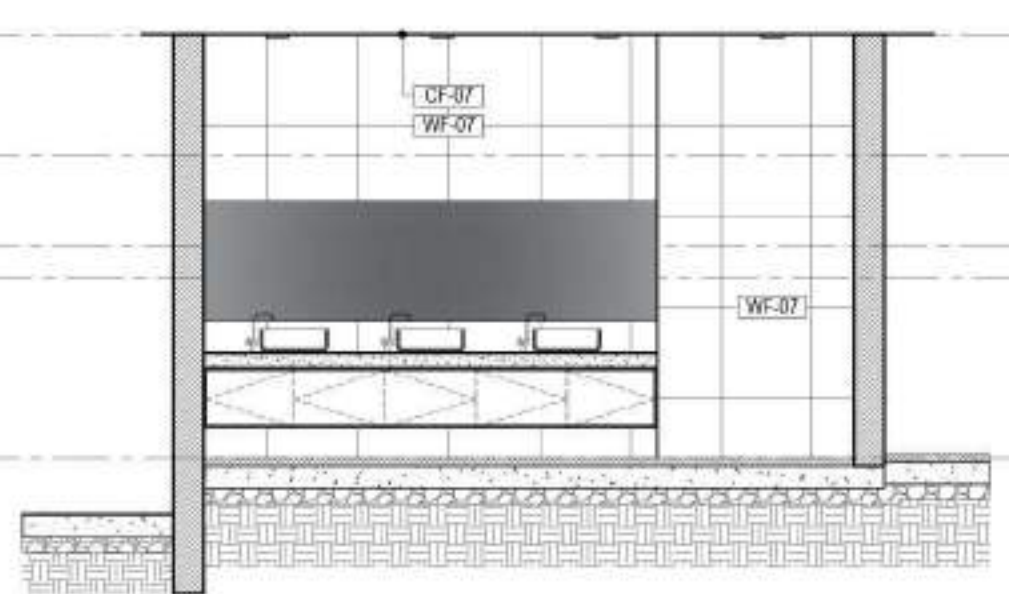
19 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-1
SCALE 1:50MTS



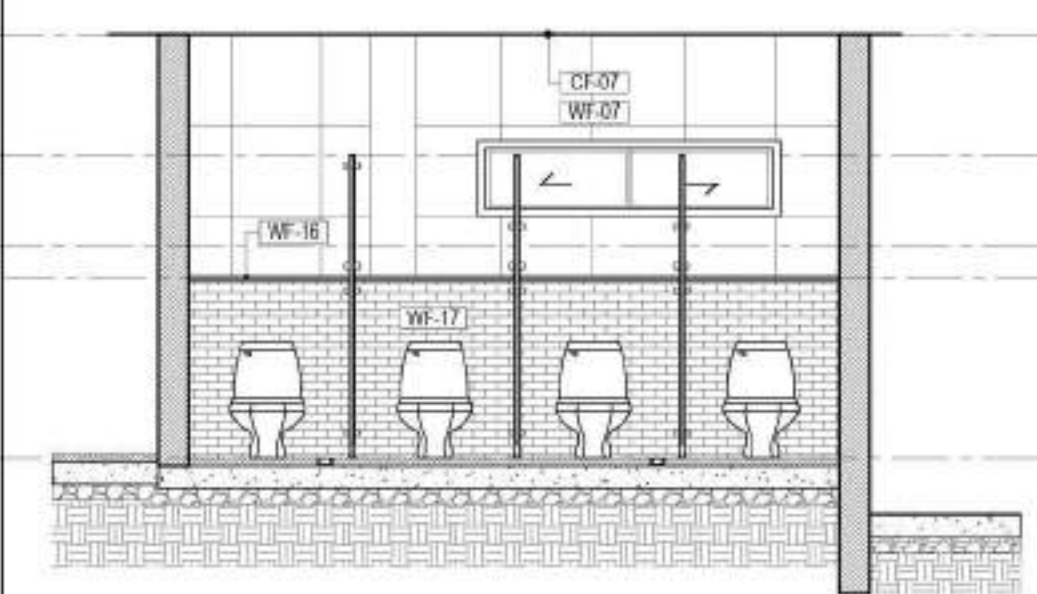
20 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-2
SCALE 1:50MTS



21 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-3
SCALE 1:50MTS



22 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-4
SCALE 1:50MTS



23 MESS HALL COMMON TOILET
SECTIONAL ELEVATION-5
SCALE 1:50MTS

LEGENDS

FLOOR FINISHES	
FF-06	600MM X 600MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-17	300MM X 300MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
FF-18	NON-SKD CEMENT FLOOR FINISH WITH 10mm x 10mm HORIZONTAL GROOVE LINES
WALL FINISHES	
WF-02	PLAIN CEMENT WITH SKIMCOAT PAINTED FINISHED
WF-07	600MM X 600MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)
WF-16	20mm THK. SYNTHETIC TILES (SIZE TO VERIFY ON PLAN)
WF-17	200mm X 400mm HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)
CEILING FINISHES	
CF-07	12MM THK. FIBER CEMENT BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING

- NOTES
1. ALL TOILET FLOOR TILES MUST BE SLOPE TO DRAIN TOILETS WITH INCORRECT SLOPE OR PONDED PART WILL BE SUBJECT FOR REPAIR C/O OF CONTRACTOR.
 2. ALL ANGLE VALVES FOR WATER CLOSET MUST BE 5-WAY GATE VALVE TO ACCOMMODATE BIDET SPRAY WITH SEPARATE SHUT OFF MECHANISM
 3. ALL CORNER TILES MUST BE CHAMFERED 45° TO ATTAIN SMOOTH CORNER TERMINATION.
 4. PRESSURE TEST OF WATERLINE PRIOR TO ANY FINISHING WORKS. NO APPROVE PRESSURE TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 5. WATERPROOFING AND FLOOD TESTING PRIOR TO ANY FINISHING WORKS. NO APPROVE FLOOD TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 6. SANITARY AND VENTILATION TESTING AND COMMISSIONING PRIOR TO ANY FINISHING WORKS. NO APPROVE TESTING AND COMMISSIONING OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 7. DAMAGES ON EMBEDDED PIPINGS DURING INSTALLATION OF TOILET WARES MUST BE COORDINATED TO THE CONTRACTORS PLUMBER TO AVOID REPAIRS.
 8. HANGER SUPPORT FOR CEILING PIPES MUST BE EVERY 1.2M OR LESS WITH COMPLETE SET OF HANGER SUPPORT, TIE WIRE AND METAL FURRING SUPPORT IS NOT ALLOWED.
 9. TOTAL HEIGHT OF LAVATORY MUST BE 0.85M FROM FFL TO THE HIGHEST LIP OF VESSEL TYPE LAVATORY. VERIFY THE ACTUAL HEIGHT OF VESSEL TYPE LAVATORY TO ACHIEVE THE 0.85M REQUIRED HEIGHT.

REPLAN

DRAWING PHASE

DepED MATATAG BACOG PILIPINAS

Address: GATE 2, KARANGALAN VILLAGE, CANTA, BZAL
Telephone No: 02-8862-2114

PREPARED BY: [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT II (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR.
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

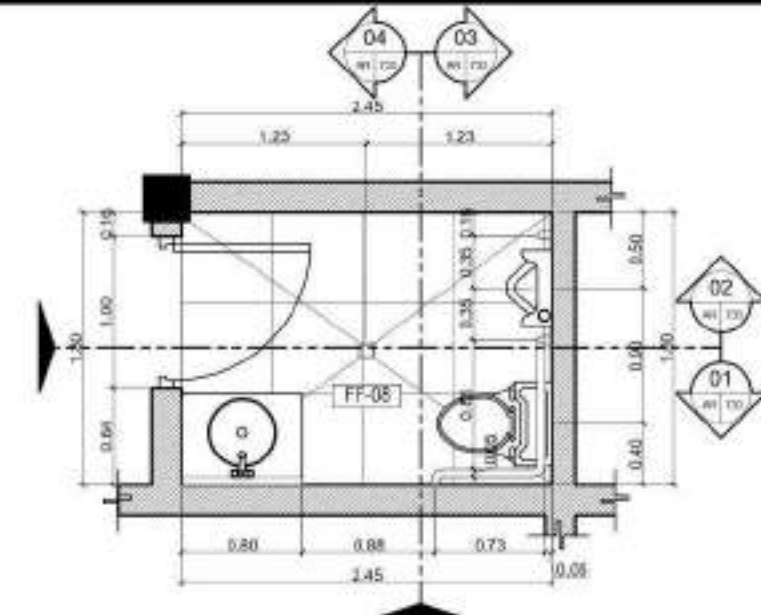
APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES
LOCATION: MALAB, MINDAOS

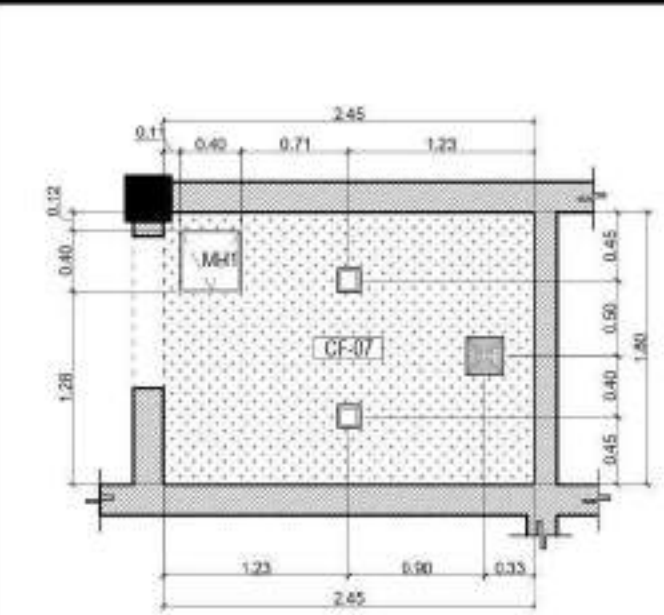
OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A
SHEET CONTENTS: AS SHOWN

SHEET NO. 732
AR

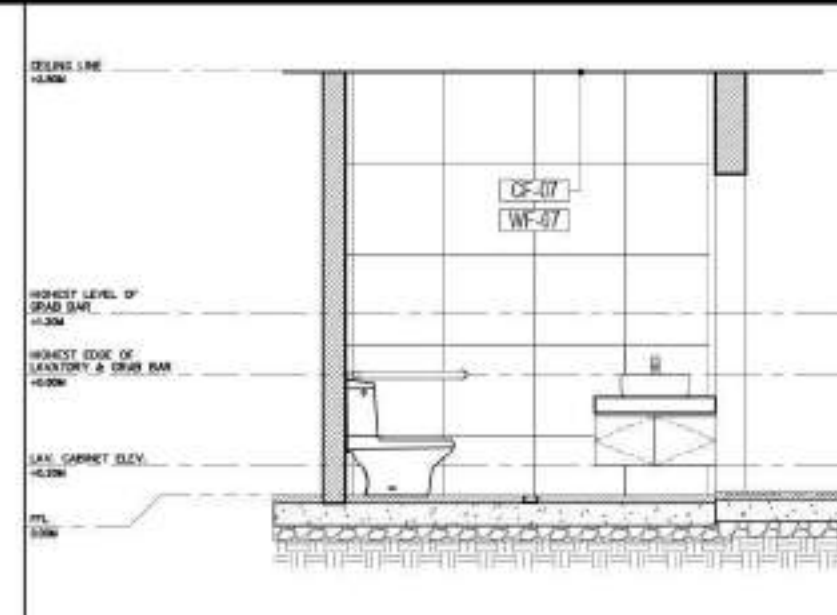
NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, SPECIFICATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTOR THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7905.



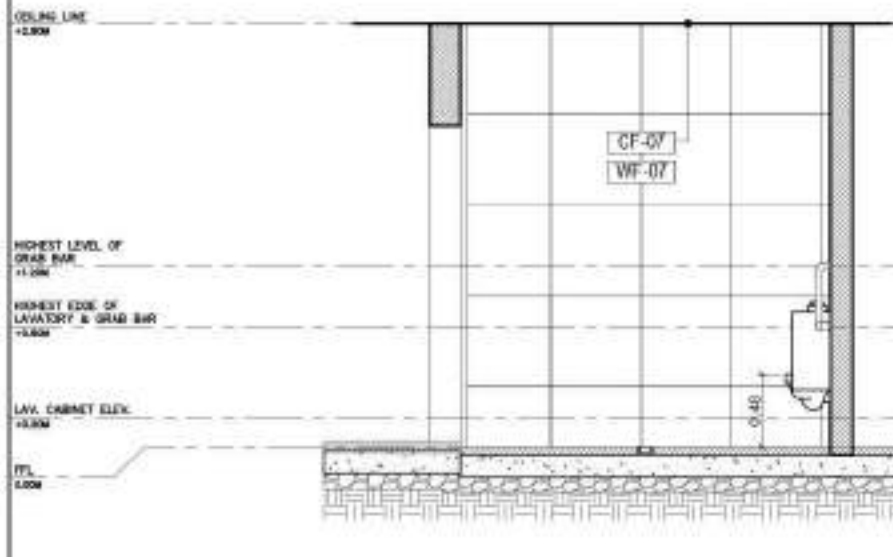
25 PWD TOILET BLOW-UP PLAN
AR 733 SCALE 1:50M/T5



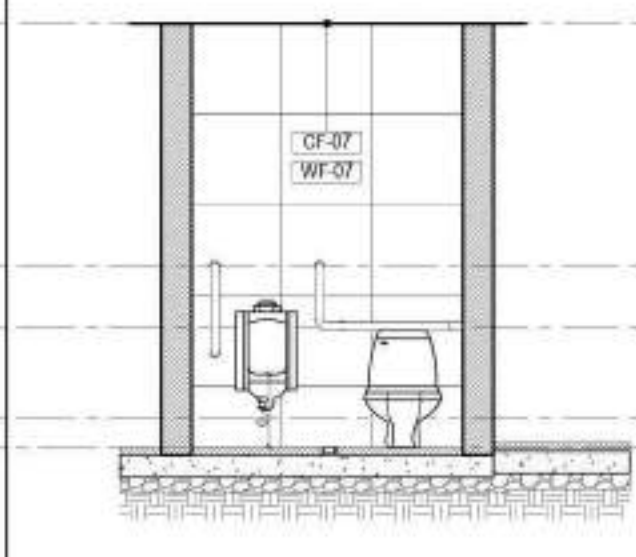
26 REFLECTED CEILING PLAN
AR 733 SCALE 1:50M/T5



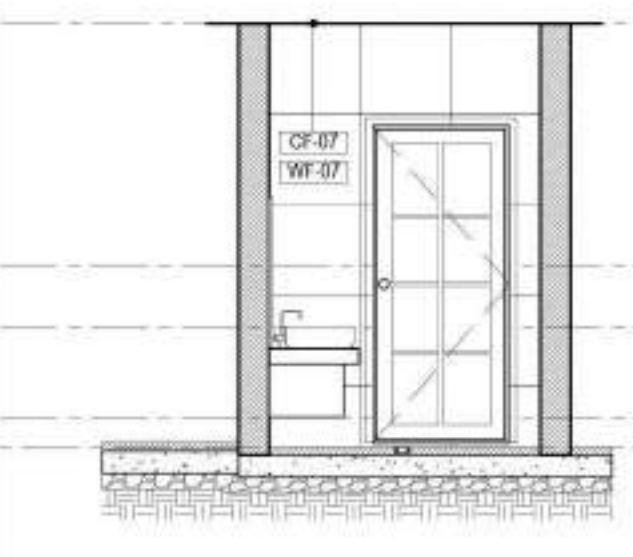
27 SECTIONAL ELEVATION-1
AR 733 SCALE 1:50M/T5



28 SECTIONAL ELEVATION-2
AR 733 SCALE 1:50M/T5

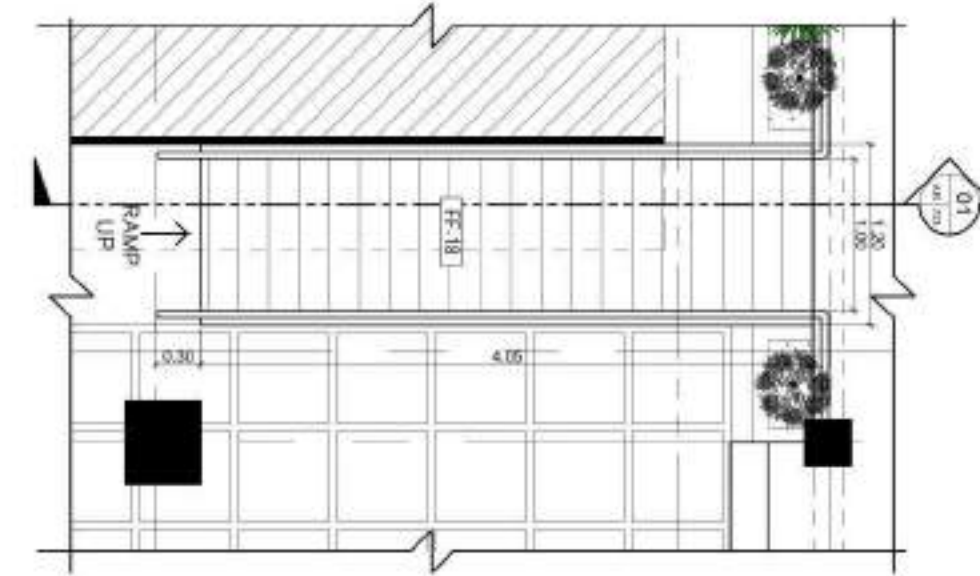


29 SECTIONAL ELEVATION-3
AR 733 SCALE 1:50M/T5

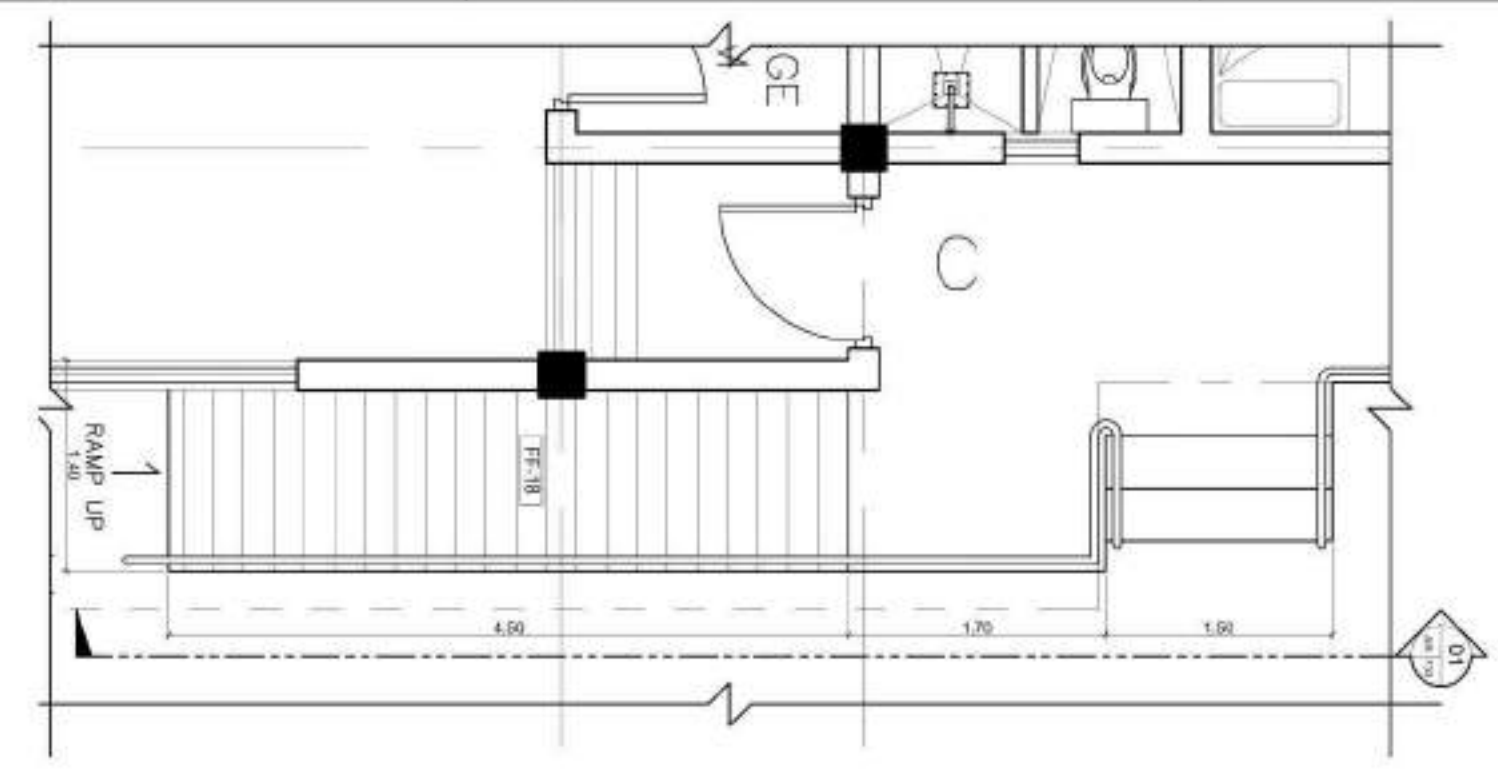


30 SECTIONAL ELEVATION-4
AR 733 SCALE 1:50M/T5

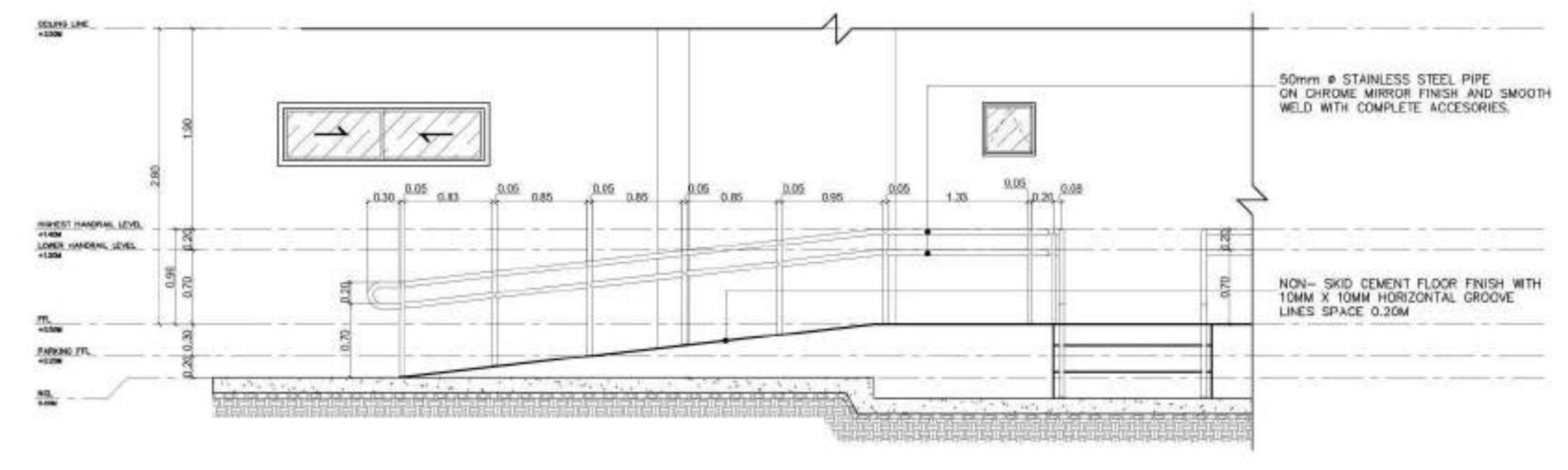
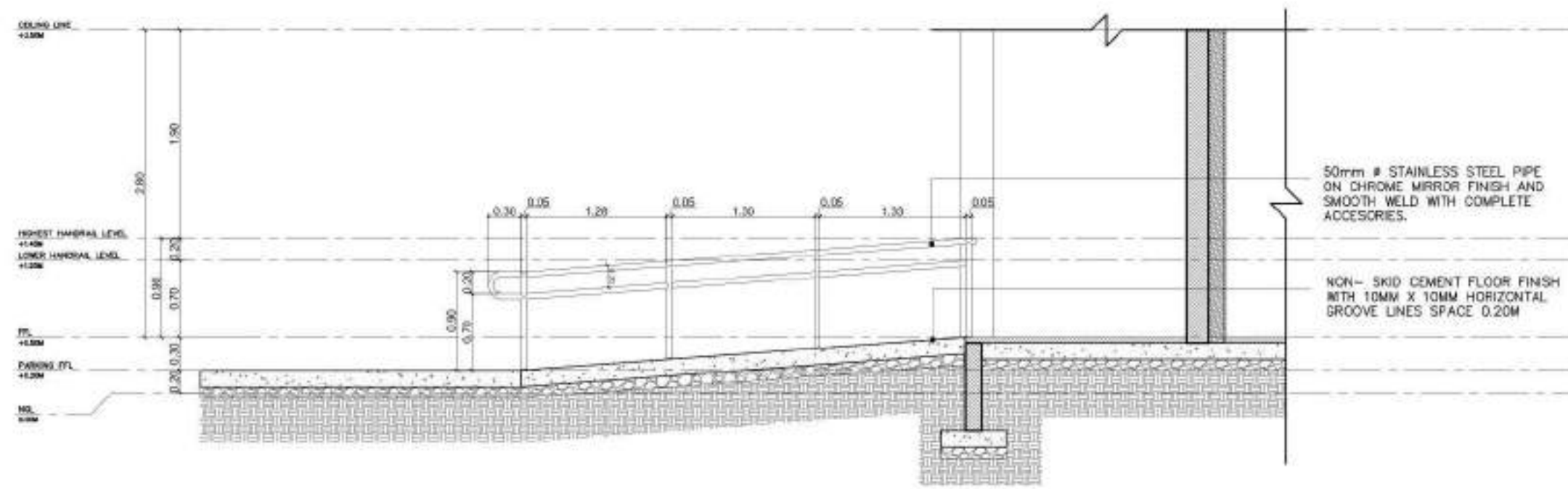
24 PWD TOILET PERSPECTIVE
AR 733 SCALE 1:50M/T5



31 PWD RAMP NEAR MAIN ENTRANCE BLOW-UP PLAN AND SECTION DETAILS-1
AR 733 SCALE 1:50M/T5



32 UTILITY RAMP NEAR KITCHEN BLOW-UP PLAN AND SECTION DETAILS-1
AR 733 SCALE 1:50M/T5



LEGENDS

FLOOR FINISHES

FF-06 600MM X 600MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)

FF-17 300MM X 300MM HOMOGENEOUS TILES WITH WATERPROOFING MEMBRANE (VERIFY ARCHITECT)

FF-18 NON-SKID CEMENT FLOOR FINISH WITH 10mm x 10mm HORIZONTAL GROOVE LINES

WALL FINISHES

WF-02 PLAIN CEMENT WITH SKIMCOAT PAINTED FINISHED

WF-07 600MM X 600MM HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)

WF-16 20mm Thk. SYNTHETIC TILES (size to verify on plan)

WF-17 200mmX400mm HOMOGENEOUS WALL TILES (VERIFY ARCHITECT)

CEILING FINISHES

CF-07 12MM THK. FIBER CEMENT BOARD PAINTED FINISHED ON STANDARD METAL FURRING FRAMING.

- NOTES
1. ALL TOILET FLOOR TILES MUST BE SLOPE TO DRAIN TOILETS WITH INCORRECT SLOPE OR POUNDED PART WILL BE SUBJECT FOR REPAIR C/O OF CONTRACTOR.
 2. ALL ANGLE VALVES FOR WATER CLOSET MUST BE 5-WAY GATE VALVE TO ACCOMMODATE BIDET SPRAY WITH SEPARATE SHUT OFF MECHANISM
 3. ALL CORNER TILES MUST BE CHAMFERED 45° TO ATTAIN SMOOTH CORNER TERMINATION.
 4. PRESSURE TEST OF WATERLINE PRIOR TO ANY FINISHING WORKS. NO APPROVE PRESSURE TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 5. WATERPROOFING AND FLOOD TESTING PRIOR TO ANY FINISHING WORKS. NO APPROVE FLOOD TEST RESULT OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR.
 6. SANITARY AND VENTILATION TESTING AND COMMISSIONING PRIOR TO ANY FINISHING WORKS. NO APPROVE TESTING AND COMMISSIONING OR NOTICE TO PROCEED WILL NOT BE RECOGNIZED AS ACCOMPLISHMENT AND SUBJECT FOR REPAIR DAMAGES ON EMBEDDED PIPINGS DURING INSTALLATION OF TOILET WARES MUST BE COORDINATED TO THE CONTRACTORS PLUMBER TO AVOID REPAIRS.
 7. HANGER SUPPORT FOR CEILING PIPES MUST BE EVERY 1.20M OR LESS WITH COMPLETE SET OF HANGER SUPPORT, TIE WIRE AND METAL FURRING SUPPORT IS NOT ALLOWED.
 8. TOTAL HEIGHT OF LAVATORY MUST BE 0.85M FROM FFL TO THE HIGHEST LIP OF VESSEL TYPE LAVATORY. VERIFY THE ACTUAL HEIGHT OF VESSEL TYPE LAVATORY TO ACHIEVE THE 0.85M REQUIRED HEIGHT.

REPLAN

DRAWING PHASE



PREPARED BY :
[ORIGINAL SIGNED]
AR. ANJO H. RAQUEÑO
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT II (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENGR. EDILBERTO A. DAMILES JR.
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENGR. JAMES MATWILL E. ABALOS
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY :
[ORIGINAL SIGNED]
ENGR. JAMAICA ROSE G. ROLLOQUE
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL :
[ORIGINAL SIGNED]
DR. EDUARDA M. ZAPANTA
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY :
[ORIGINAL SIGNED]
ATTY. ALBERTO T. ESCOBARTE, CESO II
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE :
RELIC-NEAR WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR

GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES

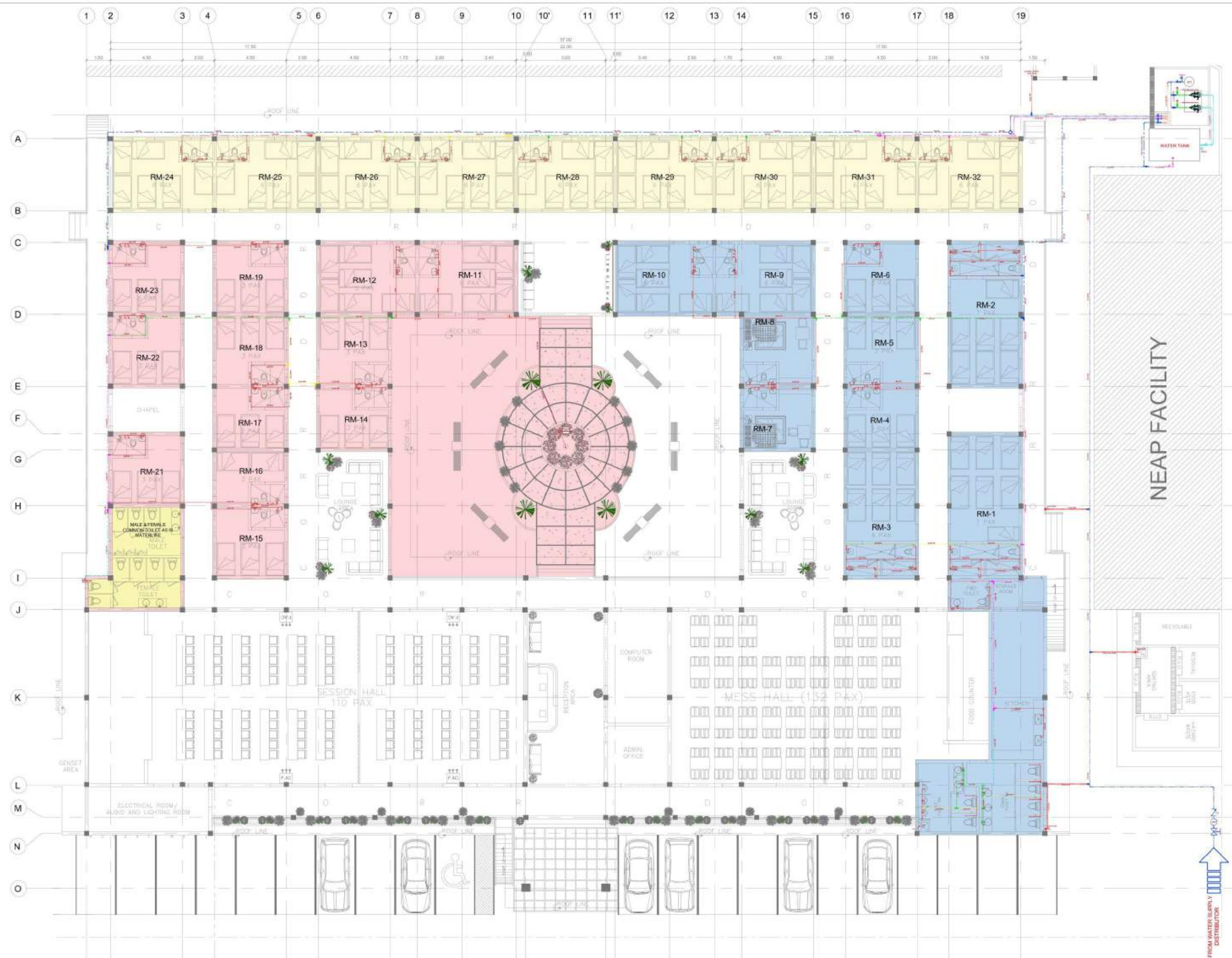
LOCATION : MALABAR, BINTANGAS

OWNER :
DEPARTMENT OF EDUCATION
REGIONAL OFFICE IV-A

SHEET CONTENTS :
AS SHOWN

SHEET NO. :
733
AR

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE UNLAWFUL FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTOR THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEDERAL AND MUNICIPAL REGULATIONS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7905.



LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Blue
630	2 1/2"	Orange
500	1 7/8"	Purple
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIBB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	ELBOW 90°
1/2"	ELBOW 90° THREADED	TEE	TEE
1/2"	TEE THREADED	GV	GATE VALVE
1/2"	CHECK VALVE	UP	UNION PATENTE
1/2"	FLOAT VALVE	HOSEBIBB	HOSEBIBB

- NOTES**
1. ALL WATER CLOSET MUST HAVE DUAL/S-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

1 PROPOSED NEW WATERLINE SYSTEM
 SCALE 1:150METS



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
 REGISTERED & LICENSED ARCHITECT
 TECHNICAL ASSISTANT II (ARCHITECT II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
 REGISTERED CIVIL ENGINEER
 TECHNICAL ASSISTANT II (ENGINEER II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

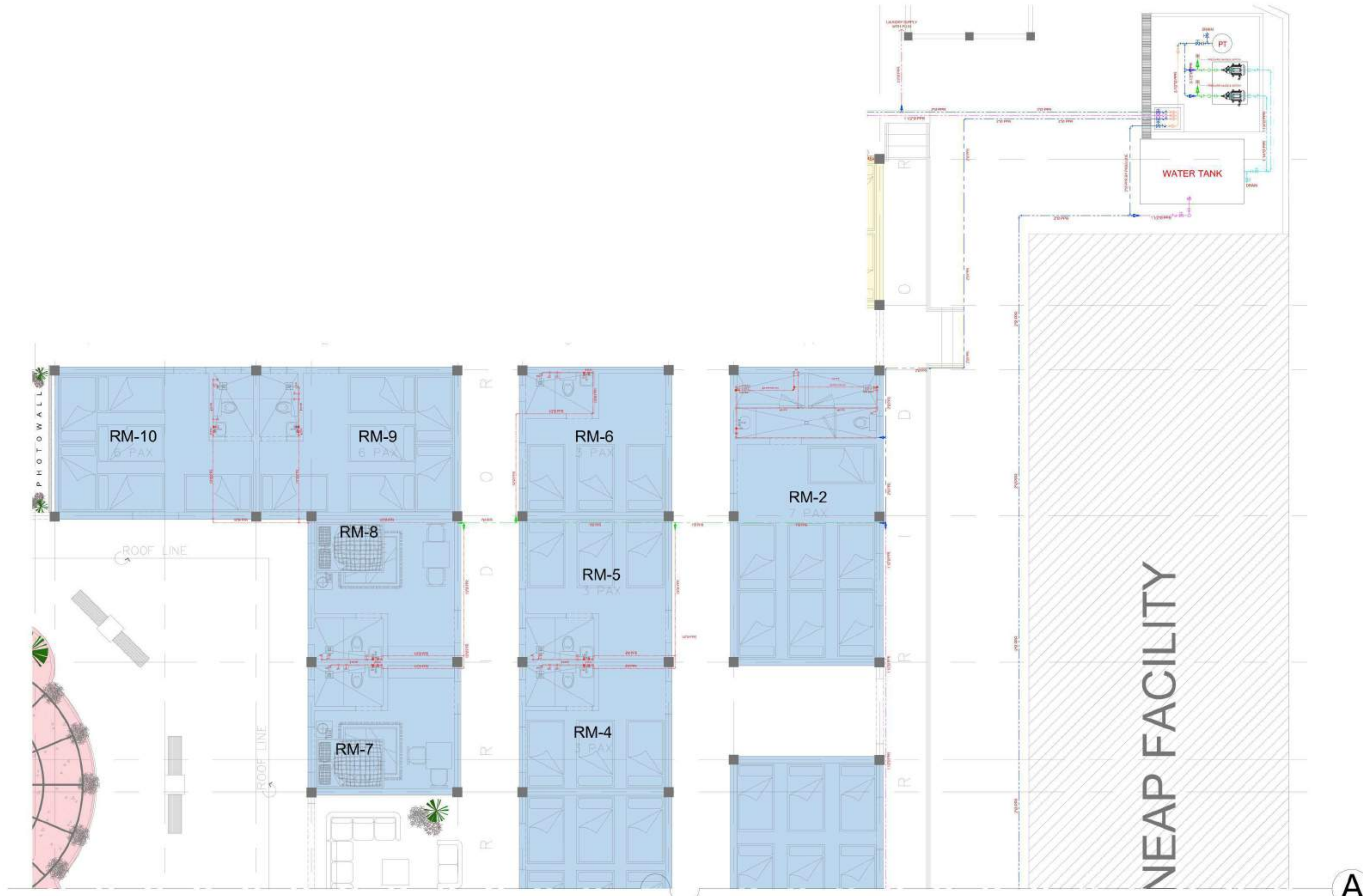
CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAMAICA ROSE G. ROLLOQUE**
 REGIONAL ENGINEER II
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
 CHIEF EDUCATION SUPERVISOR
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
 REGIONAL DIRECTOR
 OFFICE OF THE REGIONAL DIRECTOR
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
 OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A
 SHEET NO: 101
 SHEET CONTENTS: AS SHOWN
 PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SALAMPAHA FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SEALED AND SIGNED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICAL AS THE CASE MAY BE, AND THE REGULATORY, FISCAL AND MINISTERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W.P. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



2 ZONE 1 BLOW-UP WATERLINE SYSTEM (PG-1)
 PL 102 SCALE 1:75MTS

LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2"	Purple
500	1 7/8"	Blue
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Orange	WATERLINE ZONE 1
Blue	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	ELBOW 90°
1/4"	ELBOW 90° THREADED	TEE	TEE
1/4"	TEE THREADED	GV	GATE VALVE
1/4"	CHECK VALVE	UP	UNION PATENTE
1/4"	FLOAT VALVE	HO	HOSEBIB

- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL/S- WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN

DRAWING PHASE

	PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELCO-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION: MALABO, BANGALAG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 102 SHEET CONTENTS: AS SHOWN PL
	<p><small>NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VARIATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENT, FEES, AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7905.</small></p>							

A

LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2"	Purple
500	1 7/8"	Blue
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

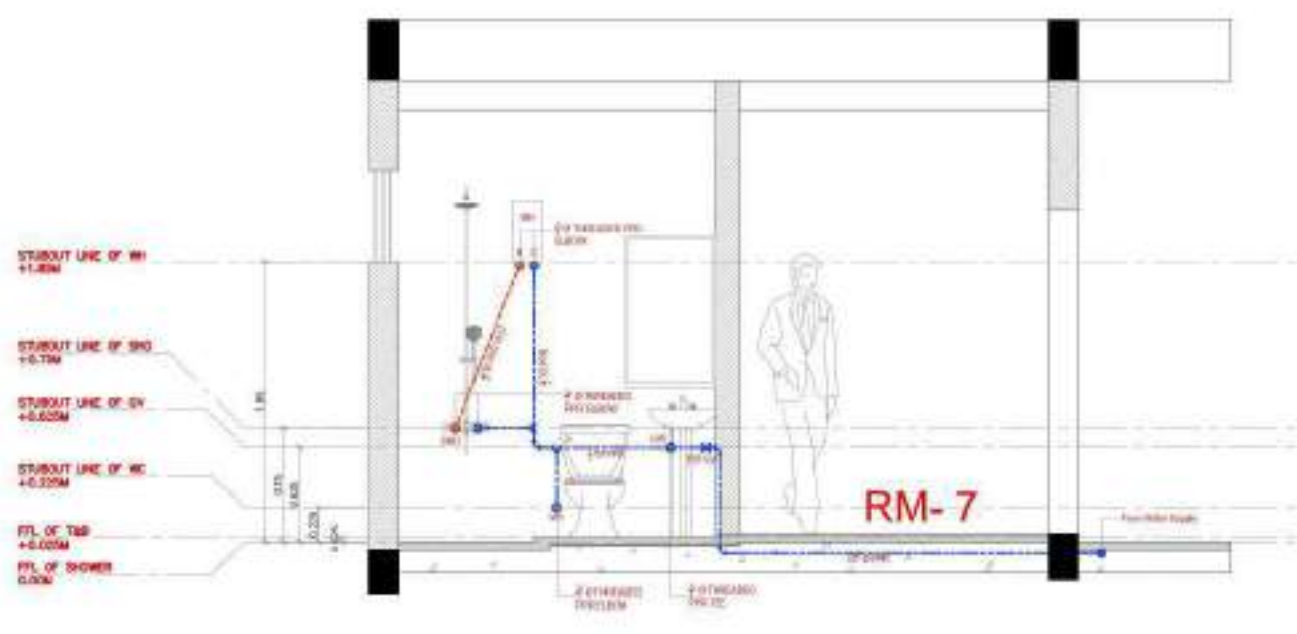
Orange	WATERLINE ZONE 1
Blue	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	ELBOW 90°
1/2"	ELBOW 90° THREADED	TEE	TEE
1/2"	TEE THREADED	GV	GATE VALVE
1/2"	CHECK VALVE	UP	UNION PATENTE
1/2"	FLOAT VALVE	HOSEBIB	HOSEBIB

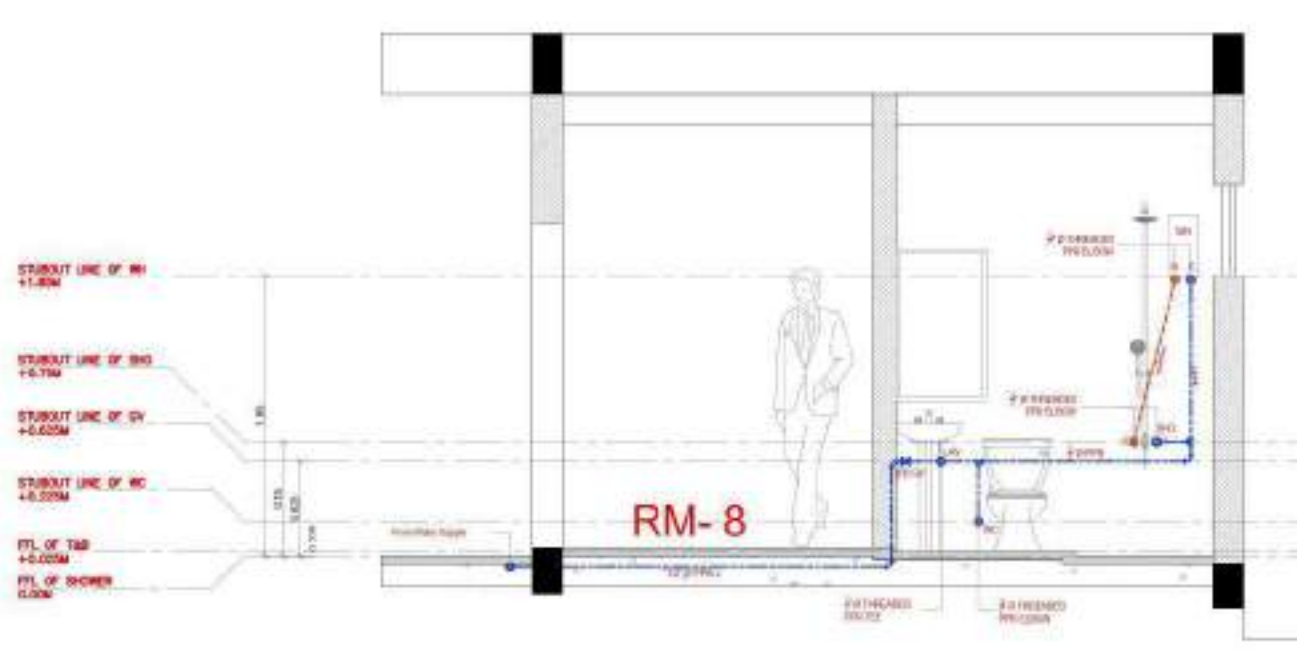
- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL 5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN

DRAWING PHASE



4 TOILET & BATH SECTION DETAIL WATER SUPPLY FROM RIGHT SIDE
SCALE 1:50MTS



5 TOILET & BATH SECTION DETAIL WATER SUPPLY FROM RIGHT SIDE
SCALE 1:50MTS

3 ZONE 1 BLOW-UP WATERLINE SYSTEM (PG-1)
SCALE 1:75MTS



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT II (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAMAICA ROSE G. ROLLOQUE**
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

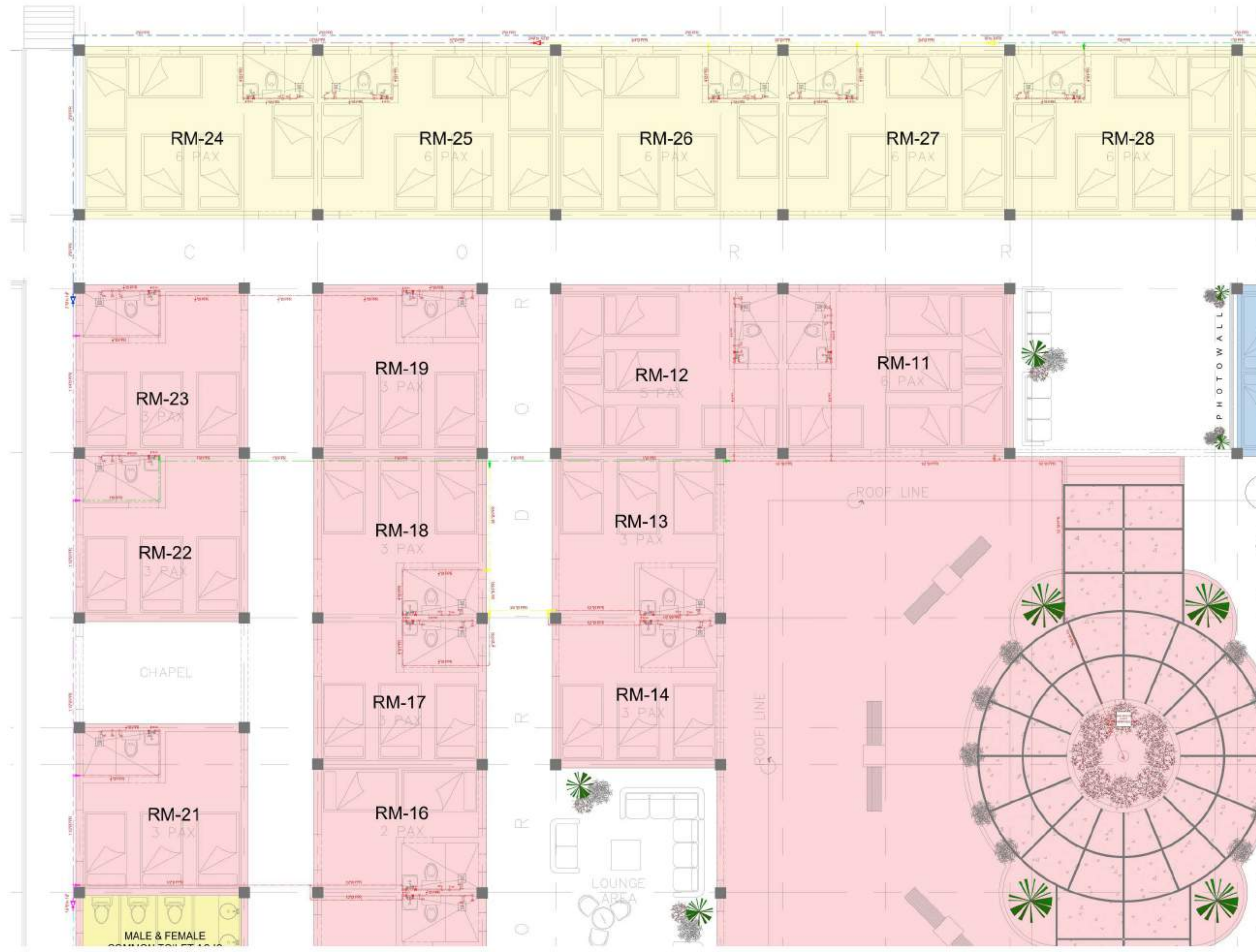
APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: **RELIC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR**
GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES
LOCATION: MALABE, MATATAG

OWNER: **DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A**
SHEET CONTENTS: **AS SHOWN**

SHEET NO. **103**
PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, CALCULATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENTIAL MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FURTHER EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7926



6 ZONE 2 BLOW-UP WATERLINE SYSTEM
 PL 104 SCALE 1:75MITS

WATERLINE LEGENDS		
SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2 1/2"	Purple
500	1 7/8"	Blue
400	1 1/2"	Green
320	1 1/4"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING	
Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIBB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	
ELBOW 90° THREADED		TEE	
TEE THREADED		GATE VALVE	
CHECK VALVE		UNION PATENTE	
FLOAT VALVE		HOSEBIBB	

- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL 5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN

DRAWING PHASE



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
 REGISTERED & LICENSED ARCHITECT
 TECHNICAL ASSISTANT II (ARCHITECT II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
 REGISTERED CIVIL ENGINEER
 TECHNICAL ASSISTANT II (ENGINEER II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAWAICA ROSE G. ROLLOQUE**
 REGIONAL ENGINEER II
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
 CHIEF EDUCATION SUPERVISOR
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
 REGIONAL DIRECTOR
 OFFICE OF THE REGIONAL DIRECTOR
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

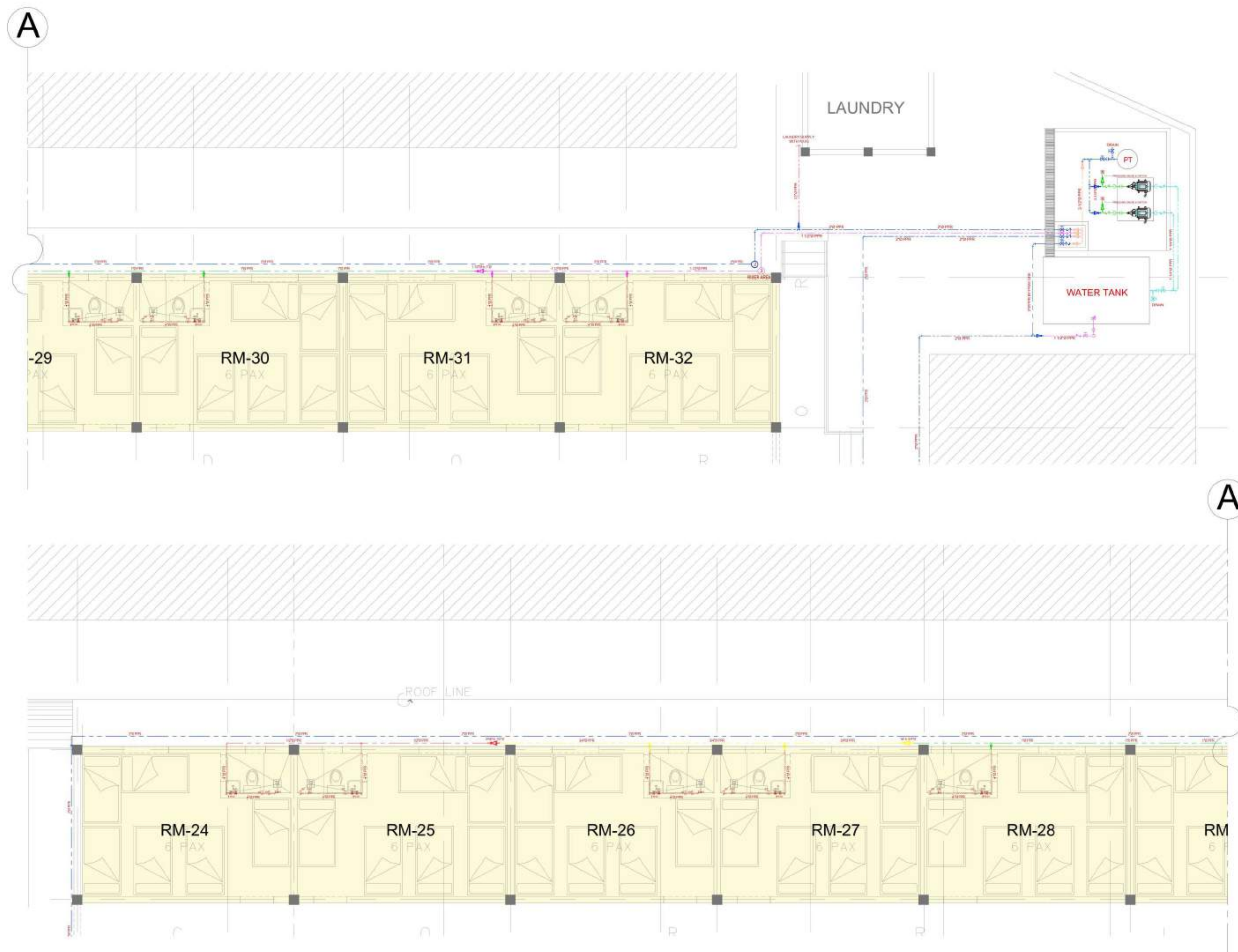
PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
 GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
 NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES
 LOCATION: MALABO, MATATAG

OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A

SHEET CONTENTS: AS SHOWN

SHEET NO. **104**
 PL

NOTE: PREPARATION OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, OR A REGISTERED ELECTRICAL ENGINEER, AS THE CASE MAY BE, AND THE REGISTRY, FEES, AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2"	Blue
500	1 7/8"	Purple
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

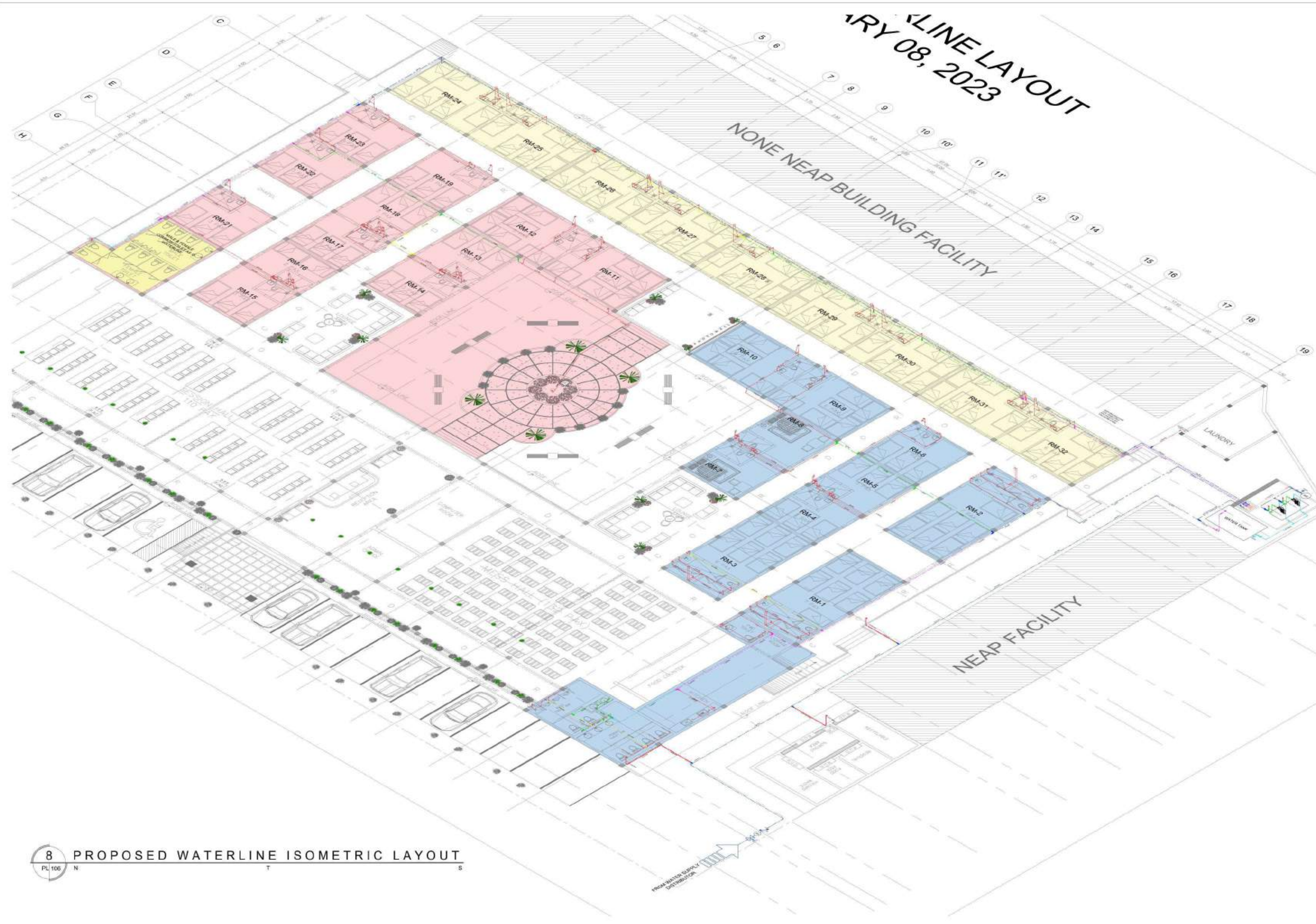
LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	
1/2"	ELBOW 90° THREADED	TEE	
1/2"	TEE THREADED	GV	GATE VALVE
1/2"	CHECK VALVE	UP	UNION PATENTE
1/2"	FLOAT VALVE	HO	HOSEBIB

- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL 5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

7 ZONE 3 BLOW-UP WATERLINE SYSTEM
 PL 105 SCALE 1:75M

	PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALIBU, BAYANAG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 105 PL
	SHEET CONTENTS: AS SHOWN								

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMELY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBILITY CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY FEE AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W.V. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7926.



LINE LAYOUT
RY 08, 2023

LEGENDS

WATERLINE LEGENDS		
SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8	Blue
630	2 1/2	Orange
500	1 7/8	Green
400	1 1/2	Red
320	1 1/4	Yellow
250	3/4	Purple
200	1/2	Black

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Green	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELB 90°	ELBOW 90°
1/2	ELBOW 90° THREADED	TEE	TEE
1/2	TEE THREADED	GV	GATE VALVE
↑	CHECK VALVE	UP	UNION PATENTE
⊕	FLOAT VALVE	HOSEBIB	HOSEBIB

- NOTES
1. ALL WATER CLOSET MUST HAVE DUAL/5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

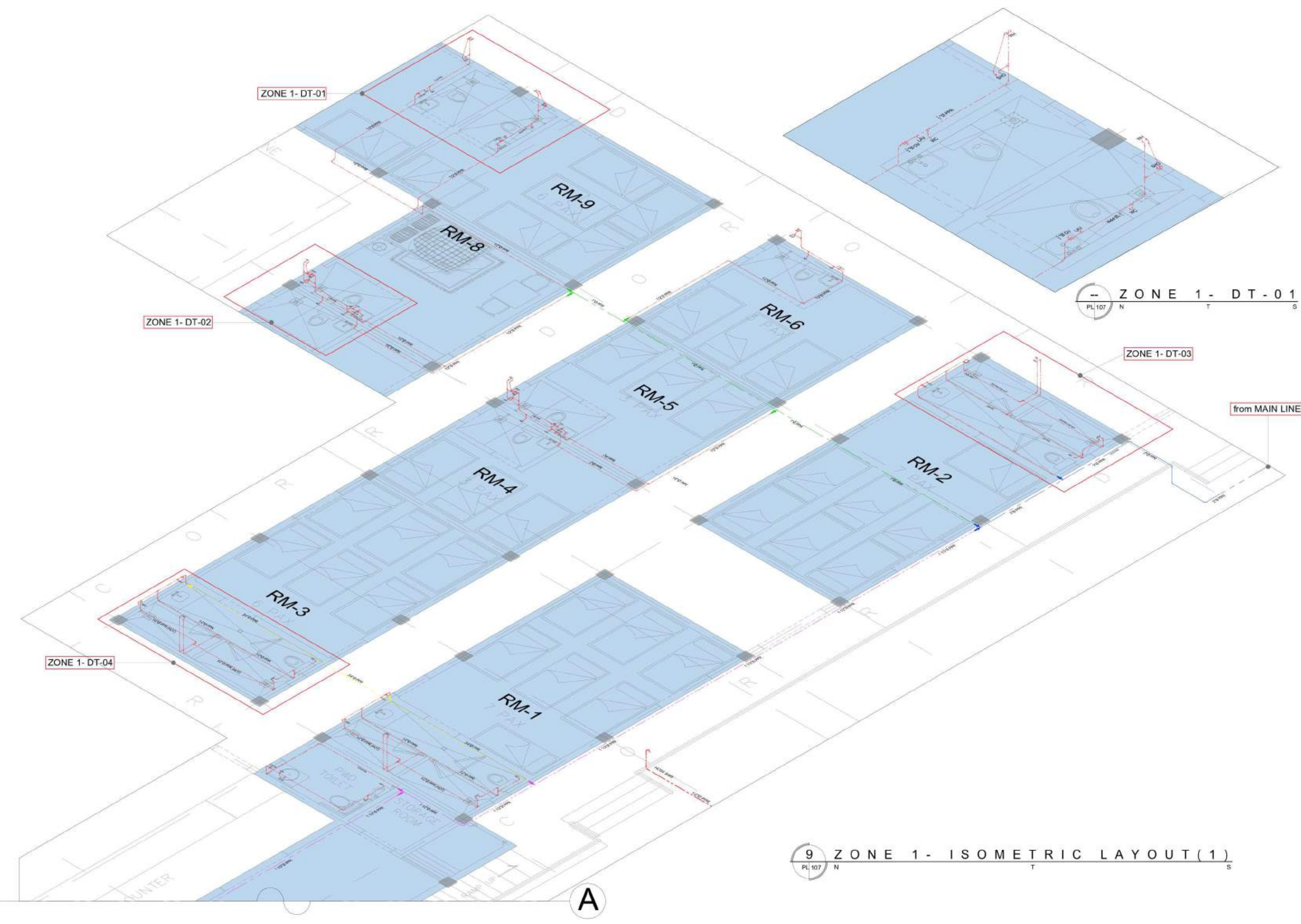
REPLAN

DRAWING PHASE

8 PROPOSED WATERLINE ISOMETRIC LAYOUT
PL 106 N T S

	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] MR. ANJO H. RADEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY :</p> <p>[ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABILLOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>CHECKED BY :</p> <p>[ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>RECOMMENDING APPROVAL :</p> <p>[ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>APPROVED BY :</p> <p>[ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PROJECT TITLE :</p> <p>RELIC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR</p> <p>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION: MALIBU, MATATAG</p>	<p>OWNER :</p> <p>DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A</p>	<p>SHEET NO. :</p> <p>106</p> <p>PL</p>
	<p>SHEET CONTENTS :</p> <p>AS SHOWN</p>								

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7900.



LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2"	Purple
500	1 7/8"	Blue
400	1 1/2"	Green
320	1"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Waterline Zone 1
Waterline Zone 2
Waterline Zone 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIBB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	
ELBOW 90° THREADED		TEE	
TEE THREADED		GATE VALVE	
CHECK VALVE		UNION PATENTE	
FLOAT VALVE		HOSEBIBB	

NOTES:

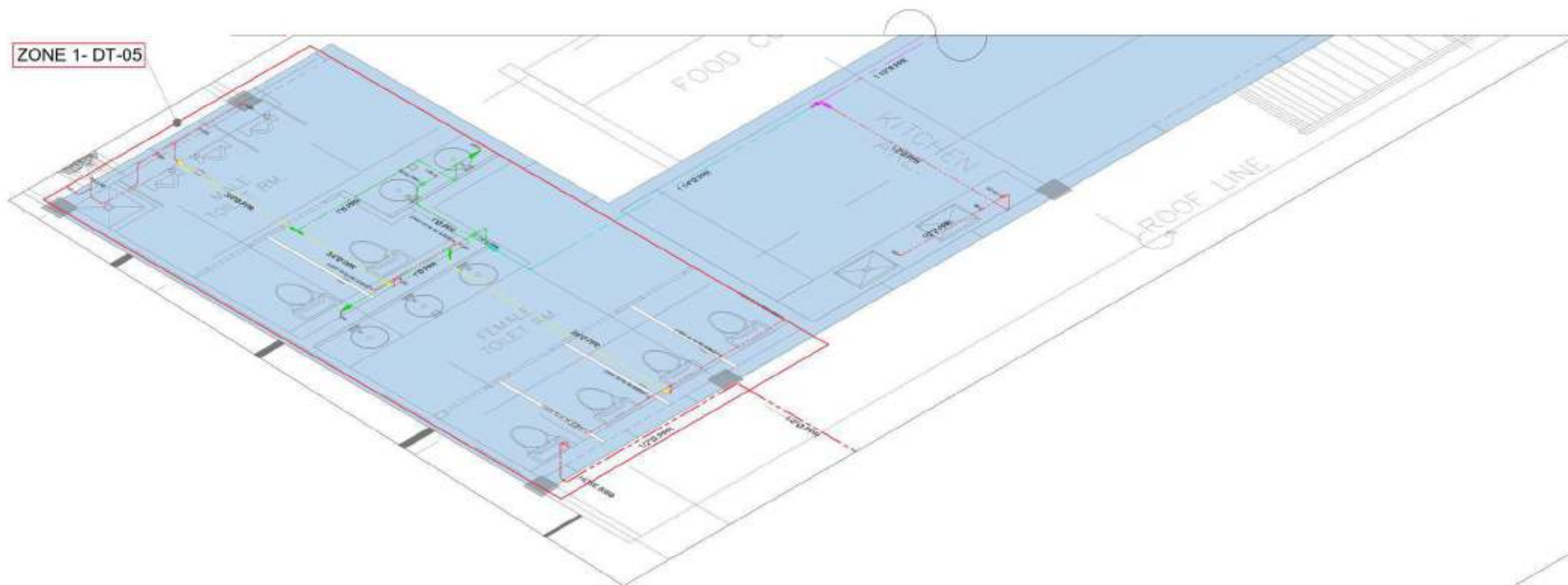
1. ALL WATER CLOSET MUST HAVE DUAL/5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN:

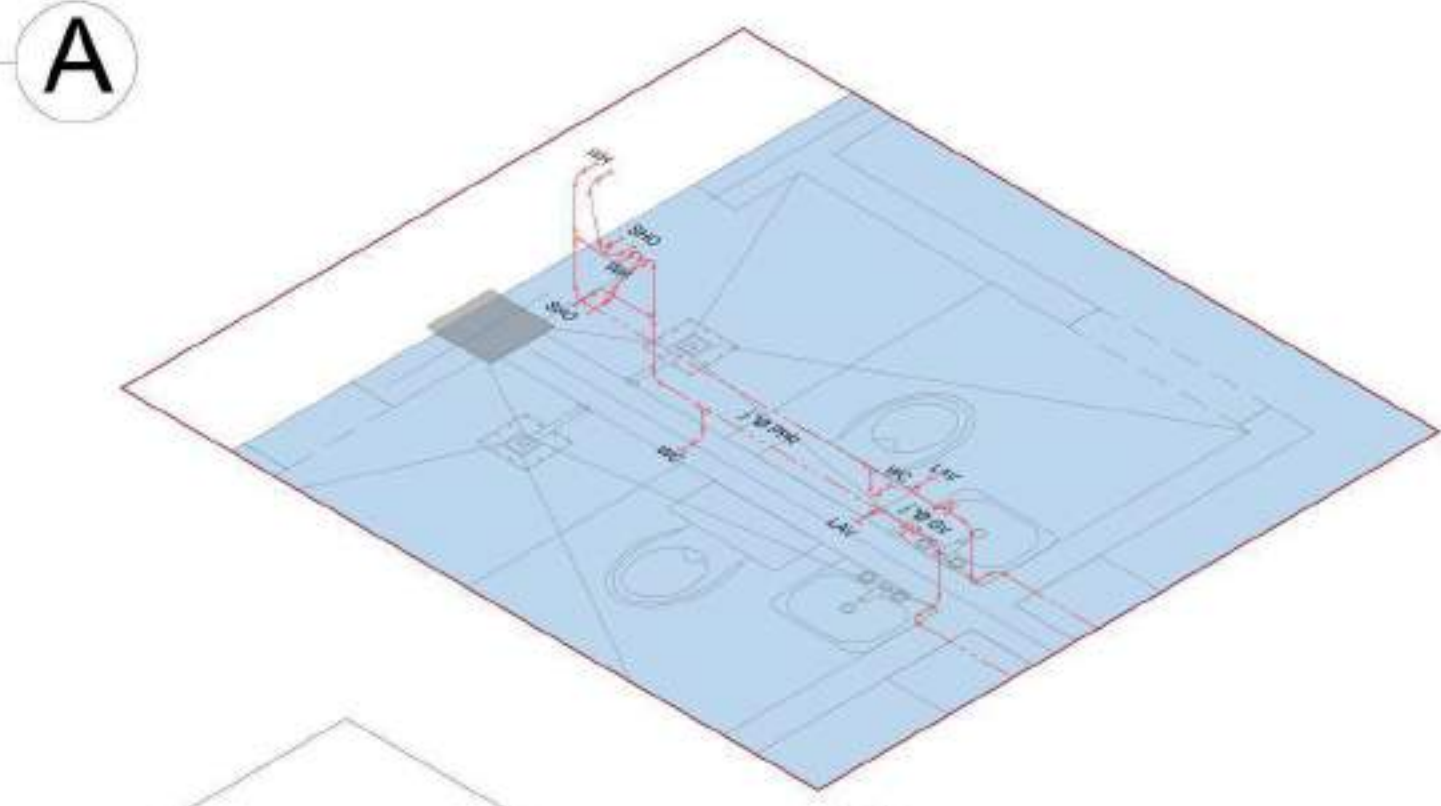
DRAWING PHASE:

	PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. EDUARDA M. ZAPANTA REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION: MALABO, BAYANAG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 107 PL
	SHEET CONTENTS: AS SHOWN								

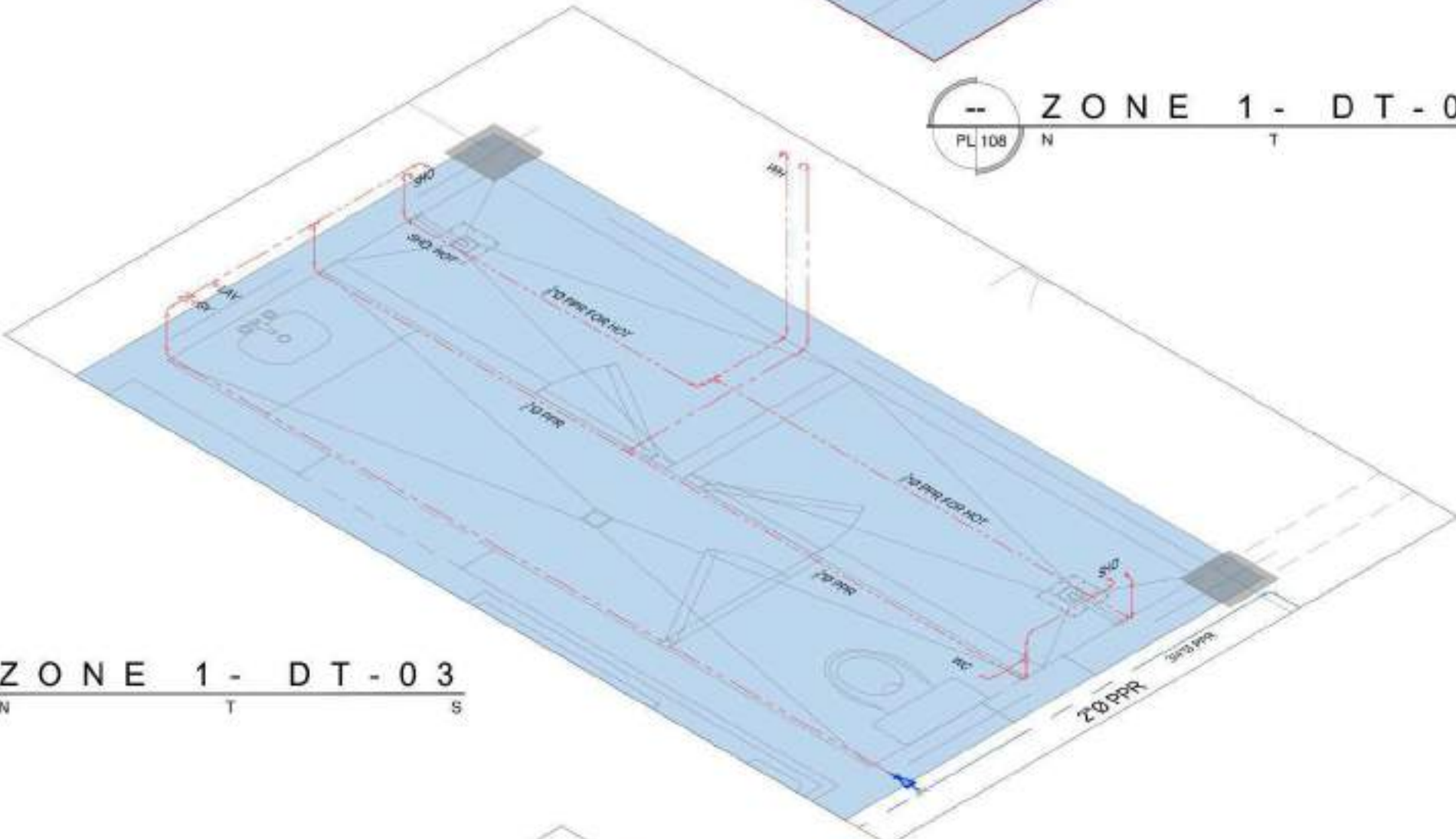
NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMELY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED, AND UNLESS IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



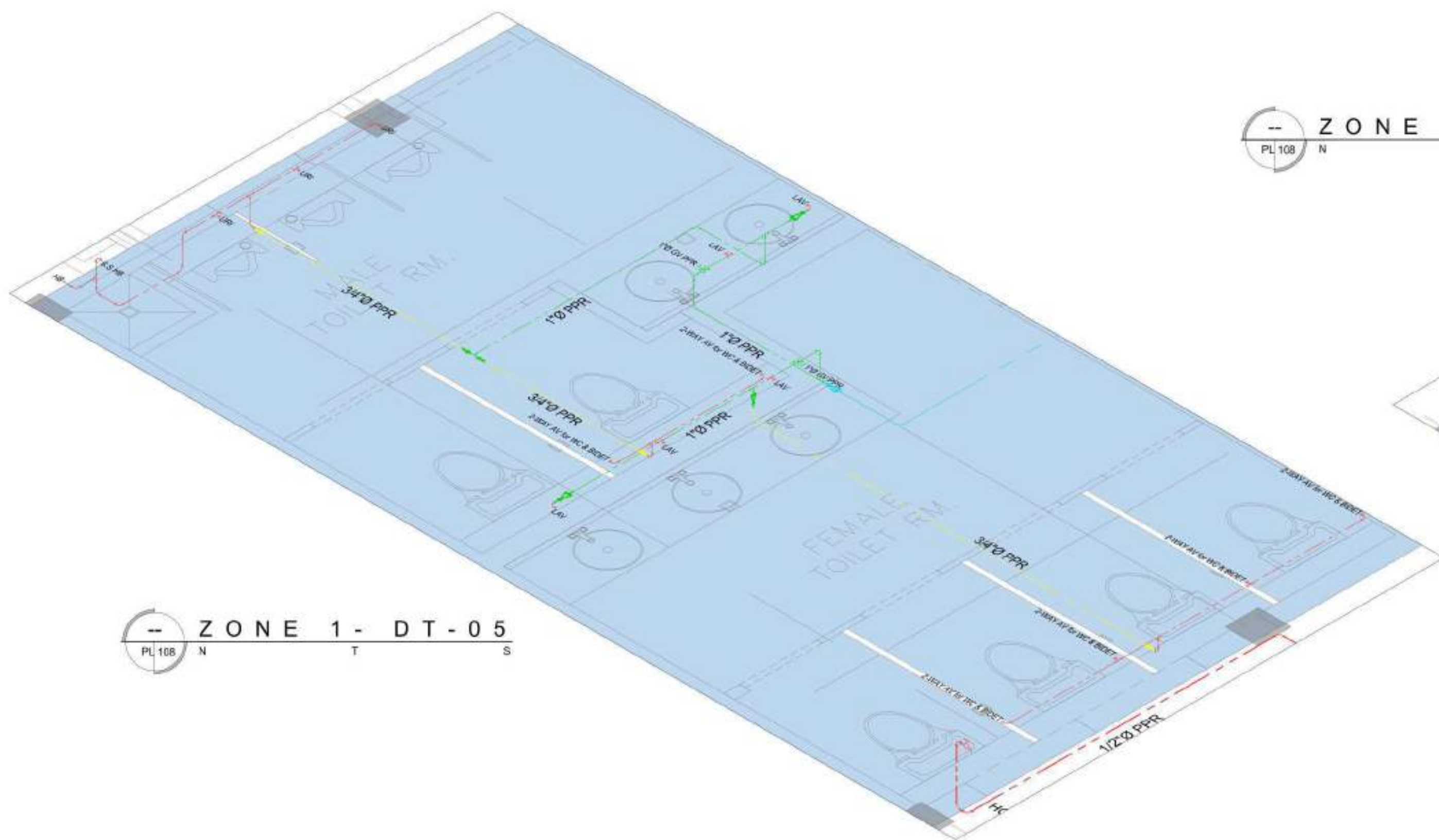
10 ZONE 1 - ISOMETRIC LAYOUT (2)
PL 108 N T S



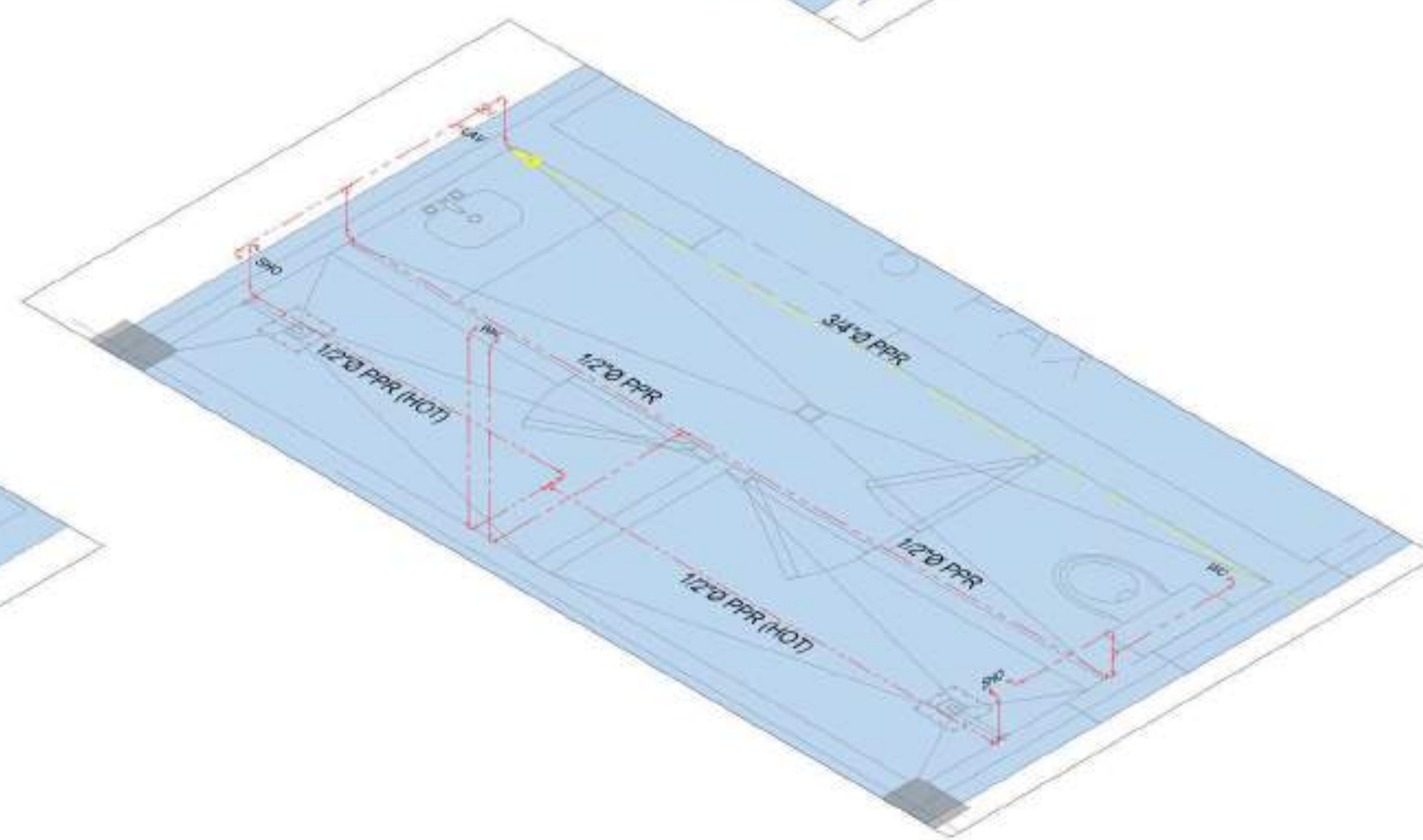
ZONE 1 - DT-02
PL 108 N T S



ZONE 1 - DT-03
PL 108 N T S



ZONE 1 - DT-05
PL 108 N T S



ZONE 1 - DT-04
PL 108 N T S

LEGENDS

WATERLINE LEGENDS		
SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8	Orange
630	2 1/2	Blue
500	1 7/8	Purple
400	1 1/2	Green
320	1 1/4	Yellow
250	3/4	Red
200	1/2	Black

WATERLINE COLOR ZONING

Waterline Zone 1	Orange
Waterline Zone 2	Blue
Waterline Zone 3	Yellow

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	
1/4	ELBOW 90° THREADED	TEE	
1/4	TEE THREADED	GV	GATE VALVE
1/4	CHECK VALVE	UP	UNION PATENTE
1/4	FLOAT VALVE	HOSEBIB	

- NOTES:
1. ALL WATER CLOSET MUST HAVE DUAL/5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN

DRAWING PHASE



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RADEÑO**
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT II (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABLOS**
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAMAICA ROSE G. ROLLOQUE**
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

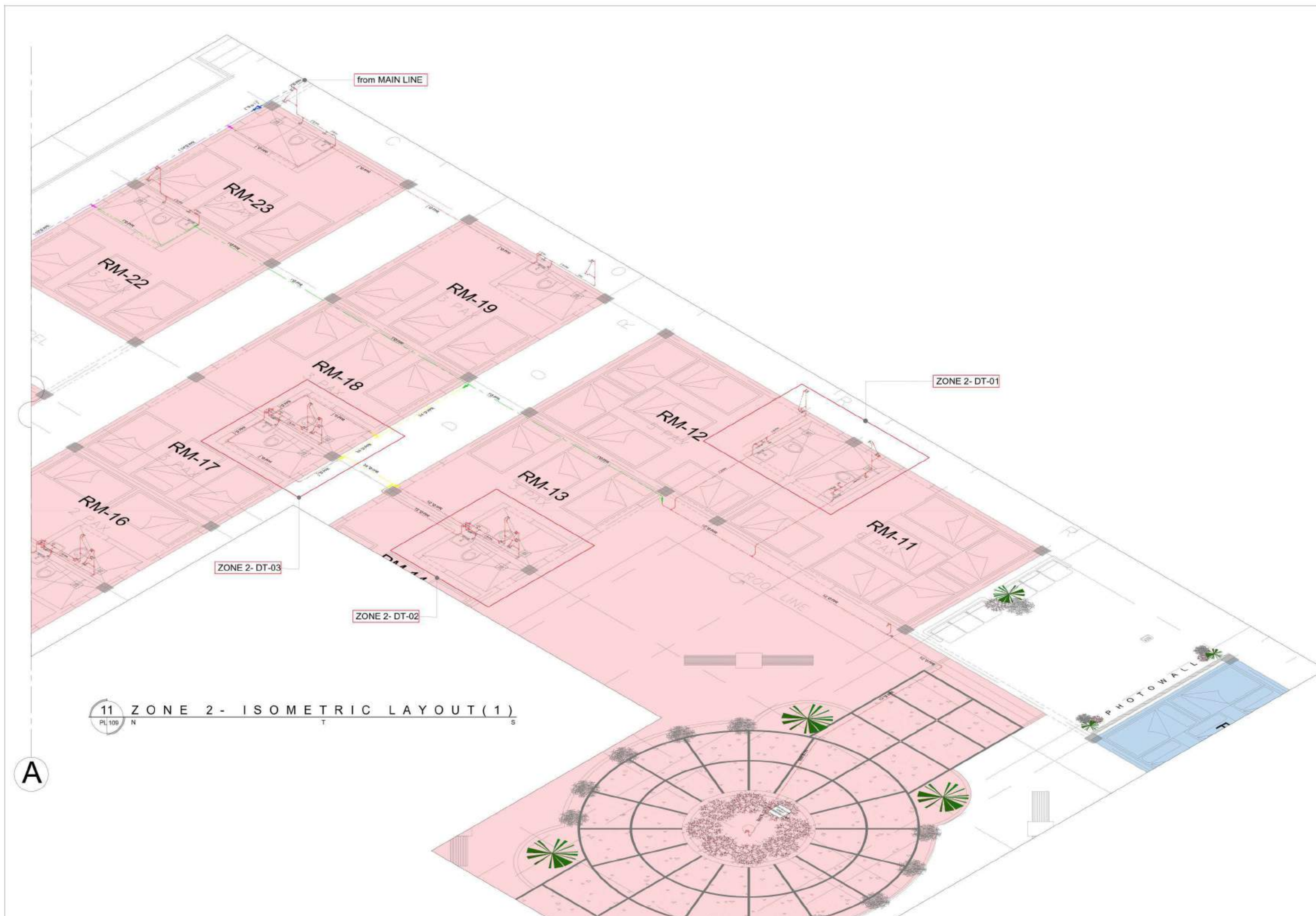
RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES
LOCATION: MALABO, BANGALAS

OWNER: DEPARTMENT OF EDUCATION
REGIONAL OFFICE IV-A
SHEET NO. 108
SHEET CONTENTS: AS SHOWN
PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENCE WIREMAN, AS THE CASE MAY BE, AND THE REQUIREMENTS AND MINISTRIAL REGULATIONS OF THE GOVERNMENT AGENCY, FURTHER EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7920.



LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Blue
630	2 1/2"	Orange
500	1 7/8"	Purple
400	1 1/2"	Green
320	1 1/4"	Yellow
250	3/4"	Red
200	1/2"	Black

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

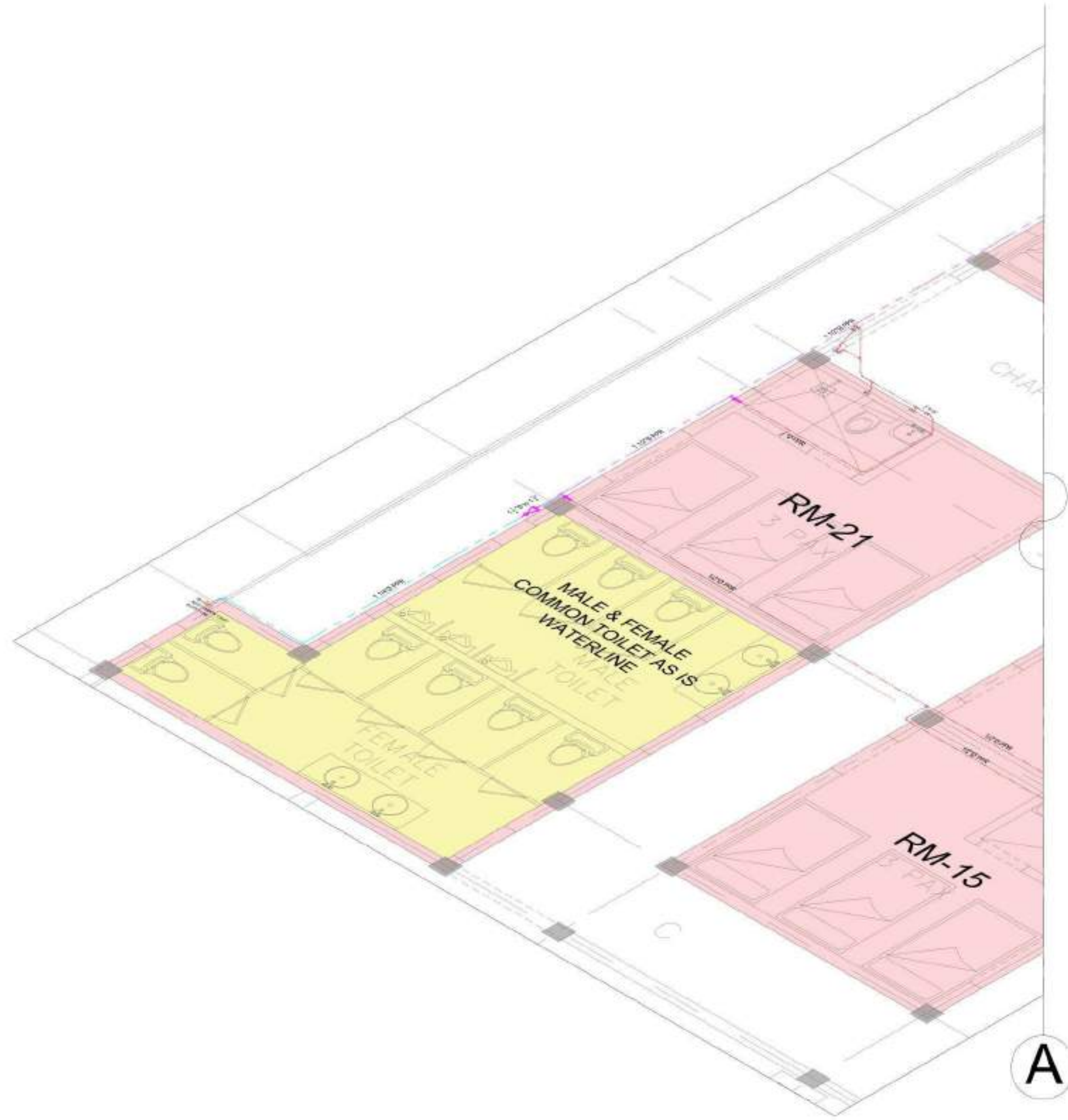
LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	
1/2"	ELBOW 90° THREADED	TEE	
1/2"	TEE THREADED	GATE VALVE	
1/2"	CHECK VALVE	UNION PATENTE	
1/2"	FLOAT VALVE	HOSEBIB	

- NOTES**
1. ALL WATER CLOSET MUST HAVE DUAL/5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

11 ZONE 2 - ISOMETRIC LAYOUT (1)

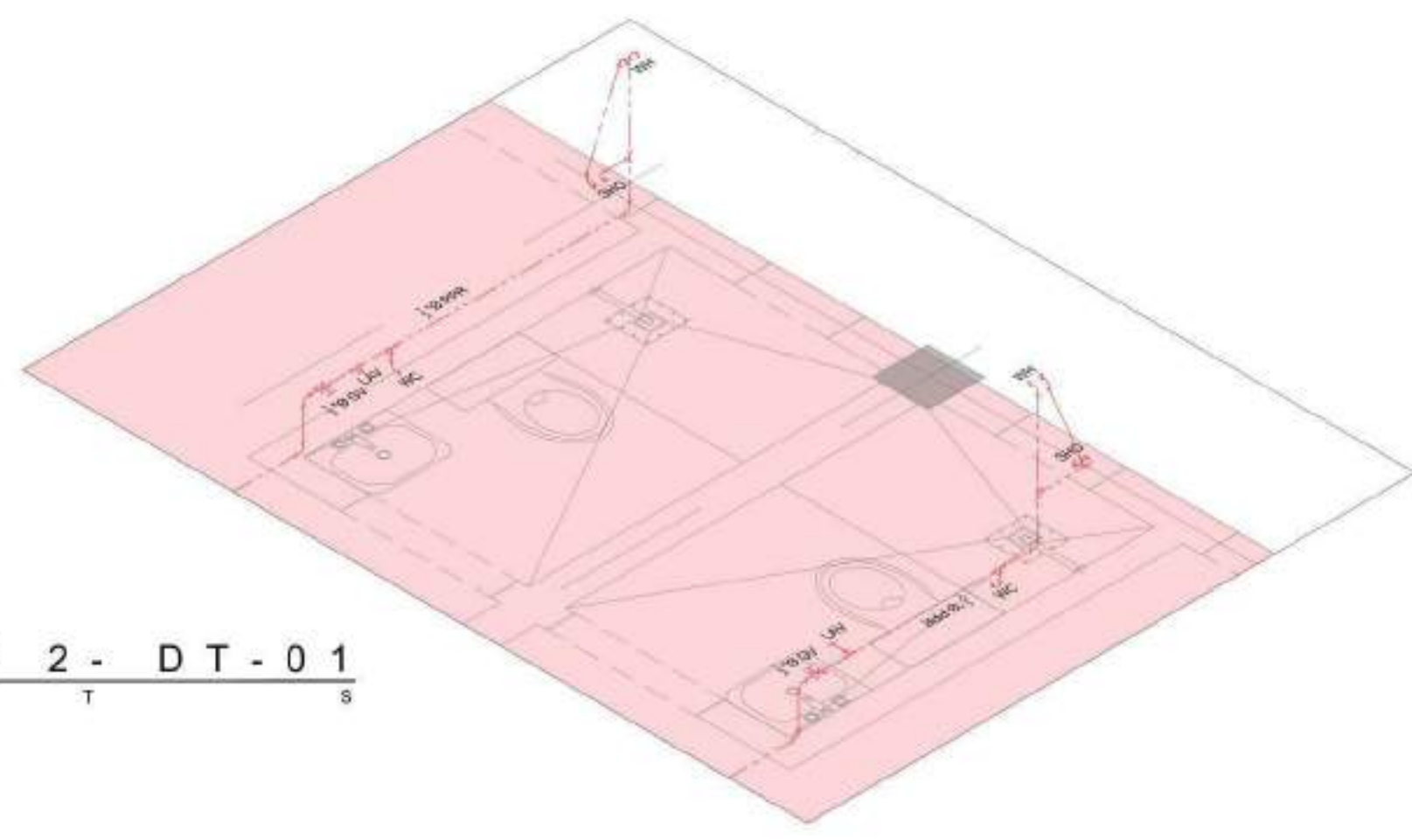
	PREPARED BY : [ORIGINAL SIGNED] MR. ANJO H. RADUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY : [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY : [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY : [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL : [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY : [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE : RELC-NEAR WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES LOCATION : MALABO, BANGALAG	OWNER : DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO. : 109 PL
	DRAWING PHASE : AS SHOWN								

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENCE MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY, FEES, AND MINISTERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W.V. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7905.

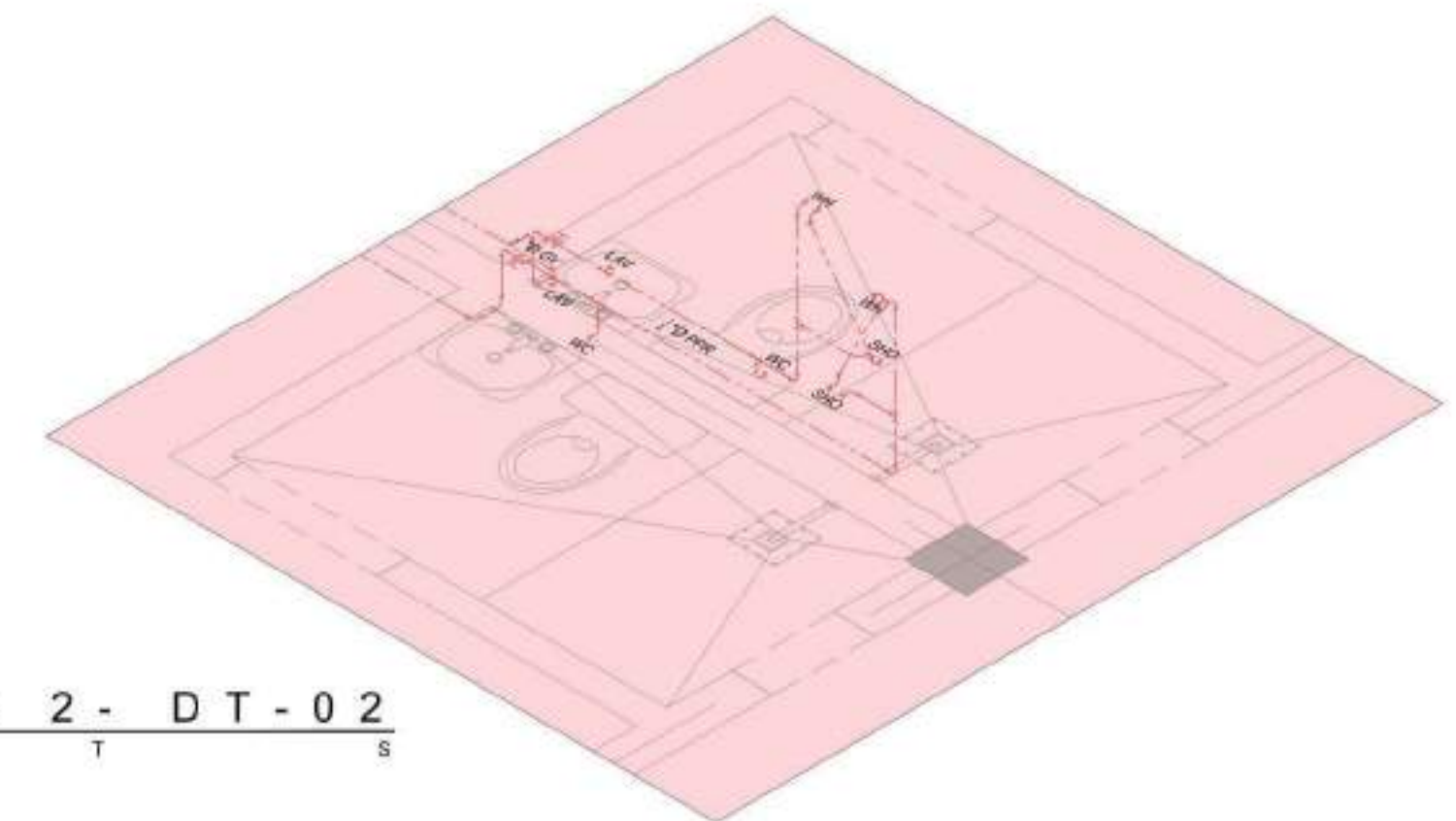


12 ZONE 2 - ISOMETRIC LAYOUT (2)
PL 110 N T S

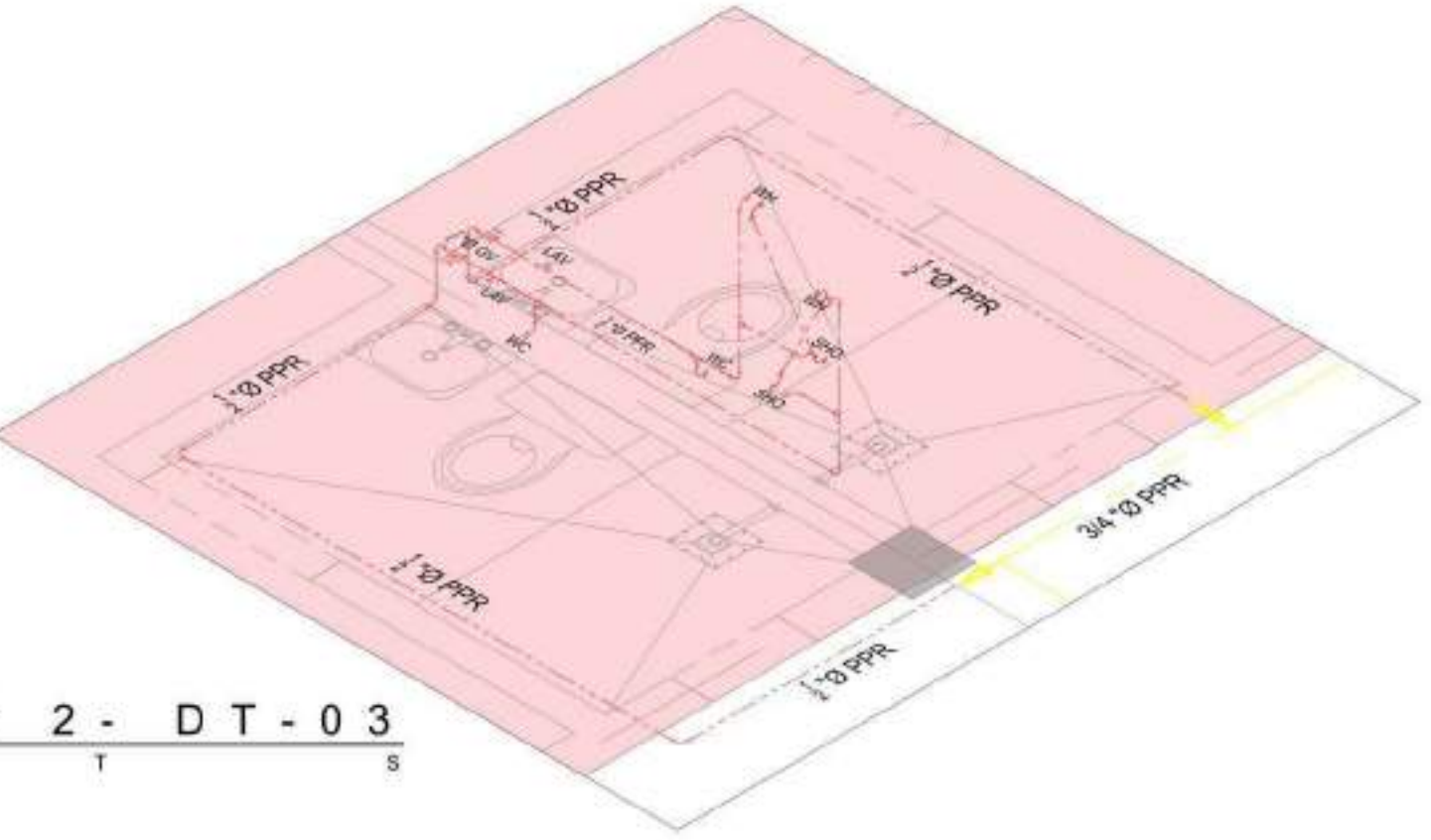
ZONE 2 - DT - 01
PL 110 N T S



ZONE 2 - DT - 02
PL 110 N T S



ZONE 2 - DT - 03
PL 110 N T S



LEGENDS

WATERLINE LEGENDS		
SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8	Orange
630	2 1/2	Purple
500	1 7/8	Blue
400	1 1/2	Green
320	1 1/4	Yellow
250	3/4	Red
200	1/2	Black

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Orange	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELB 90°	ELBOW 90°
1/2	ELBOW 90° THREADED	TEE	TEE
1/2	TEE THREADED	GV	GATE VALVE
1/2	CHECK VALVE	UP	UNION PATENTE
1/2	FLOAT VALVE	HOSEBIB	HOSEBIB

- NOTES
1. ALL WATER CLOSET MUST HAVE DUAL/5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE. POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN

DRAWING PHASE



PREPARED BY :
[ORIGINAL SIGNED]
MR. ANJO H. RADEÑO
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT II (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENGR. EDILBERTO A. DAMILES JR.
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY :
[ORIGINAL SIGNED]
ENGR. JAMES MATWILL E. ABALOS
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY :
[ORIGINAL SIGNED]
ENGR. JAMAICA ROSE G. ROLLOQUE
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL :
[ORIGINAL SIGNED]
DR. EDUARDA M. ZAPANTA
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

APPROVED BY :
[ORIGINAL SIGNED]
ATTY. ALBERTO T. ESCOBARTE, CESO II
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE :
RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES
LOCATION : MALABO, BANGAL

OWNER :
DEPARTMENT OF EDUCATION
REGIONAL OFFICE IV-A
SHEET CONTENTS :
AS SHOWN

SHEET NO.
110
PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS DESIGNED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W.V. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7905.



LEGENDS

WATERLINE LEGENDS

SIZE IN MM	SIZE IN INCHES	COLOR DESIGNATION
750	2 7/8"	Orange
630	2"	Purple
500	1 7/8"	Pink
400	1 1/2"	Blue
320	1"	Green
250	3/4"	Yellow
200	1/2"	Red

WATERLINE COLOR ZONING

Blue	WATERLINE ZONE 1
Pink	WATERLINE ZONE 2
Yellow	WATERLINE ZONE 3

LAV	LAVATORY	WC	WATER CLOSET
WH	WATER HEATER	SHO	SHOWER
FD	FLOOR DRAIN	AV	ANGLE VALVE
HB	HOSEBIB	KS	KITCHEN SINK
URI	URINAL	PT	PRESSURE TANK
WM	WATER METER	ELBOW 90°	ELBOW 90°
1/2"	ELBOW 90° THREADED	TEE	TEE
1/2"	TEE THREADED	GV	GATE VALVE
1/2"	CHECK VALVE	UP	UNION PATENTE
1/2"	FLOAT VALVE	HOSEBIB	HOSEBIB

- NOTES:**
1. ALL WATER CLOSET MUST HAVE DUAL 5-WAY ANGLE VALVE TO ACCOMMODATE THE SUPPLY FOR BOTH WATER CLOSET AND BIDET SPRAY AND MUST BE LOCATED 200MM FROM FFL OF THE TOILET.
 2. ALL TOILET AND BATH AND COMMON TOILET GATE VALVE MUST BE RAISE 600MM FROM THE FFL OF THE TOILET, FOR ANY CASE IT WILL NOT BE POSSIBLE VERIFY TO ARCHITECT/ ENGINEER IN-CHARGE.
 3. SUBMIT REPORT AND PHOTO/VIDEO DOCUMENTATION OF WATERLINE PRESSURE TEST PER TOILET, ZONING AND PER MAIN LINE PRIOR TO ANY FINISHING WORKS THAT INVOLVES A PIPE UNDERNEATH.

REPLAN:

DRAWING PHASE:

13 ZONE 3 - ISOMETRIC LAYOUT



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
 REGISTERED & LICENSED ARCHITECT
 TECHNICAL ASSISTANT II (ARCHITECT II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
 REGISTERED CIVIL ENGINEER
 TECHNICAL ASSISTANT II (ENGINEER II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAWAICA ROSE G. ROLLOQUE**
 REGIONAL ENGINEER II
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
 CHIEF EDUCATION SUPERVISOR
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

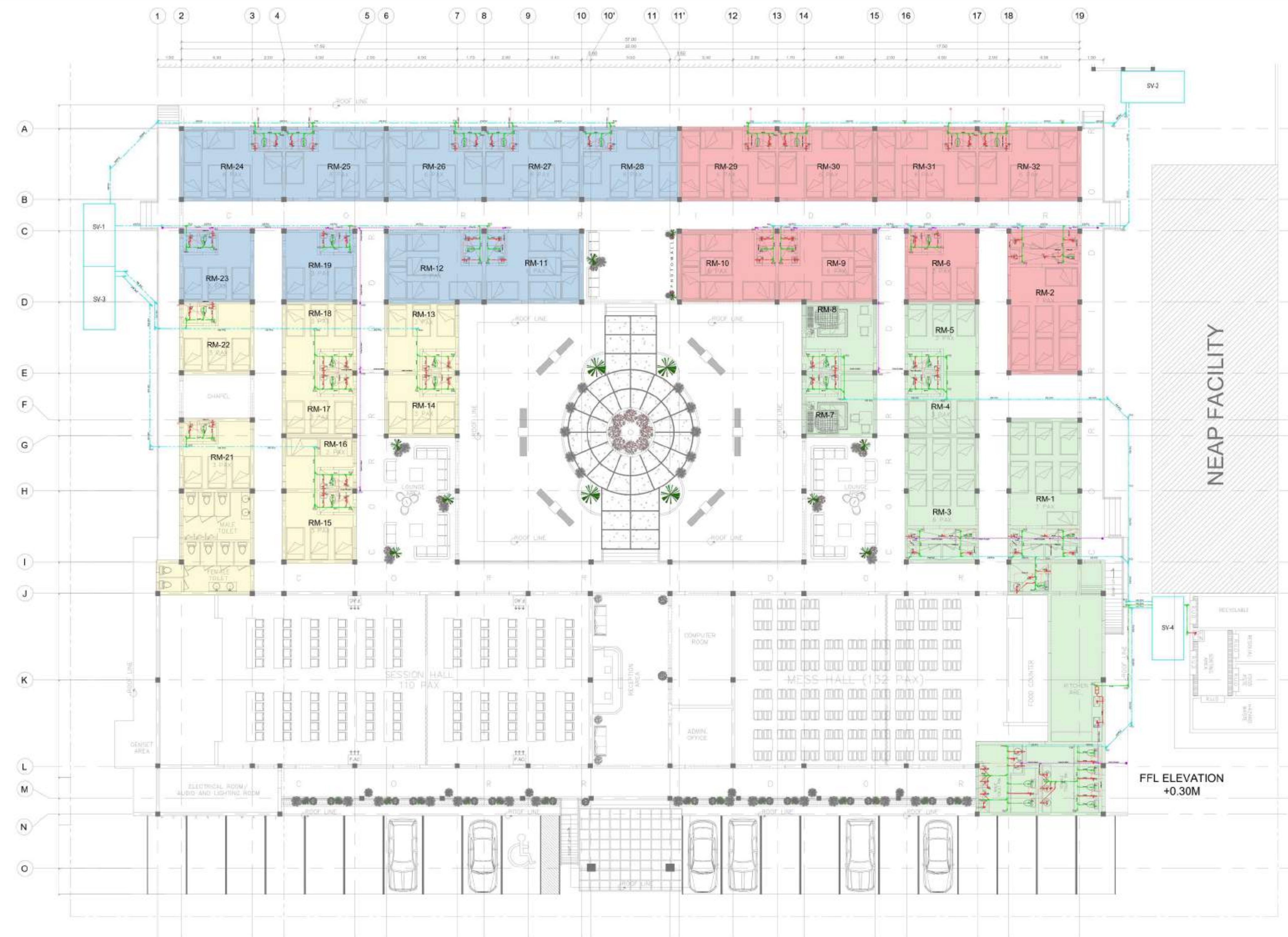
APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
 REGIONAL DIRECTOR
 OFFICE OF THE REGIONAL DIRECTOR
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: **RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR**

OWNER: **DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A**

SHEET NO. **111**
 SHEET CONTENTS: **AS SHOWN**
 PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL WIRING, EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXERCISED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY, FEES, AND MINISTERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, F.W.V. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



LEGENDS

SIZE IN (MM)	SIZE IN INCHES	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Blue	Green
80	3"Ø	Red	Yellow
100	4"Ø	Yellow	Green
150	6"Ø	Green	Blue
200	8"Ø	Blue	Red

COLOR ZONING

Blue	ZONE 1
Red	ZONE 2
Yellow	ZONE 3
Green	ZONE 4

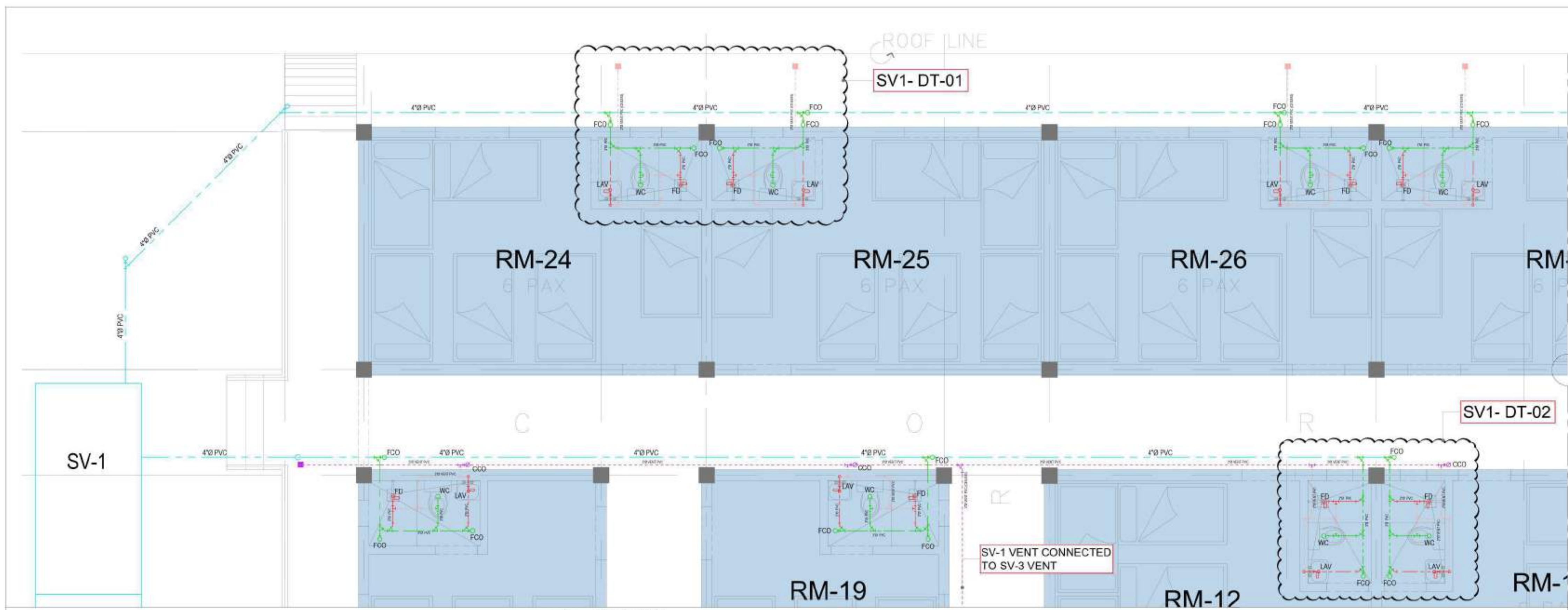
LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCC	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
ELBOW 90°		ELBOW 45°	
TEE		WYE	
P-TRAP			

NOTES

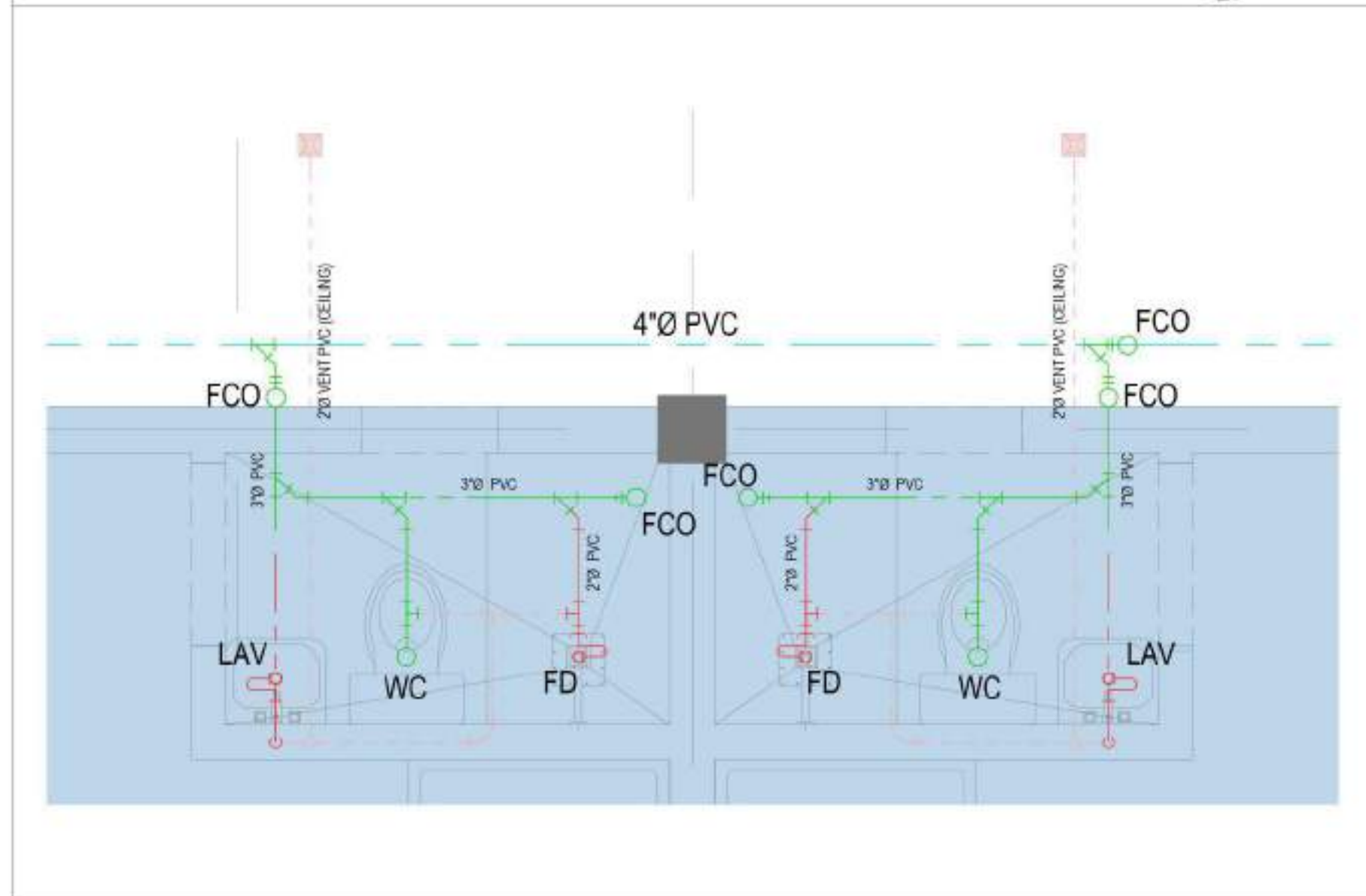
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUS END CLEANOUT-2-45° ELBOW (1/8 BEND) MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
- ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 600M IN HEIGHT
- ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
- ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 3/4" TO 2"

1 PROPOSED NEW SANITARY SYSTEM
 SCALE 1:150METS

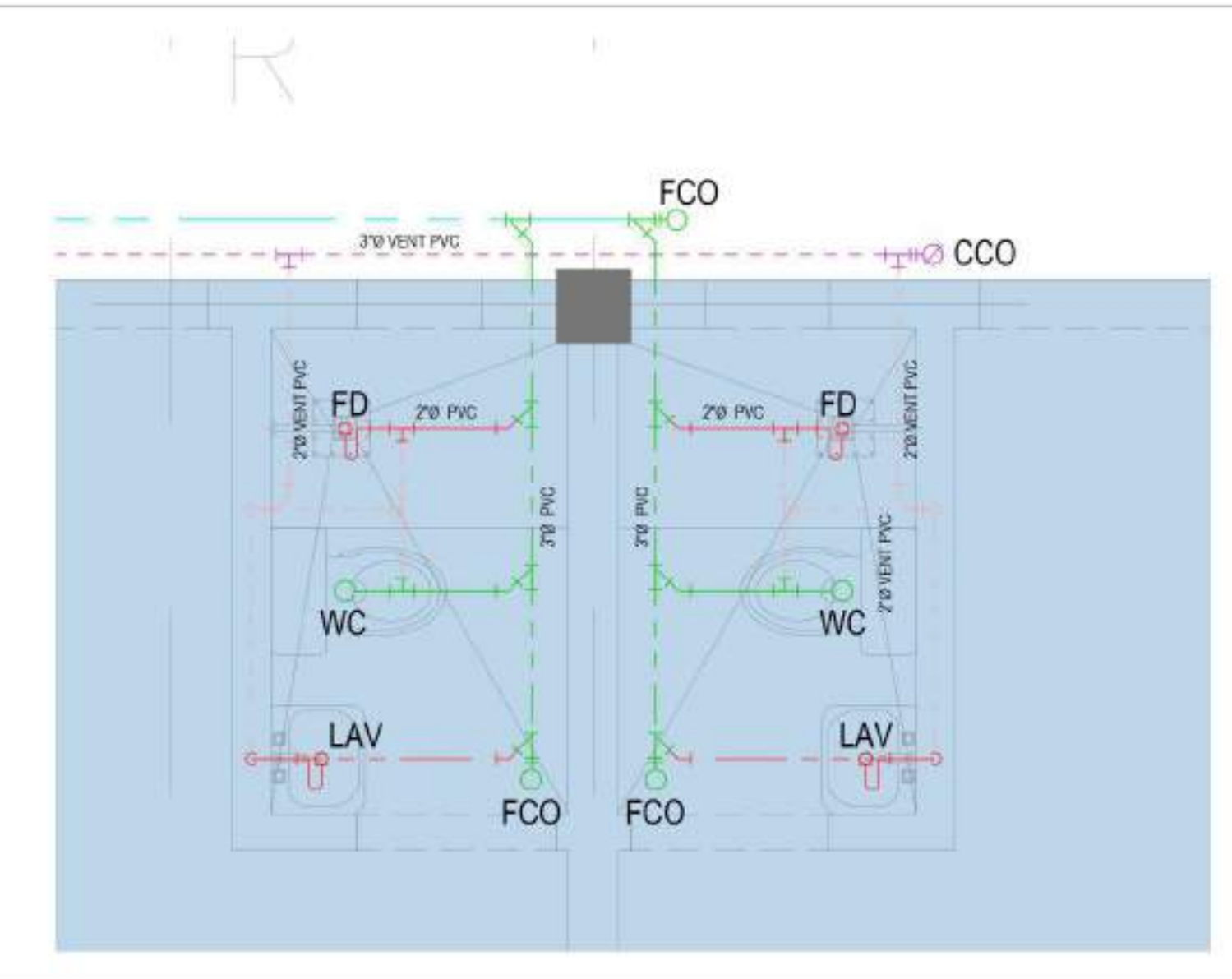
	PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RAQUENO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, MATATAG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 201 SHEET CONTENTS: AS SHOWN
	NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SALAMPA FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED MASTER ELECTRICAL, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MATERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7926.							



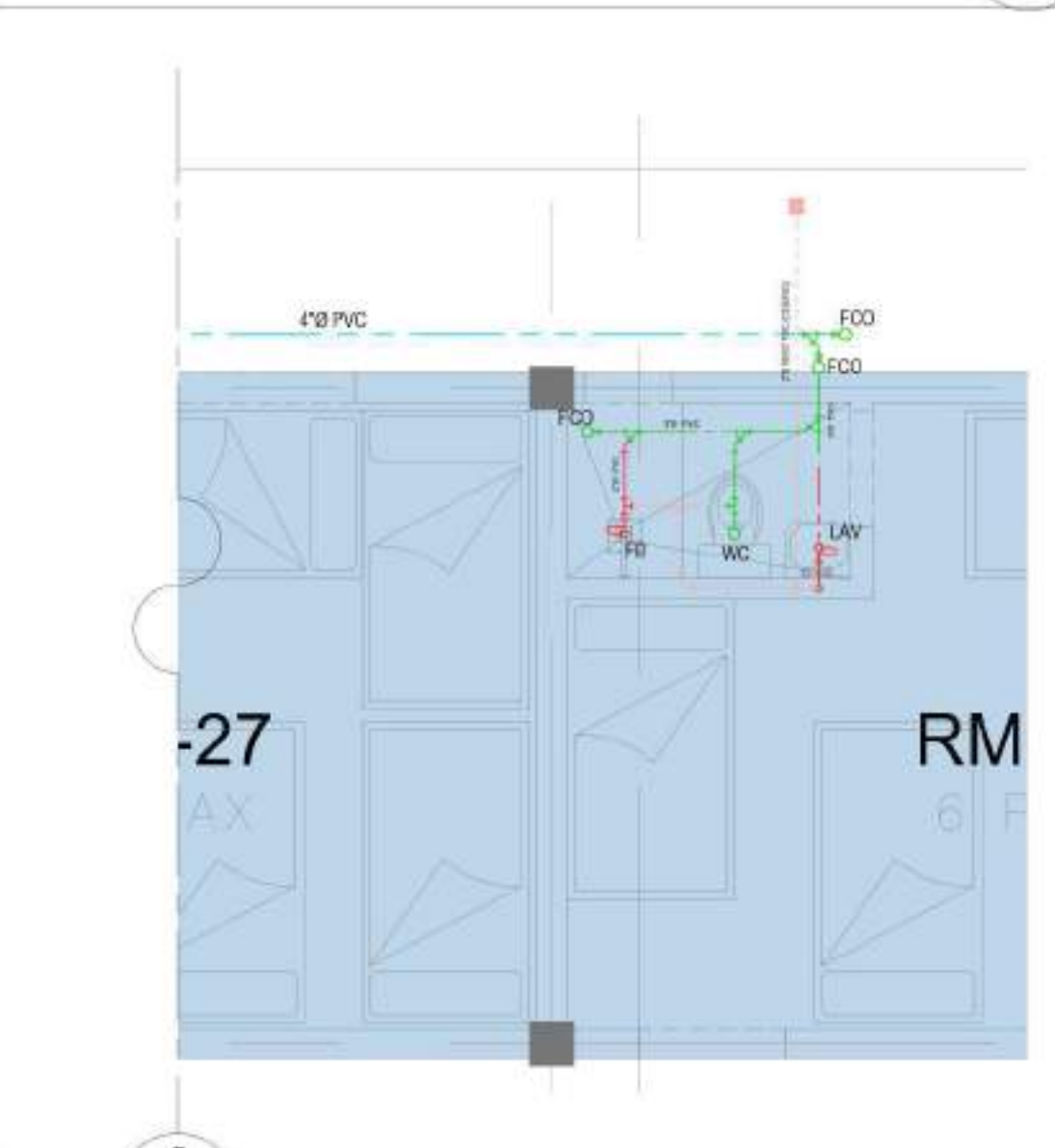
2 SANITARY SYSTEM
SV-1 BLOW UP DETAIL
 PL 202 SCALE 1:50MTS



3 SANITARY SYSTEM
SV-1 -DT-01
 PL 202 SCALE 1:25MTS



3 SANITARY SYSTEM
SV-1 -DT-01
 PL 202 SCALE 1:25MTS



A

LEGENDS

SIZE IN (MM)	SIZE IN INCHES	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Purple	Light Blue

COLOR ZONING

Zone 1	Light Blue
Zone 2	Light Green
Zone 3	Light Purple
Zone 4	Light Yellow

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCC	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
ELBOW 90°		ELBOW 45°	
TEE		WYE	
P-TRAP			

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG
 END CLEANOUT-2-45° ELBOW (1/8 BEAND)
 MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEAND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 0.60M IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 1/4" TO 2".



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
 REGISTERED & LICENSED ARCHITECT
 TECHNICAL ASSISTANT III (ARCHITECT III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
 REGISTERED CIVIL ENGINEER
 TECHNICAL ASSISTANT III (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAWAICA ROSE G. ROLLOQUE**
 REGIONAL ENGINEER II
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
 CHIEF EDUCATION SUPERVISOR
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

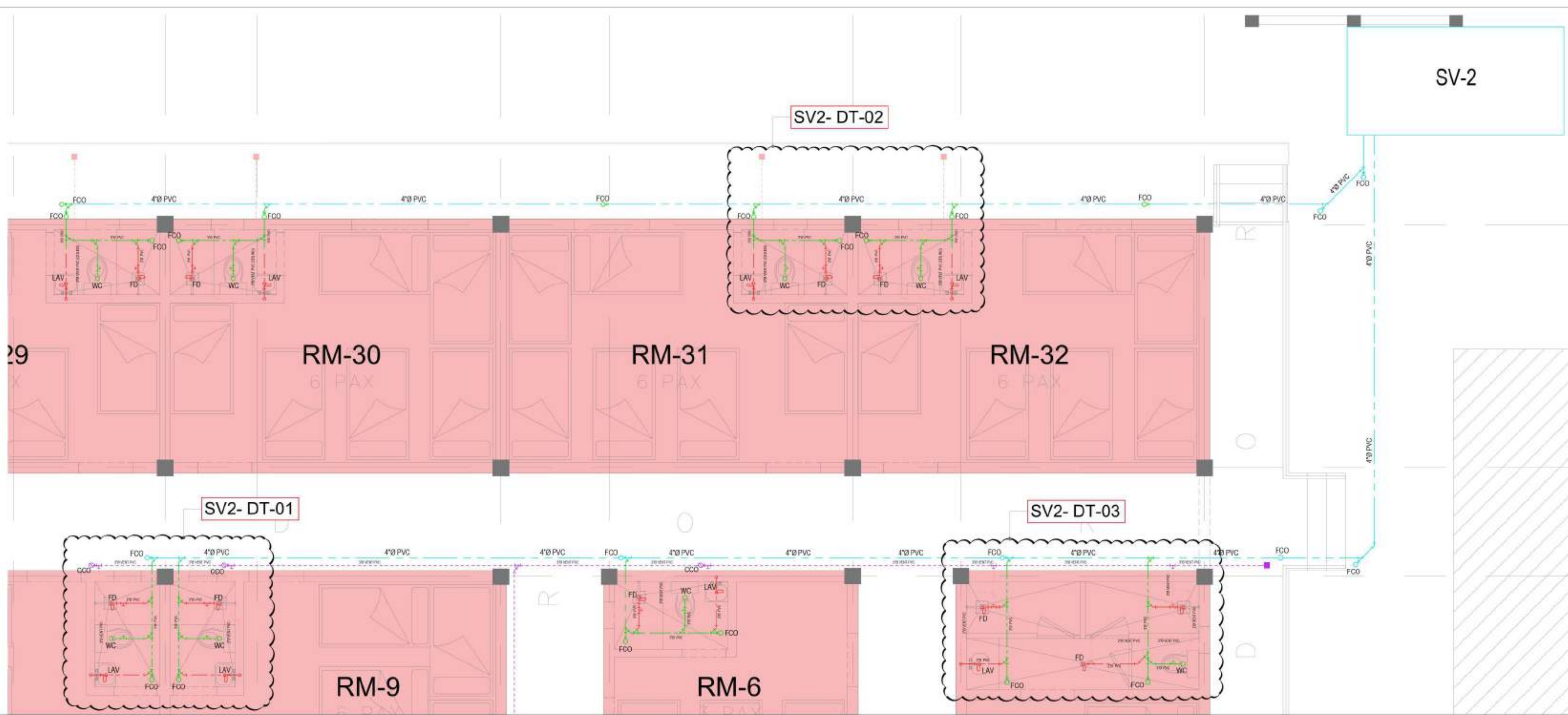
APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
 REGIONAL DIRECTOR
 OFFICE OF THE REGIONAL DIRECTOR
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
 GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
 NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES
 LOCATION: MALABO, BANGALAG

OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A
 SHEET CONTENTS: AS SHOWN

SHEET NO. **202**
 PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENCE MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7905.

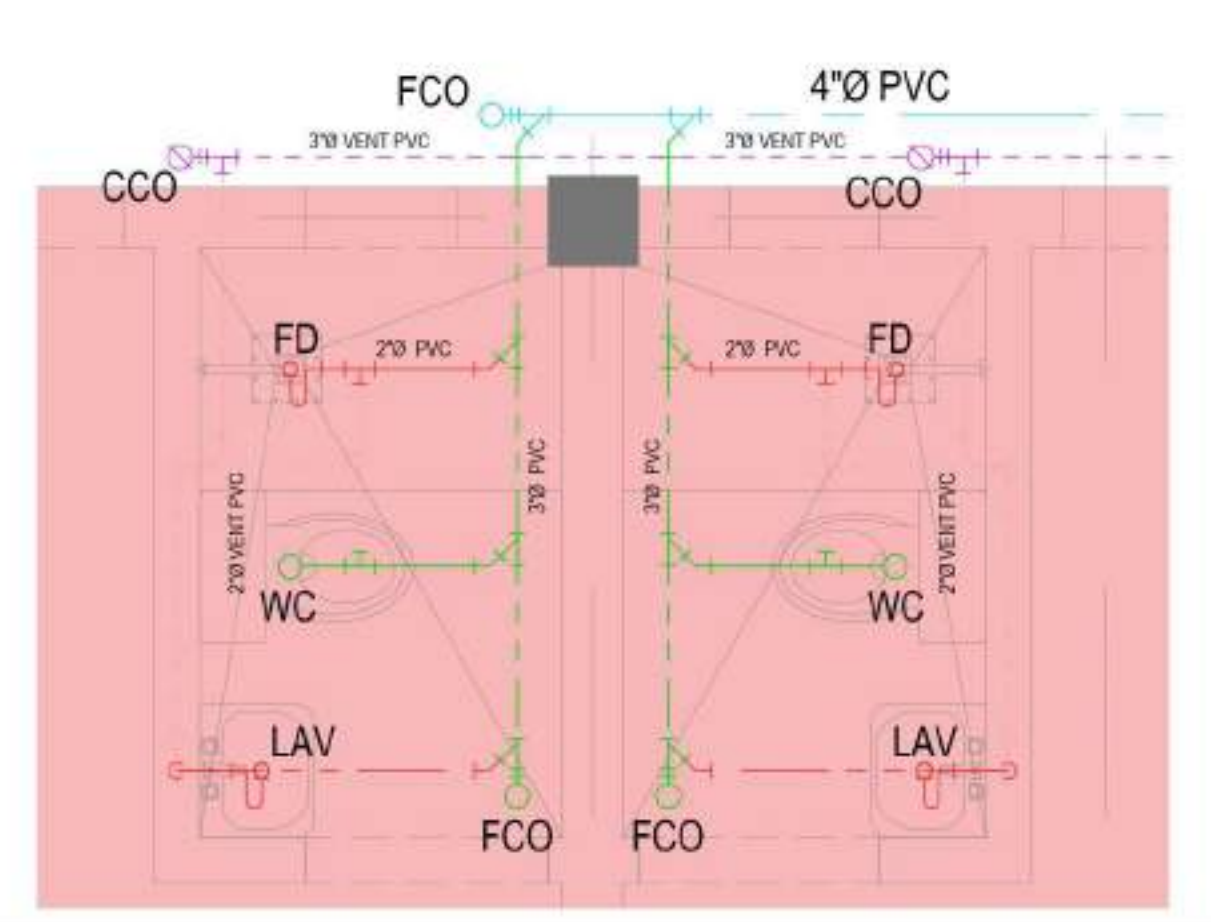


SIZE IN (MM)	SIZE IN (INCHES)	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Orange	Light Purple

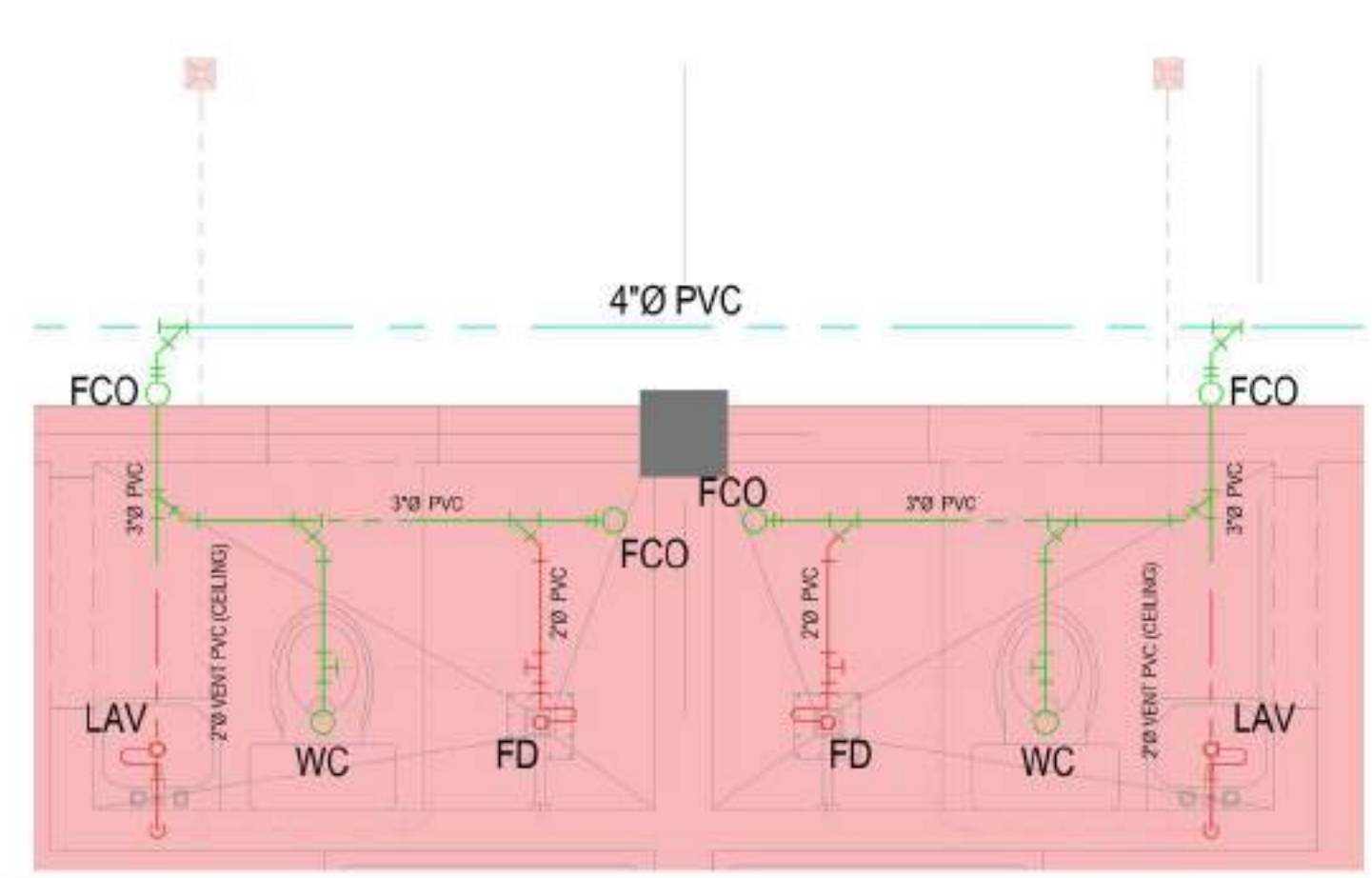
COLOR ZONING			
Zone 1	Zone 2	Zone 3	Zone 4
LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCO	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
ELBOW 90°	TEE	WYE	ELBOW 45°
P-TRAP			

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUS END CLEANOUT-2-45° ELBOW (1/8 BEND) MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 600MM IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 1/4" TO 2".

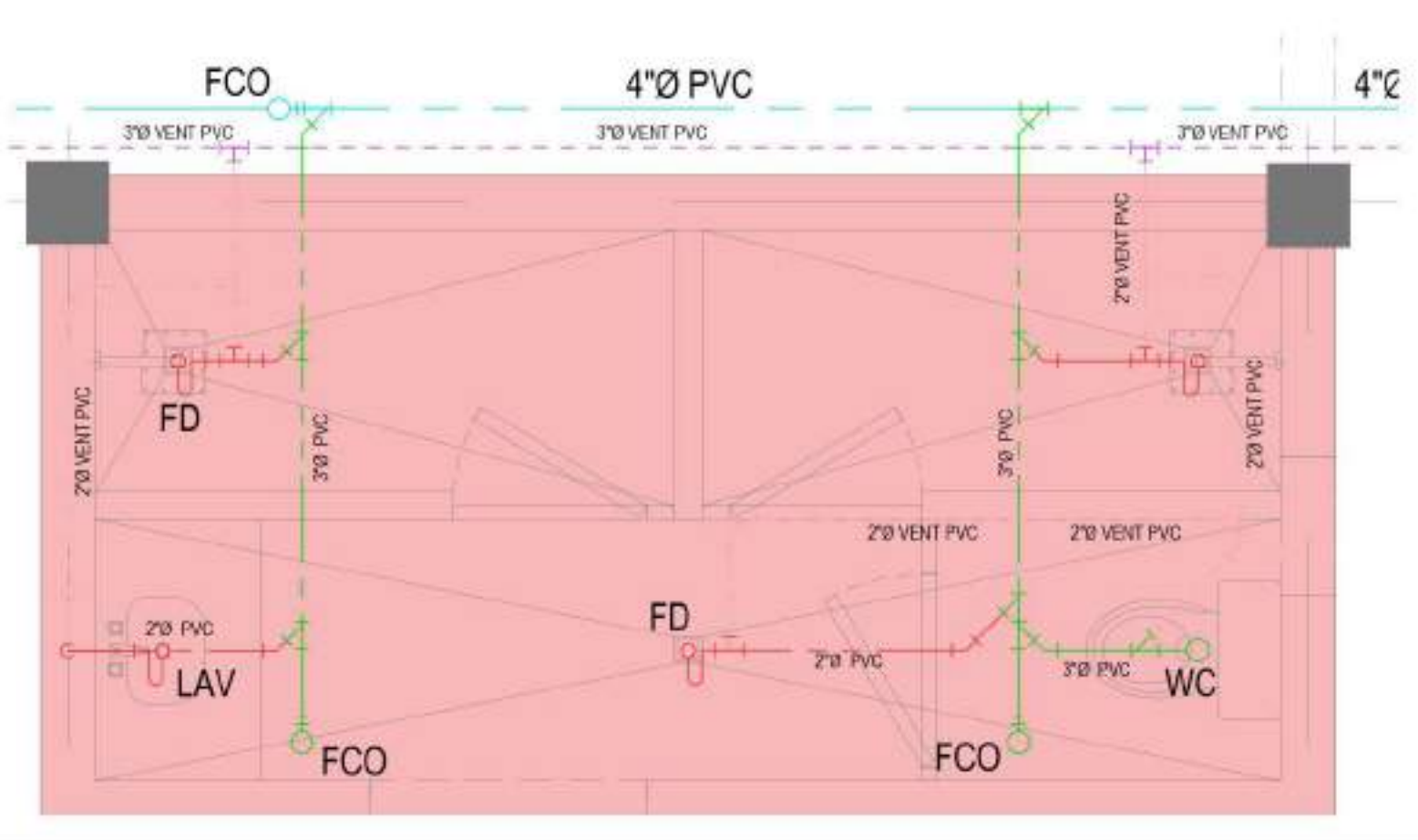
4 SANITARY SYSTEM SV-2 BLOW UP DETAIL SCALE 1:50MTS



5 SANITARY SYSTEM SV-2 -DT-01 SCALE 1:25MTS



6 SANITARY SYSTEM SV-2 -DT-02 SCALE 1:25MTS



7 SANITARY SYSTEM SV-2 -DT-03 SCALE 1:25MTS



PREPARED BY: [ORIGINAL SIGNED] AR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT III (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

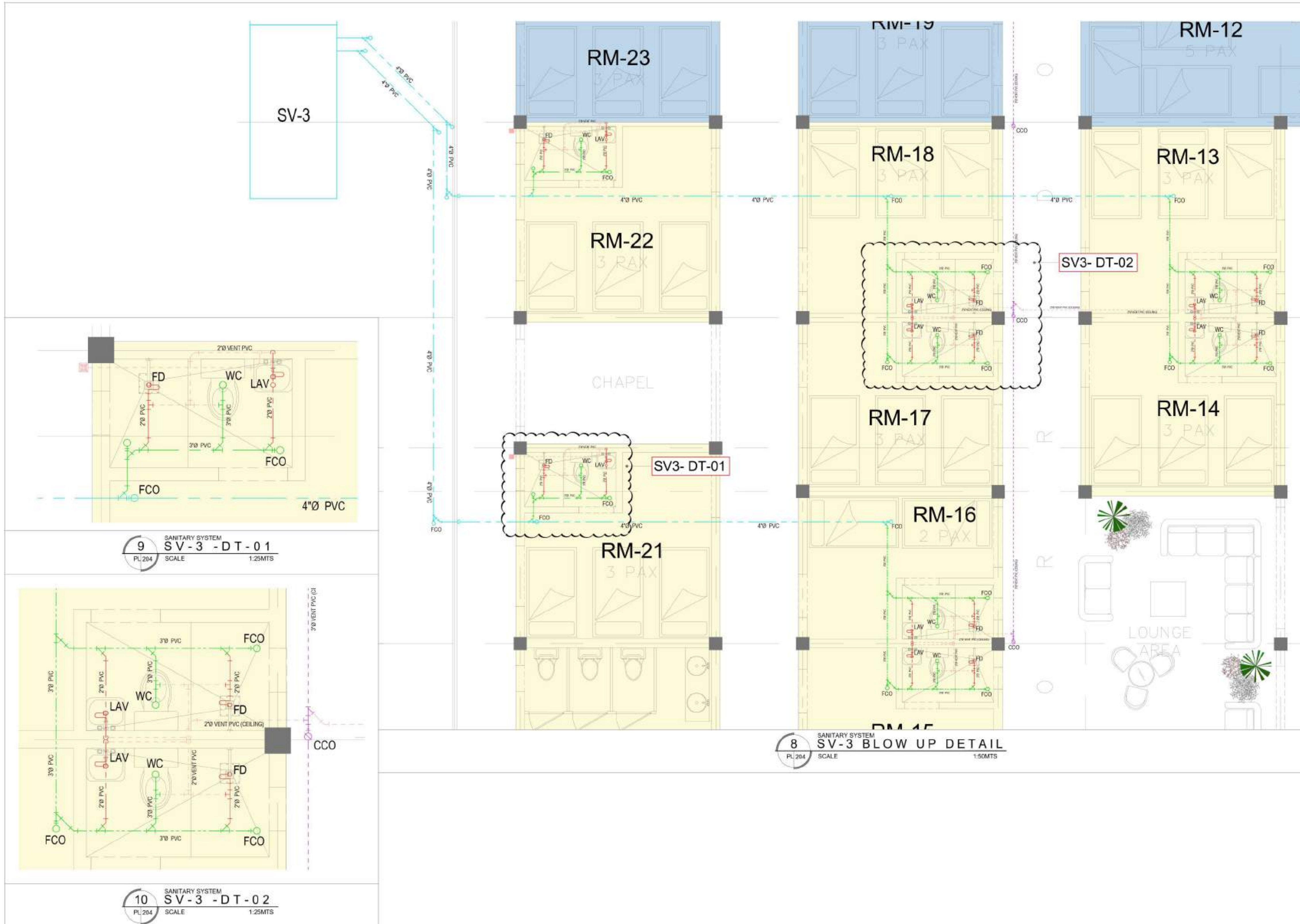
APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, MATANGI

OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A SHEET CONTENTS: AS SHOWN

SHEET NO. 203 PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS IT IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED MASTER ELECTRICIAN, OR A REGISTERED JOURNALLER, AS THE CASE MAY BE, AND THE REQUIREMENT FOR THE REGISTRATION AND MAINTENANCE OF THE REGISTERED JOURNALLER HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



LEGENDS

SIZE IN (MM)	SIZE IN INCHES	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Orange	Light Purple

COLOR ZONING

ZONE	Color
ZONE 1	Light Blue
ZONE 2	Light Orange
ZONE 3	Light Green
ZONE 4	Light Purple

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCO	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
∠	ELBOW 90°	∠	ELBOW 45°
T	TEE	∠	WYE
∩	P-TRAP		

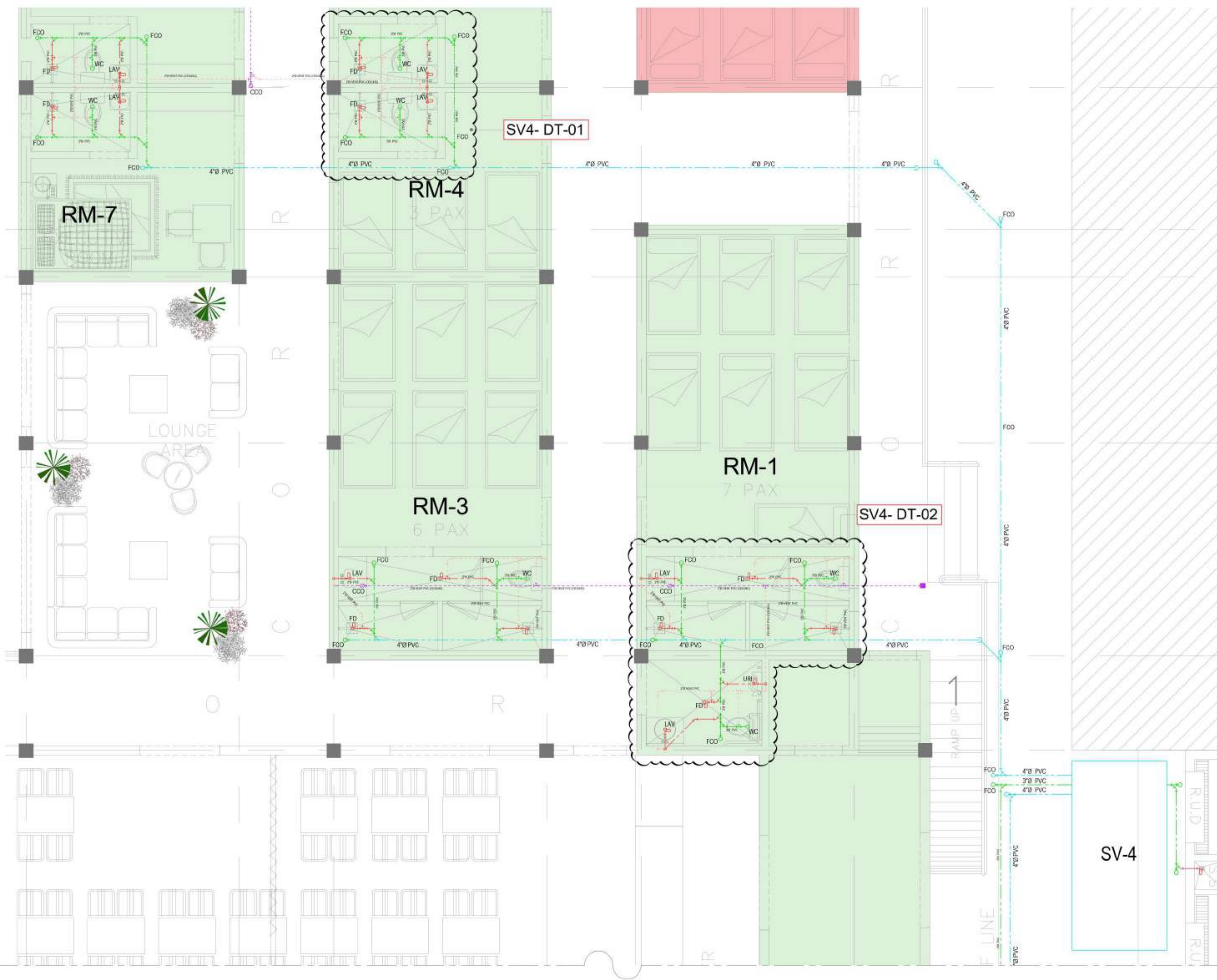
- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG END CLEANOUT-2-45° ELBOW (1/8 BEND) MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 600M IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 1/4" TO 2".

9 SANITARY SYSTEM SV-3 -DT-01 PL 204 SCALE 1:25MTS

10 SANITARY SYSTEM SV-3 -DT-02 PL 204 SCALE 1:25MTS

8 SANITARY SYSTEM SV-3 BLOW UP DETAIL PL 204 SCALE 1:50MTS

	PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAVILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, MATAGAG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A SHEET CONTENTS: AS SHOWN	SHEET NO. 204 PL
	<p>NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENT, FEES, AND MATERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.</p>								



LEGENDS

SIZE IN (MM)	SIZE IN (INCHES)	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Orange	Light Blue

COLOR ZONING

ZONE 1	ZONE 2	ZONE 3	ZONE 4
Light Blue	Light Orange	Light Green	Light Blue

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCC	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
EL	ELBOW 90°	W	WYE
T	TEE		
P	P-TRAP		

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG
END CLEANOUT- 2-4" ELBOW (1/8 BEND)
MIDDLE CLEANOUT- 1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 600MM IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 1/4" TO 2".

11 SANITARY SYSTEM SV-4 BLOW UP DETAIL (1) 1:50M/TS
 SCALE

A



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
 REGISTERED & LICENSED ARCHITECT
 TECHNICAL ASSISTANT II (ARCHITECT II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
 REGISTERED CIVIL ENGINEER
 TECHNICAL ASSISTANT II (ENGINEER II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAWAICA ROSE G. ROLLOQUE**
 REGIONAL ENGINEER II
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
 CHIEF EDUCATION SUPERVISOR
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

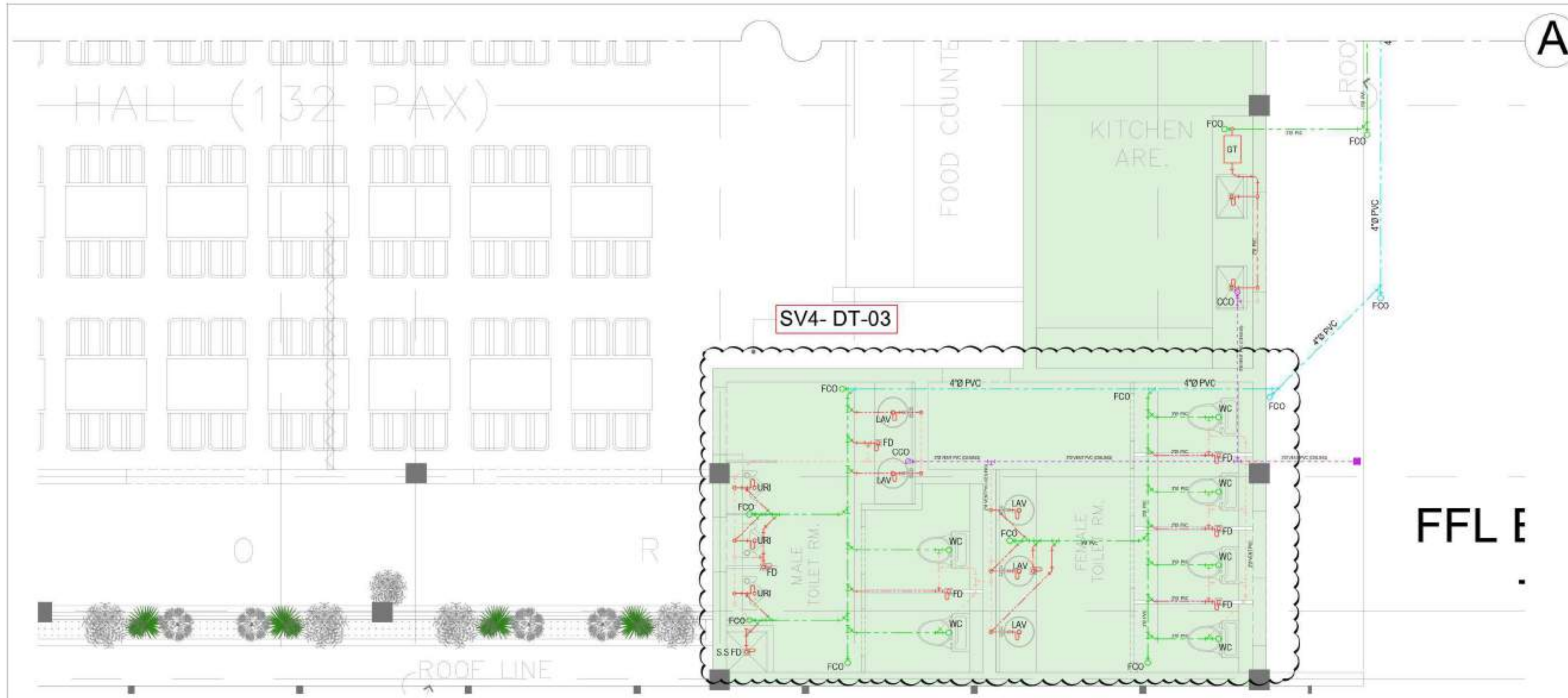
APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
 REGIONAL DIRECTOR
 OFFICE OF THE REGIONAL DIRECTOR
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
 GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
 NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES
 LOCATION: MALABO, MATATAG

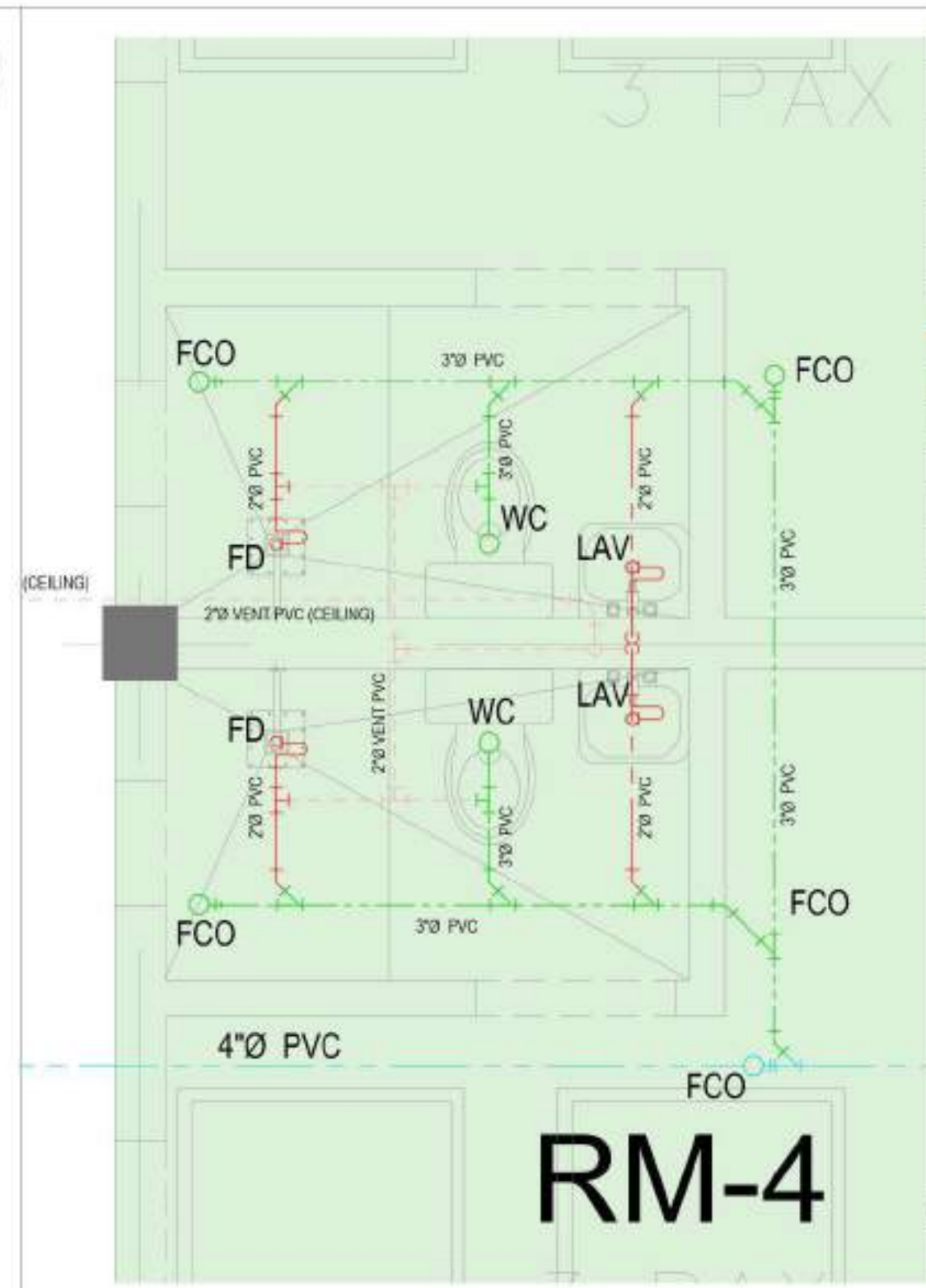
OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A
 SHEET CONTENTS: AS SHOWN

SHEET NO. **205**
 PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMELY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBILITY CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY, FEES, AND MATERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7926.



12 SANITARY SYSTEM
SV-4 BLOW UP DETAIL (2)
 PL206 SCALE 1:50MTS



13 SANITARY SYSTEM
SV-4 -DT-01
 PL206 SCALE 1:25MTS

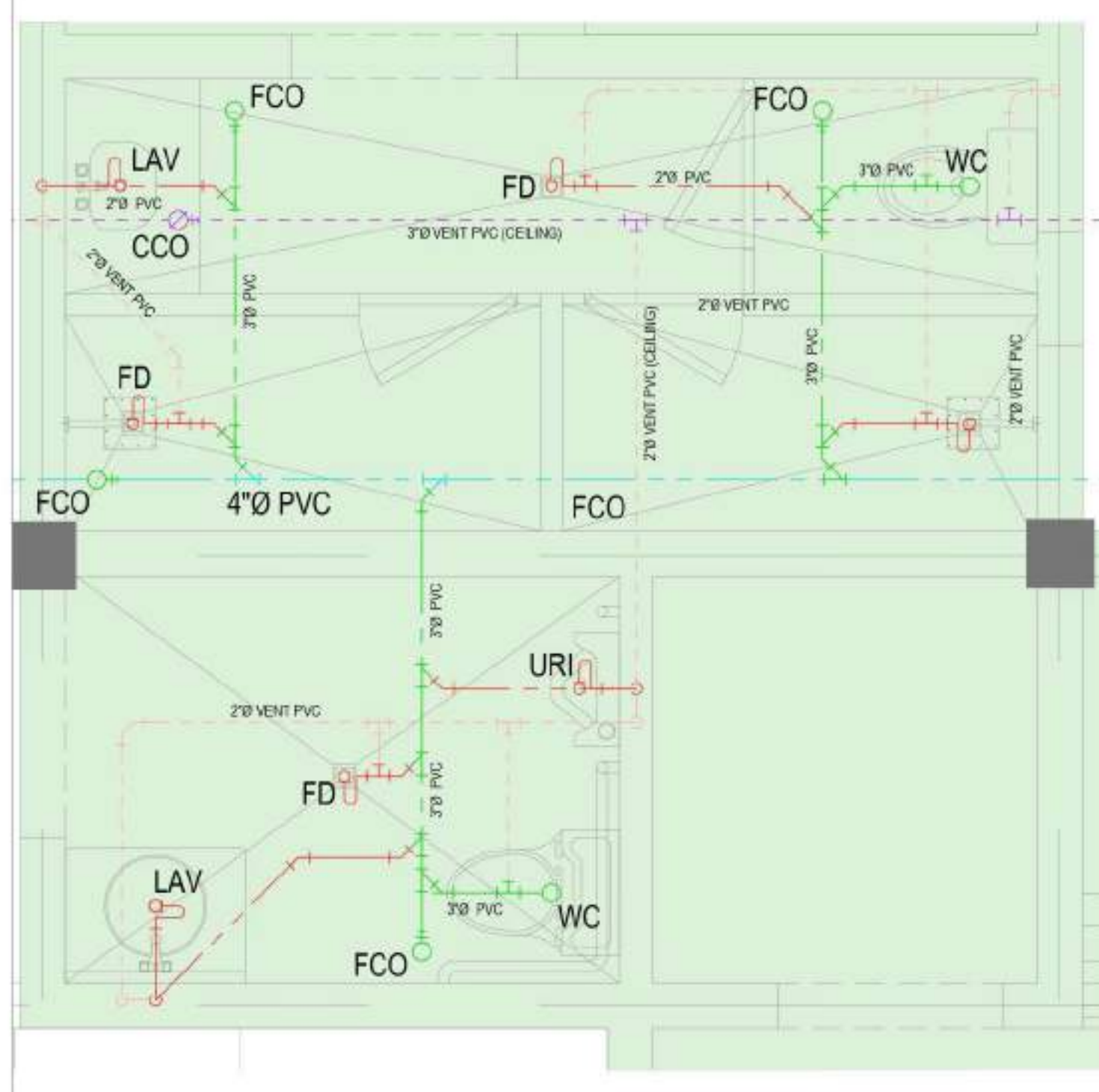
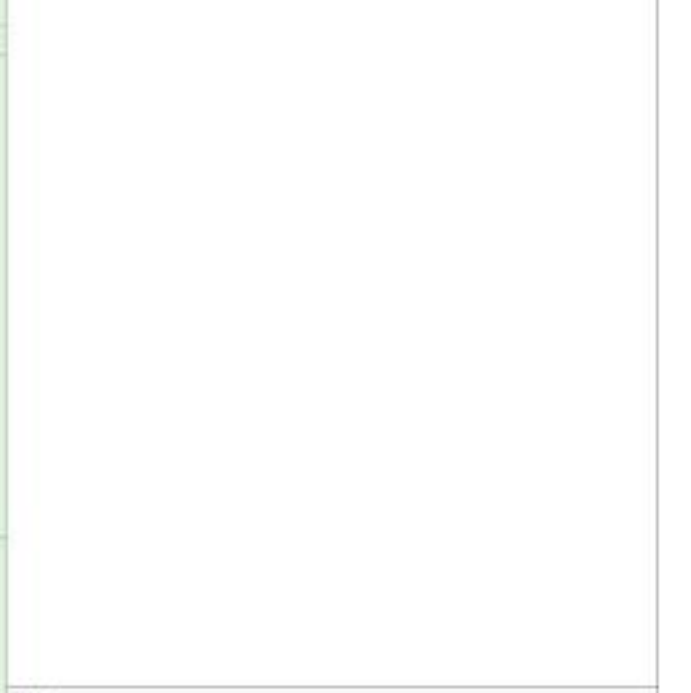
LEGENDS

SIZE IN (MM)	SIZE IN (INCHES)	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Cyan	Purple
150	6"Ø	Magenta	Orange
200	8"Ø	Dark Blue	Light Blue

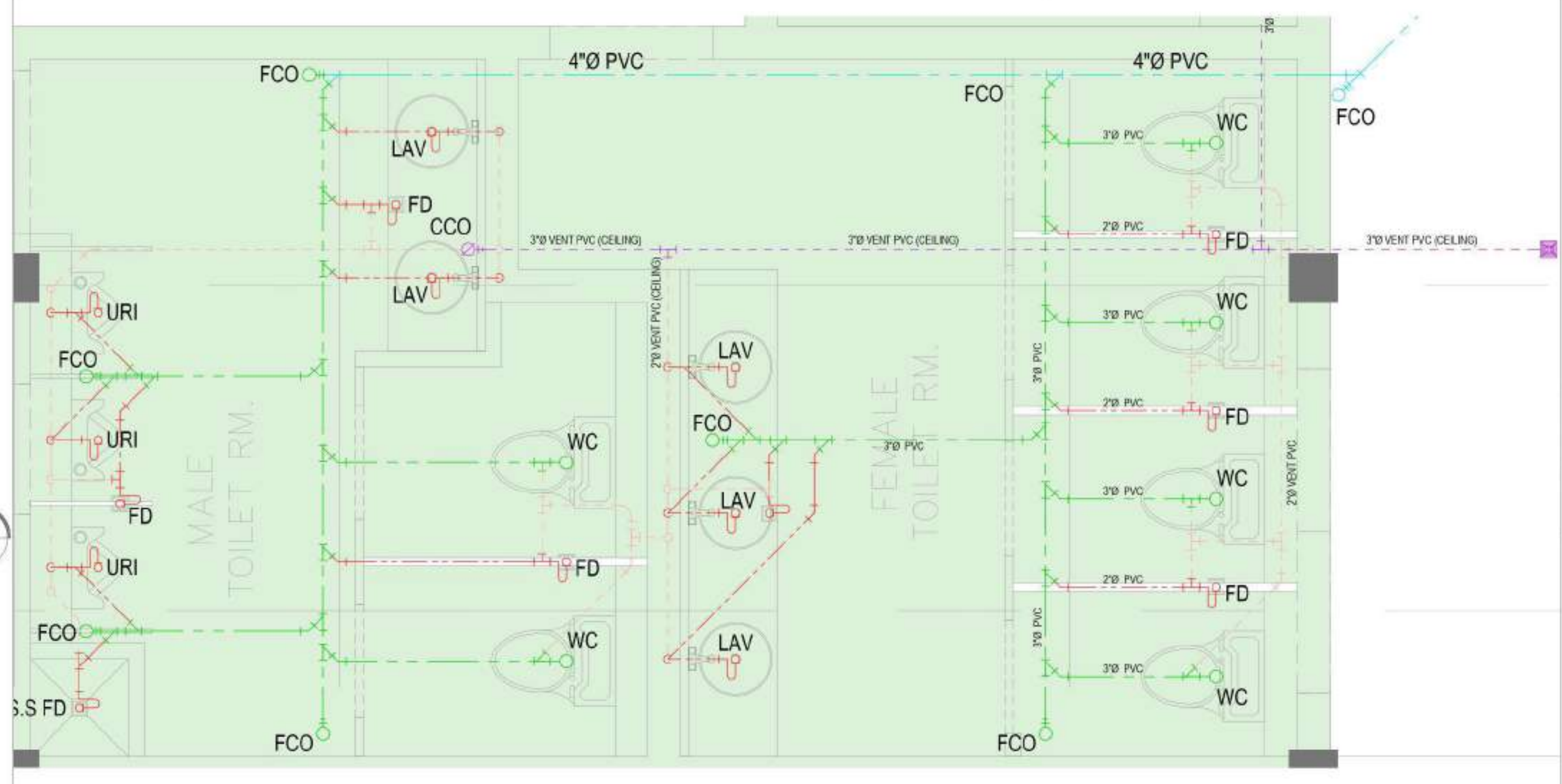
COLOR ZONING

ZONE 1	ZONE 2	ZONE 3	ZONE 4
Light Blue	Light Green	Light Yellow	Light Purple

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCO	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
ELBOW 90°		ELBOW 45°	
TEE		WYE	
P-TRAP			



14 SANITARY SYSTEM
SV-4 -DT-02
 PL206 SCALE 1:25MTS



15 SANITARY SYSTEM
SV-4 -DT-03
 PL206 SCALE 1:25MTS



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RAQUEÑO**
 REGISTERED & LICENSED ARCHITECT
 TECHNICAL ASSISTANT II (ENGINEER II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
 REGISTERED CIVIL ENGINEER
 TECHNICAL ASSISTANT II (ENGINEER II)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAMAICA ROSE G. ROLLOQUE**
 REGISTERED ELECTRICAL ENGINEER
 SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
 CHIEF EDUCATION SUPERVISOR
 EDUCATION SUPPORT SERVICES DIVISION
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

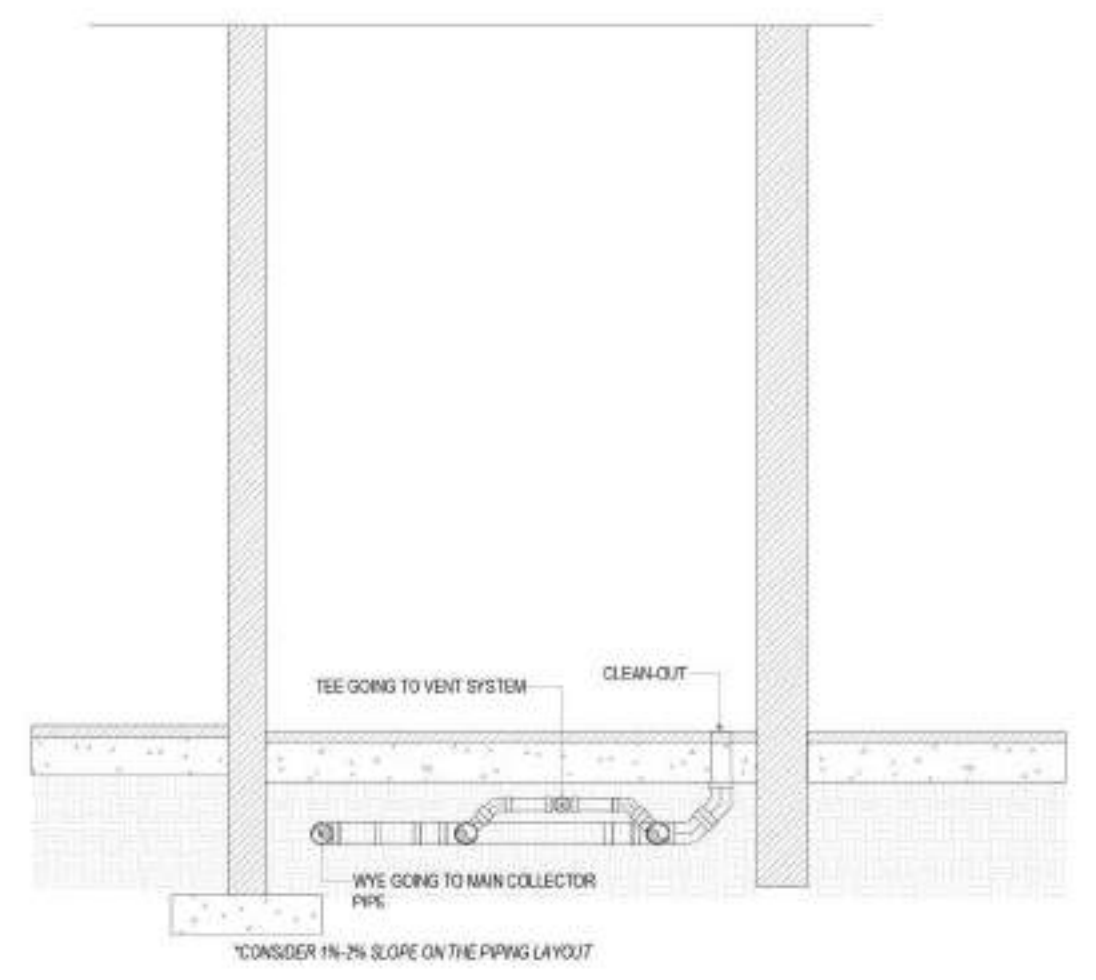
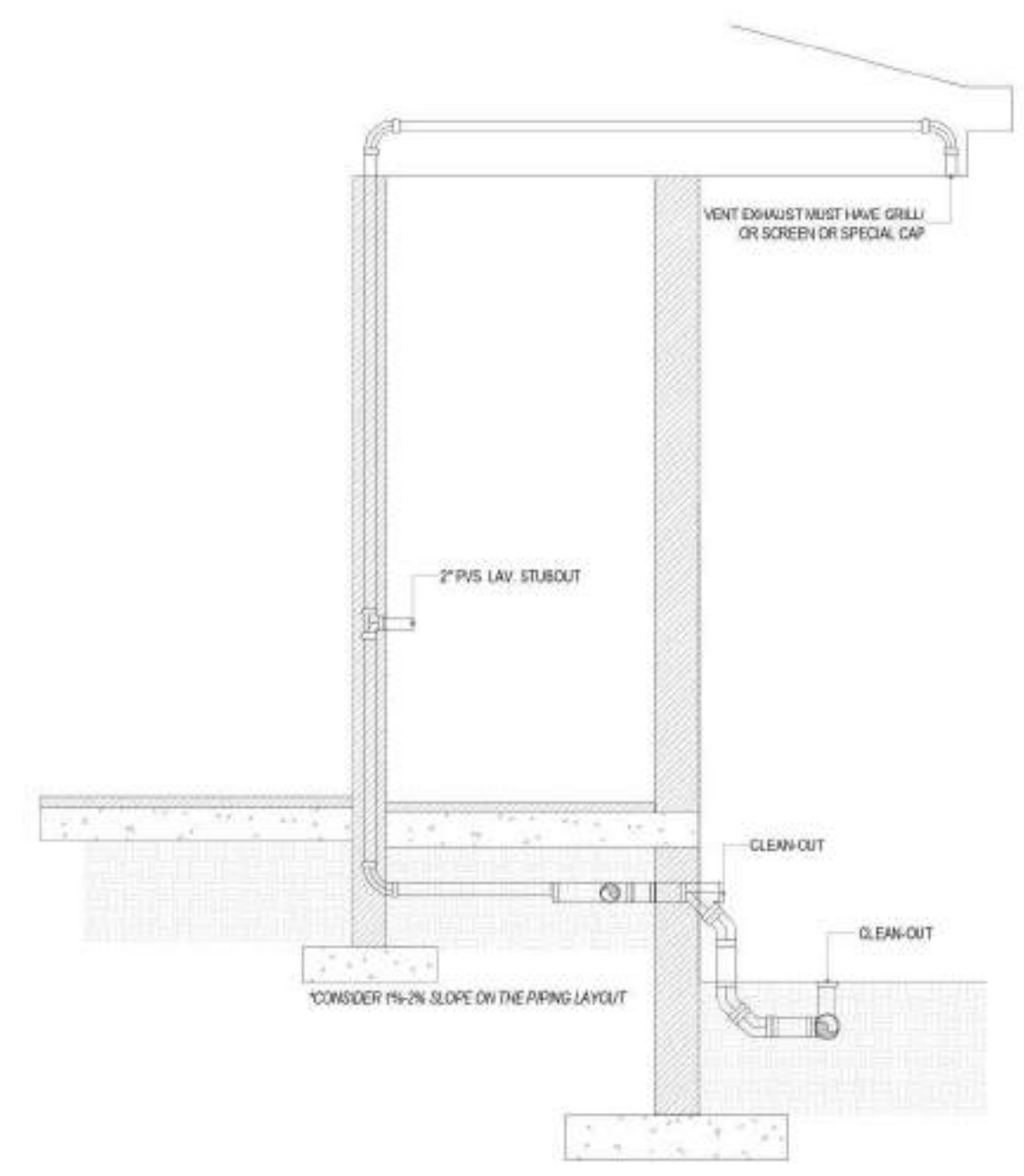
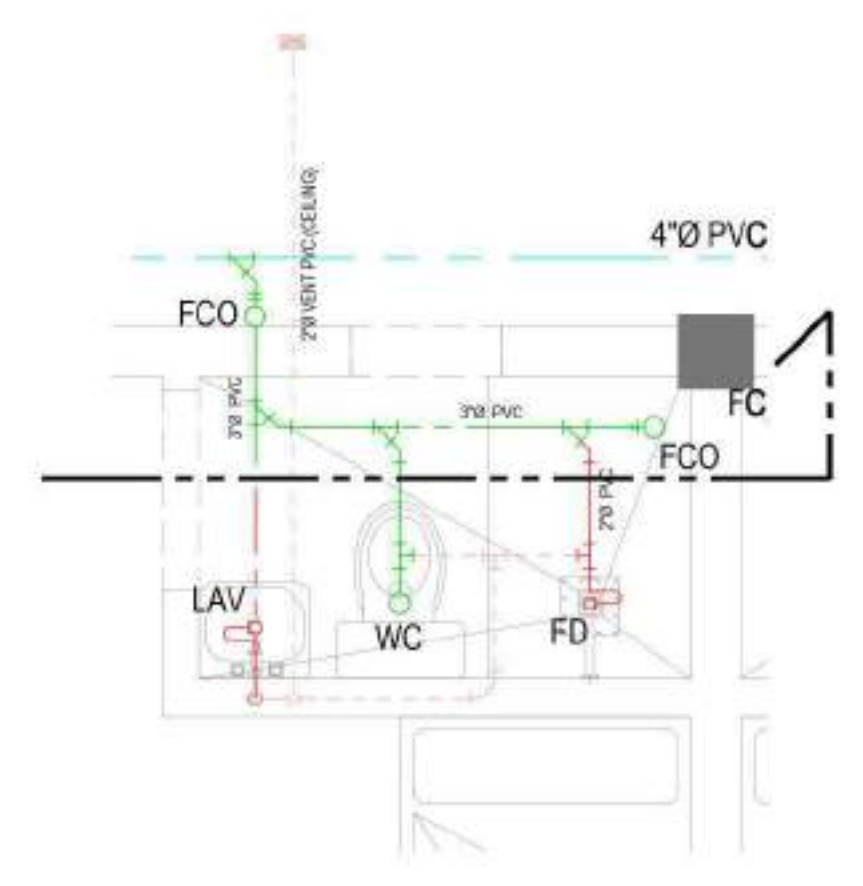
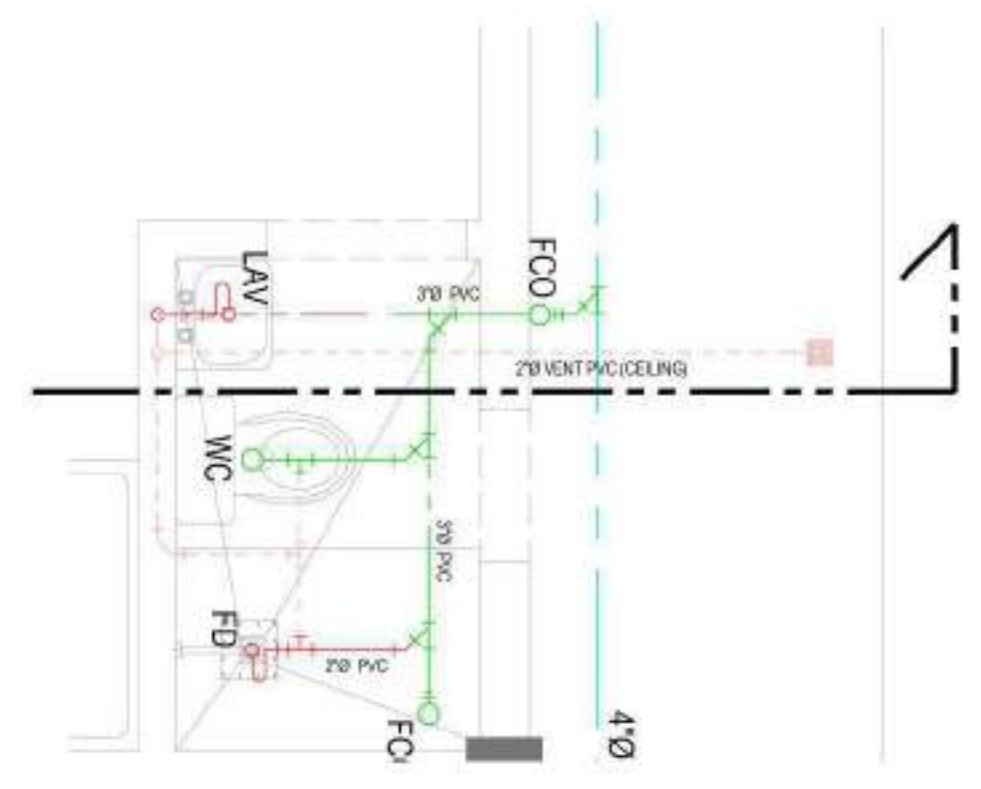
APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
 REGIONAL DIRECTOR
 OFFICE OF THE REGIONAL DIRECTOR
 DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: **REL-C-NAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR**
 GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
 NATIONAL EDUCATORS' ACADEMY OF THE PHILIPPINES
 LOCATION: MALABE, BACANG

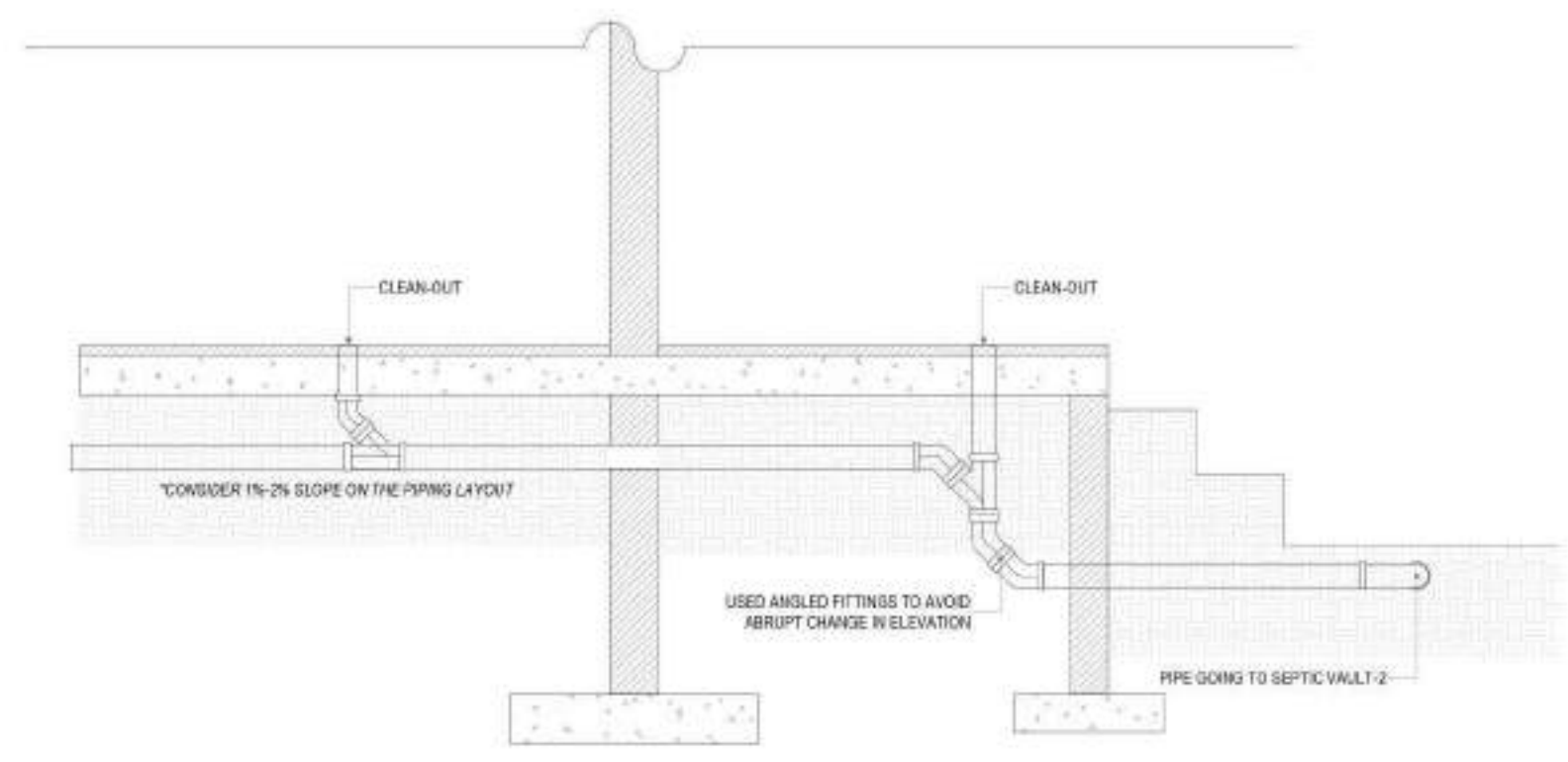
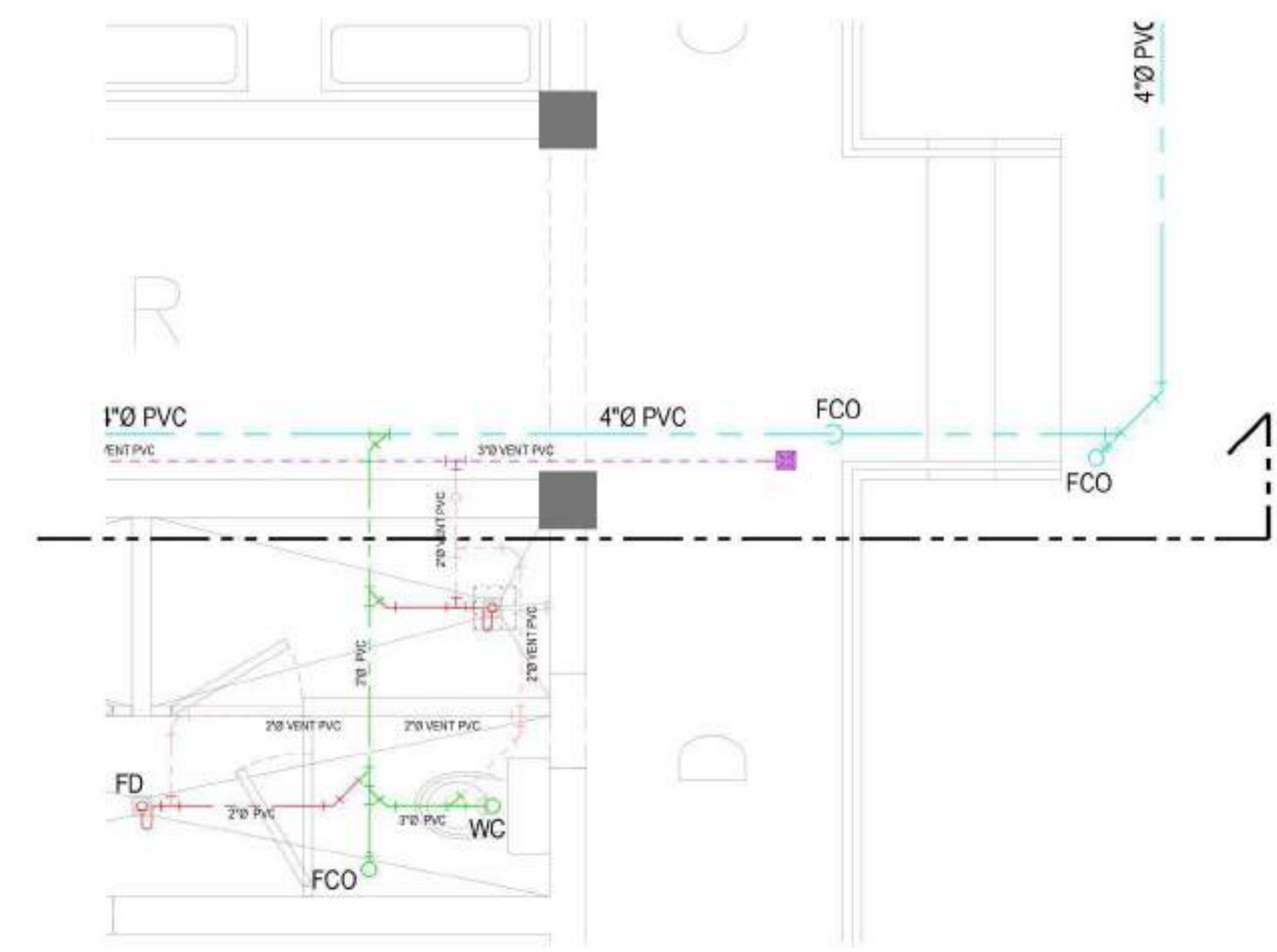
OWNER: **DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A**
 SHEET CONTENTS: **AS SHOWN**

SHEET NO. **206**
 PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY A PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCEPTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEDERAL AND MINISTERIAL REGULATIONS OF THE GOVERNMENT AGENCY, F.W.V. EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7920.



16 SANITARY SYSTEM
SV-1 PIPE LAYOUT DETAIL
SCALE 1:30MTS



17 SANITARY SYSTEM
SV-2 PIPE LAYOUT DETAIL
SCALE 1:30MTS

LEGENDS

SIZE IN (MM)	SIZE IN INCHES	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Orange	Light Purple

COLOR ZONING

Zone 1
Zone 2
Zone 3
Zone 4

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCO	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
2"	ELBOW 90°	2"	ELBOW 45°
1"	TEE	1"	WYE
1"	P-TRAP		

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG
END CLEANOUT-2-4" ELBOW (1/8 BEND)
MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 0.60M IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 1/4" TO 2".

REPLAN:

DRAWING PHASE:



PREPARED BY: [ORIGINAL SIGNED] **MR. ANJO H. RADEÑO**
REGISTERED & LICENSED ARCHITECT
TECHNICAL ASSISTANT III (ARCHITECT II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. EDILBERTO A. DAMILES JR.**
REGISTERED CIVIL ENGINEER
TECHNICAL ASSISTANT II (ENGINEER II)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PREPARED BY: [ORIGINAL SIGNED] **ENGR. JAMES MATWILL E. ABALOS**
REGISTERED ELECTRICAL ENGINEER
SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

CHECKED BY: [ORIGINAL SIGNED] **ENGR. JAMAICA ROSE G. ROLLOQUE**
REGIONAL ENGINEER II
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

RECOMMENDING APPROVAL: [ORIGINAL SIGNED] **DR. EDUARDA M. ZAPANTA**
CHIEF EDUCATION SUPERVISOR
EDUCATION SUPPORT SERVICES DIVISION
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

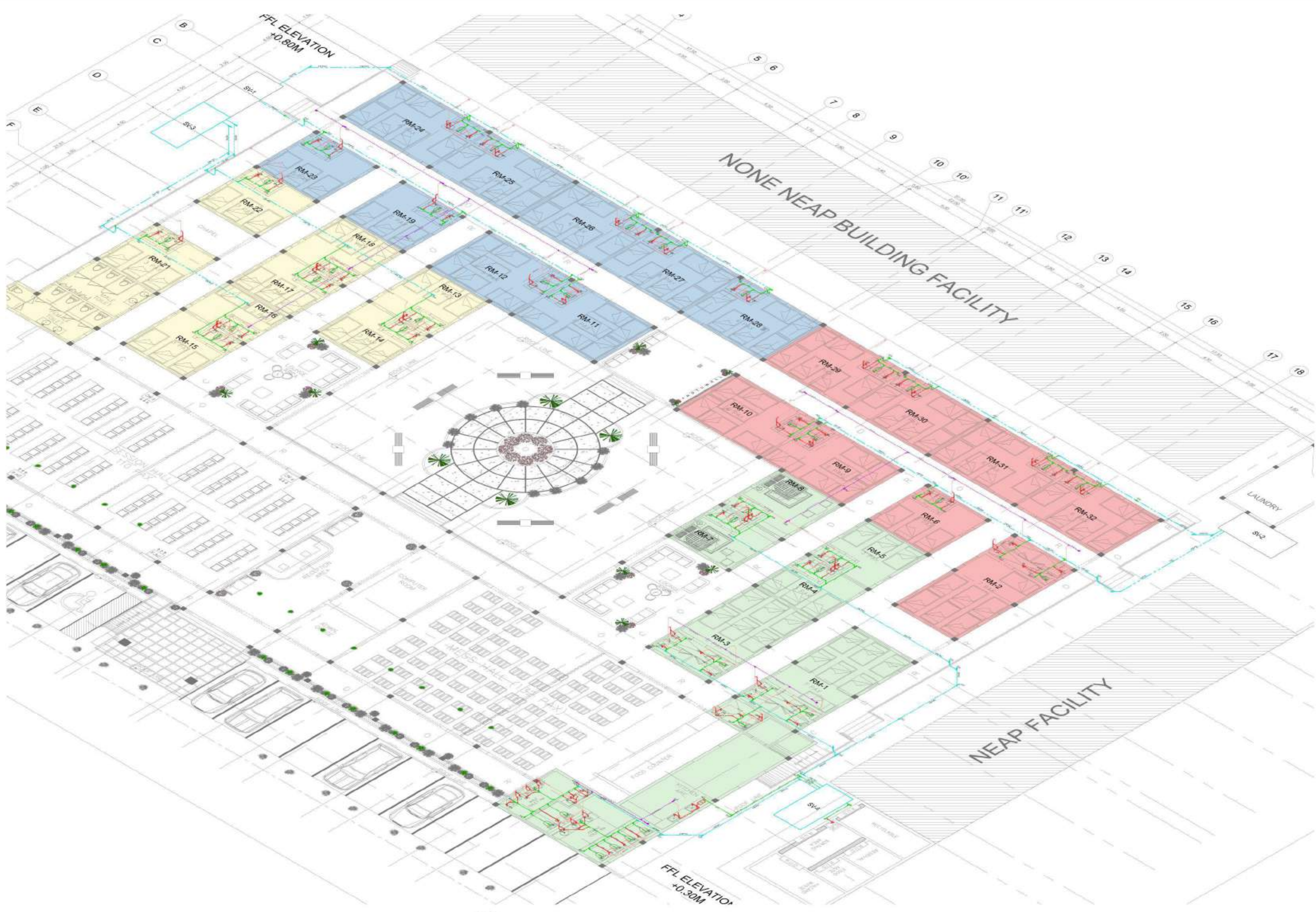
APPROVED BY: [ORIGINAL SIGNED] **ATTY. ALBERTO T. ESCOBARTE, CESO II**
REGIONAL DIRECTOR
OFFICE OF THE REGIONAL DIRECTOR
DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A

PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR
GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER
NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES
LOCATION: MALABO, BANGALAG

OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A
SHEET CONTENTS: AS SHOWN

SHEET NO. **207**
PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT FEDERAL AND MINISTERIAL REGULATIONS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7920.



LEGENDS

SIZE IN (MM)	SIZE IN (INCHES)	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Green	Blue
150	6"Ø	Yellow	Red
200	8"Ø	Blue	Green

COLOR ZONING

Zone 1	Blue
Zone 2	Red
Zone 3	Green
Zone 4	Yellow

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCC	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
ELBOW 90°		ELBOW 45°	
TEE		WYE	
P-TRAP			

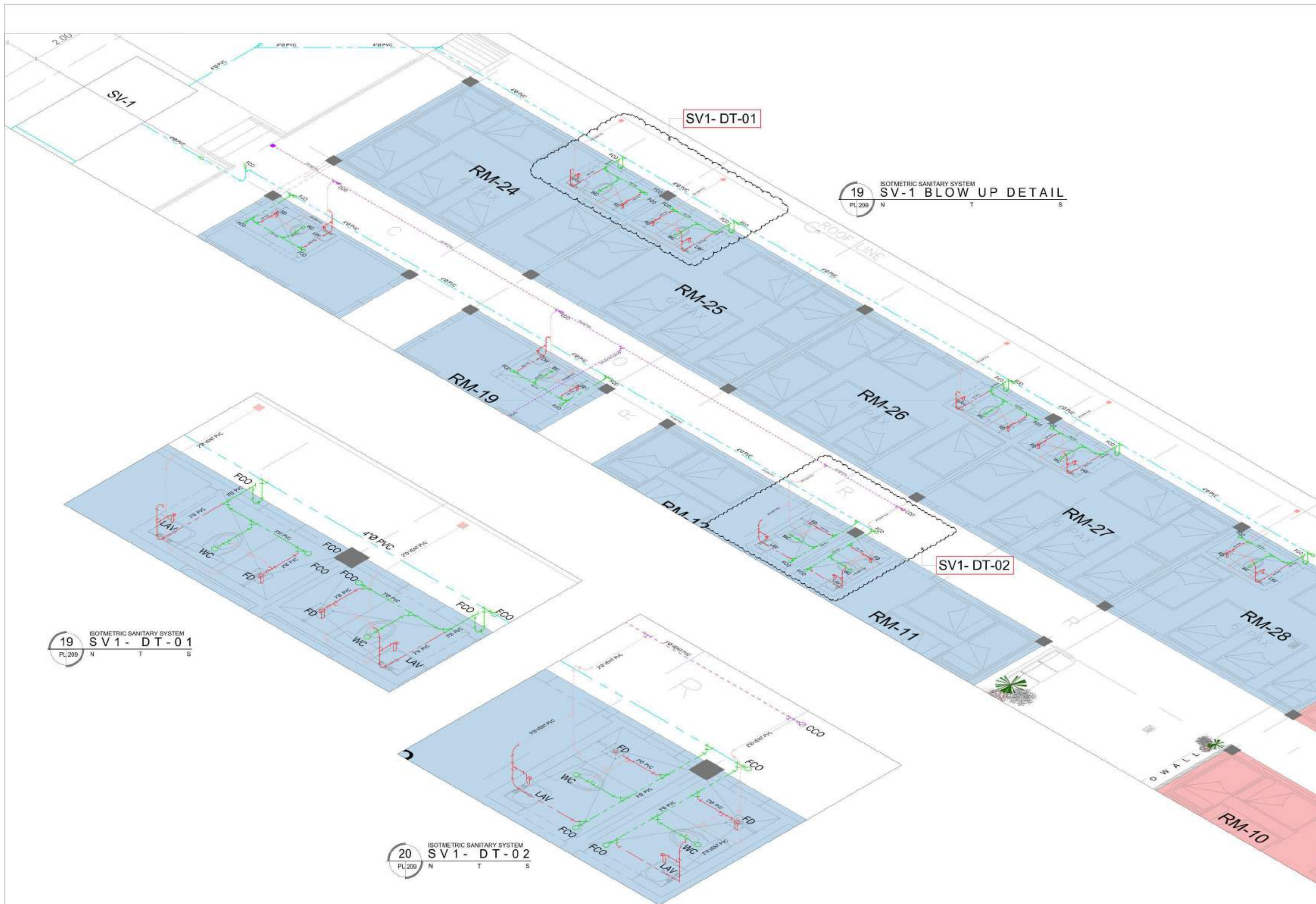
- NOTES
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG
END CLEANOUT-2-45° ELBOW (1/8 BEND)
MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 0.60M IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FITTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 3/4" TO 2".

18 PROPOSED NEW SANITARY SYSTEM ISOMETRIC LAYOUT
PL 208 SCALE 1:150M

PREPARED BY:	PREPARED BY:	PREPARED BY:	CHECKED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE:	OWNER:	SHEET NO.:
<p>[ORIGINAL SIGNED]</p> <p>MR. ANJO H. RADEÑO</p> <p>REGISTERED & LICENSED ARCHITECT</p> <p>TECHNICAL ASSISTANT II (ARCHITECT II)</p> <p>EDUCATION SUPPORT SERVICES DIVISION</p> <p>DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED]</p> <p>ENGR. EDILBERTO A. DAMILES JR.</p> <p>REGISTERED CIVIL ENGINEER</p> <p>TECHNICAL ASSISTANT II (ENGINEER II)</p> <p>EDUCATION SUPPORT SERVICES DIVISION</p> <p>DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED]</p> <p>ENGR. JAMES MATWILL E. ABALOS</p> <p>REGISTERED ELECTRICAL ENGINEER</p> <p>SENIOR TECHNICAL ASSISTANT IV (ENGINEER III)</p> <p>EDUCATION SUPPORT SERVICES DIVISION</p> <p>DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED]</p> <p>ENGR. JAMICA ROSE G. ROLLOQUE</p> <p>REGIONAL ENGINEER II</p> <p>EDUCATION SUPPORT SERVICES DIVISION</p> <p>DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED]</p> <p>DR. EDUARDA M. ZAPANTA</p> <p>CHIEF EDUCATION SUPERVISOR</p> <p>EDUCATION SUPPORT SERVICES DIVISION</p> <p>DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>[ORIGINAL SIGNED]</p> <p>ATTY. ALBERTO T. ESCOBARTE, CESO II</p> <p>REGIONAL DIRECTOR</p> <p>OFFICE OF THE REGIONAL DIRECTOR</p> <p>DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>RELIC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR</p> <p>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER</p> <p>NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES</p> <p>LOCATION: MALABO, BANGAL</p>	<p>DEPARTMENT OF EDUCATION</p> <p>REGIONAL OFFICE IV-A</p> <p>SHEET CONTENTS:</p> <p>AS SHOWN</p>	<p>208</p> <p>PL</p>



NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMELY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND PREPARATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REQUIREMENTS AND MINISTRIAL REGULATIONS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7905.



SIZE IN (MM)	SIZE IN (INCHES)	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Orange	Light Purple

COLOR ZONING	
Light Blue	ZONE 1
Light Orange	ZONE 2
Light Green	ZONE 3
Light Purple	ZONE 4

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCC	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
ELBOW 90°		ELBOW 45°	
TEE		WYE	
P-TRAP			

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG
END CLEANOUT- 2-4" ELBOW (18 BEND)
MIDDLE CLEANOUT- 1- WYE & 1-45° ELBOW (18 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 0.60M IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 3/4" TO 2".

REPLAN

DRAWING PHASE

	<p>PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RADUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A</p>	<p>PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR</p>	<p>OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A</p>	<p>SHEET NO. 209</p>
	<p>GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, MATATAG</p>							<p>SHEET CONTENTS: AS SHOWN</p>	<p>PL</p>

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE; AND THE RELEVANT FEDERAL AND MUNICIPAL REGULATIONS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7905.



LEGENDS

SIZE IN (MM)	SIZE IN INCHES	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Orange	Light Purple

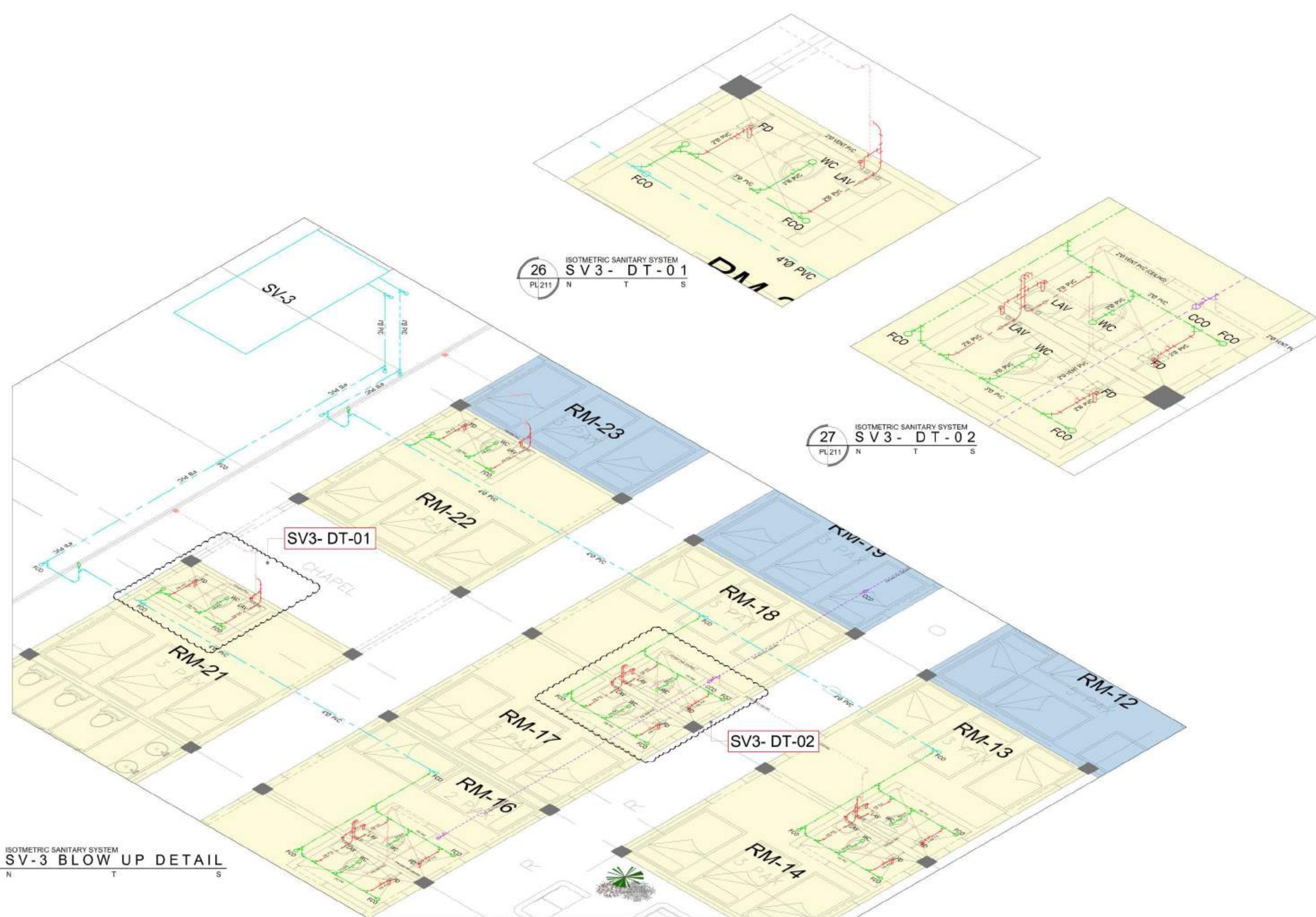
COLOR ZONING	
Zone 1	Light Blue
Zone 2	Light Orange
Zone 3	Light Green
Zone 4	Light Purple

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCO	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
ELBOW 90°		TEE	ELBOW 45°
P-TRAP			

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG END CLEANOUT-2-45° ELBOW (1/8 BEND) MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 0.60M IN HEIGHT
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1"Ø OR 1 1/2" TO 2"

	PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RAQUENO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAVILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAWAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, BAYANAG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 210 PL
	SHEET CONTENTS: AS SHOWN								

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SALEMALA FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, AND SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY FEE AND MATERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.



LEGENDS

SIZE IN (MM)	SIZE IN INCHES	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Orange	Light Purple

COLOR ZONING

Zone 1	Light Blue
Zone 2	Light Orange
Zone 3	Light Green
Zone 4	Light Purple

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCC	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
E	ELBOW 90°	T	TEE
W	WYE	45	ELBOW 45°
PT	P-TRAP		

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG
END CLEANOUT-2-45° ELBOW (1/8 BEND)
MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 0.60M IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 3/4" TO 2".

REPLAN

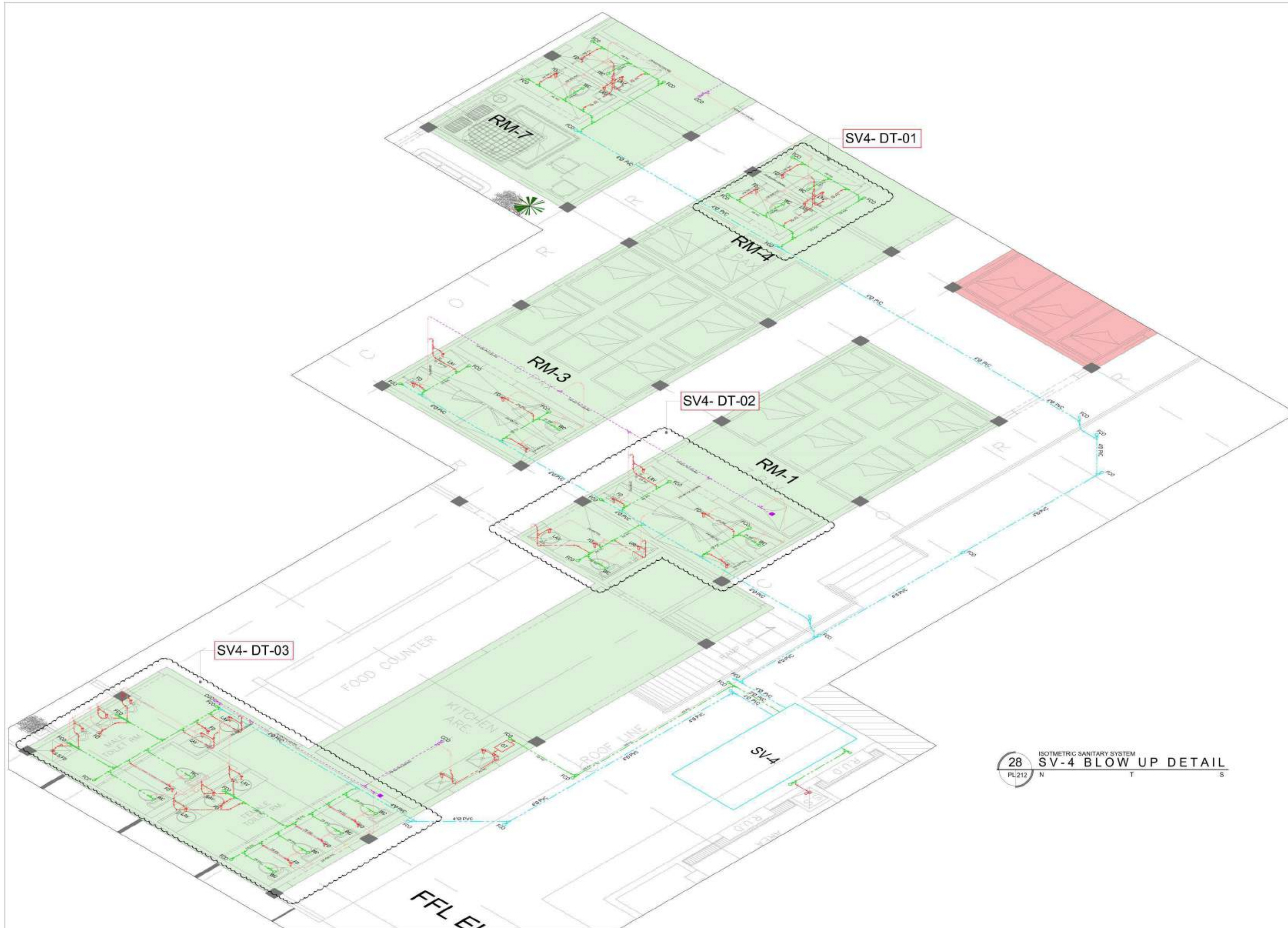
DRAWING PHASE

25 ISOMETRIC SANITARY SYSTEM
SV-3 BLOW UP DETAIL
PL211

26 ISOMETRIC SANITARY SYSTEM
SV3-DT-01
PL211

27 ISOMETRIC SANITARY SYSTEM
SV3-DT-02
PL211

	PREPARED BY: [ORIGINAL SIGNED] DR. ANJO H. RAQUEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, BAYANAG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 211 SHEET CONTENTS: AS SHOWN
	NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGN, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXCLUDED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE REGISTRY, FISCAL AND MINISTERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7920.							



28 ISOMETRIC SANITARY SYSTEM
SV-4 BLOW UP DETAIL

SIZE IN (MM)	SIZE IN (INCHES)	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Blue	Yellow
100	4"Ø	Orange	Purple
150	6"Ø	Light Blue	Light Green
200	8"Ø	Light Orange	Light Purple

COLOR ZONING	
Light Blue	ZONE 1
Light Orange	ZONE 2
Light Green	ZONE 3
Light Purple	ZONE 4

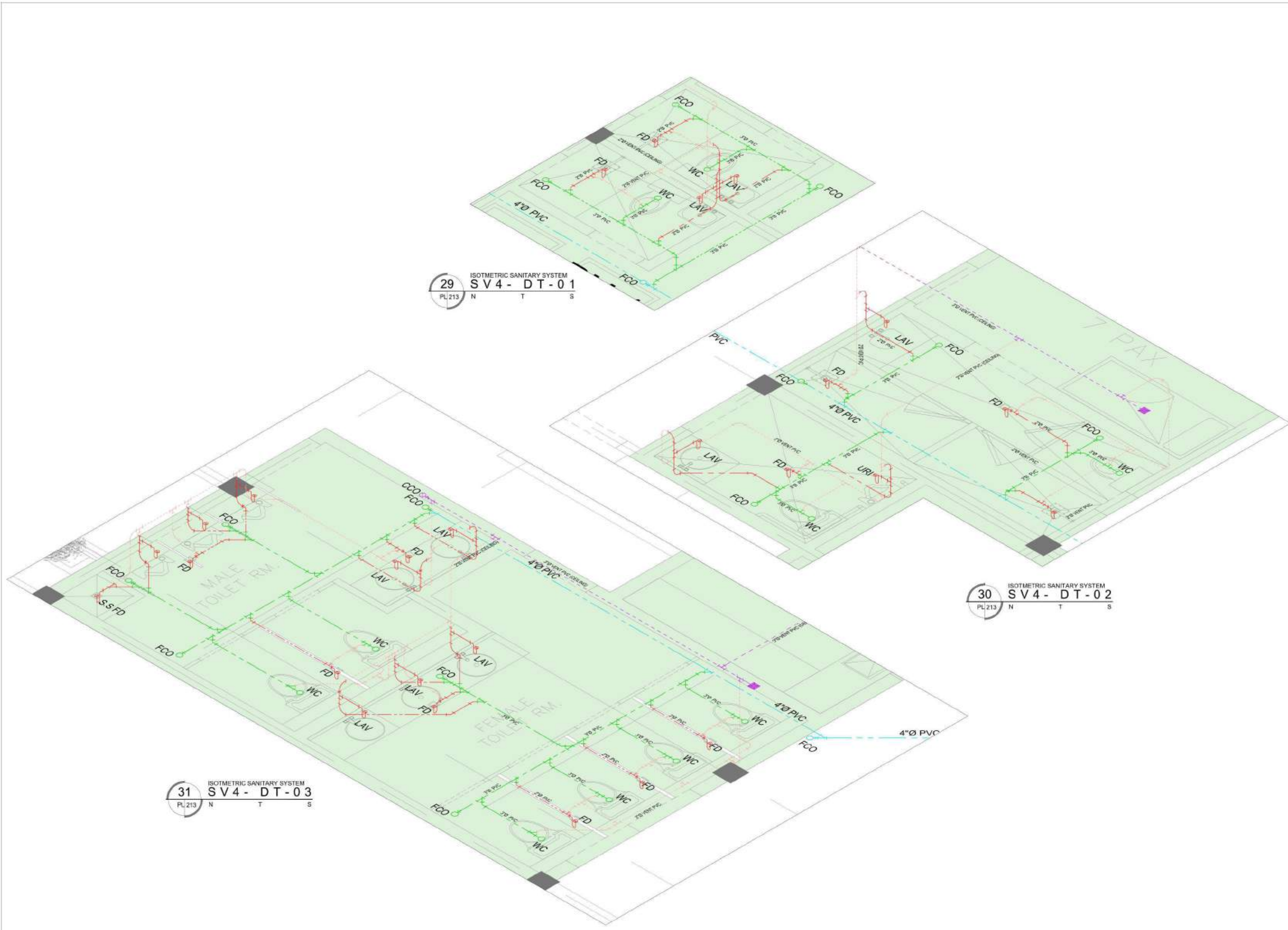
LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCC	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
90°	ELBOW 90°	90°	ELBOW 45°
T	TEE	W	WYE
U	P-TRAP		

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG
END CLEANOUT-2-45° ELBOW (1/8 BEND)
MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 0.60M IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 3/4" TO 2".

REPLAN:

DRAWING PHASE:

	PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RAQUENO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT IV (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, BANGALAG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 212 SHEET CONTENTS: AS SHOWN	PL
	NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS EXECUTED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A REGISTERED MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT TITLES AND MINISTRIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, FOLLOWING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7906.								



SIZE IN (MM)	SIZE IN (INCHES)	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING
50	2"Ø	Red	Green
80	3"Ø	Red	Green
100	4"Ø	Red	Green
150	6"Ø	Red	Green
200	8"Ø	Red	Green

COLOR ZONING	
Zone 1	Light Blue
Zone 2	Light Green
Zone 3	Light Yellow
Zone 4	Light Purple

LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCCO	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
ELBOW 90°		ELBOW 45°	
TEE		WYE	
P-TRAP			

- NOTES:
- ALL FLOOR CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH BRASS PACKET BUSHING PLUG
END CLEANOUT-2-45° ELBOW (1/8 BEND)
MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1/8 BEND)
 - ALL STUBOUTS MUST ASSUMED TO HAVE A VERTICAL PIPE 0.60M IN HEIGHT.
 - ALL IMMEDIATE FITTINGS FOR VENTILATION FOR EVERY FIXTURE LAID IN THE FLOOR MUST BE TILTED 45° TO PREVENT RE-DIRECTION OF WASTE WATER TO VENT PIPES.
 - ALL LAVATORY STUBOUT MUST HAVE A REDUCER FROM 1 1/2" OR 1 1/4" TO 2".

REPLAY

DRAWING PHASE

	PREPARED BY: [ORIGINAL SIGNED] MR. ANJO H. RADEÑO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDILBERTO A. DAMILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. JAMES MATWILL E. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT II (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMAICA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] DR. EDUARDA M. ZAPANTA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 213
	SHEET CONTENTS: AS SHOWN								PL

NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO SIGNED AND SEALED BY PROFESSIONAL ELECTRICAL ENGINEER; AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS DESIGNED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENCE MASTER ELECTRICIAN, AS THE CASE MAY BE; AND THE ROUTING, TRACING AND MATERIAL REQUIREMENTS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 34 OF REPUBLIC ACT NO. 7906.

SIZE IN (MM)	SIZE IN (INCHES)	SANITARY LINES COLOR CODING	VENTILATION LINES COLOR CODING	EXHAUST LINES COLOR CODING
50	2"Ø	Red	Green	Blue
80	3"Ø	Red	Green	Blue
100	4"Ø	Red	Green	Blue
150	6"Ø	Red	Green	Blue
200	8"Ø	Red	Green	Blue

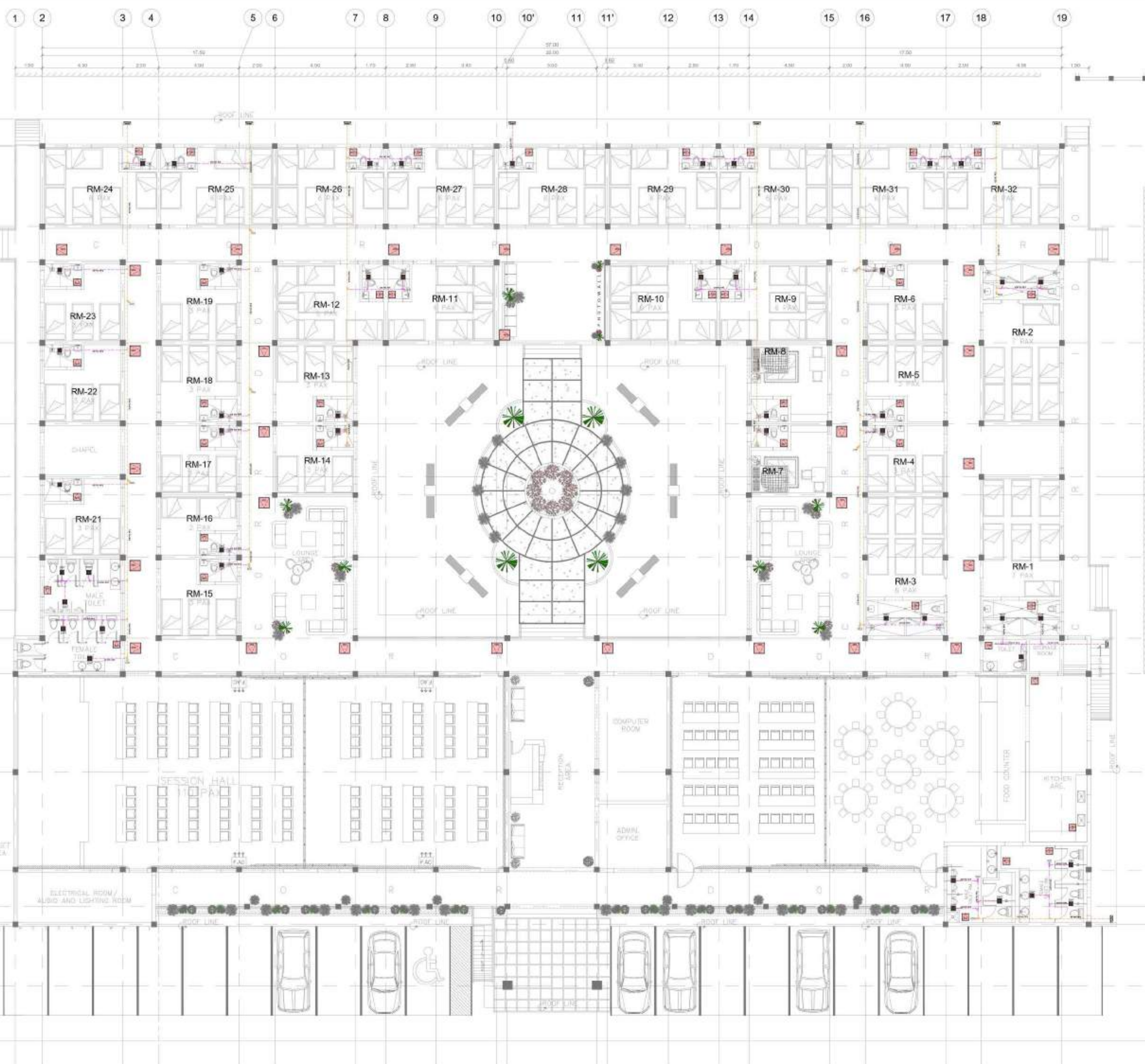
COLOR ZONING	
Zone 1	Light Blue
Zone 2	Light Green
Zone 3	Light Yellow
Zone 4	Light Purple

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
LAV	LAVATORY	WC	WATERCLOSET
FD	FLOOR DRAIN	FCC	FLOOR CLEAN OUT
CCO	CEILING CLEAN OUT	SV	SEPTIC VAULT
90°	ELBOW 90°	45°	ELBOW 45°
T	TEE	WYE	WYE
P-TRAP	P-TRAP	0.4x0.4	MANHOLE
0.6x0.6	MANHOLE	EXHAUST FAN	EXHAUST FAN

- NOTES**
- ALL CEILING CLEAN OUT MUST BE COMPOSE OF FOLLOWING FITTINGS WITH PVC PLUG OR CAP
END CLEANOUT-1-45° ELBOW (1Ø BEND)
MIDDLE CLEANOUT-1-WYE & 1-45° ELBOW (1Ø BEND)
 - ENSURE HANGER SPACING EVERY 1.20M
 - DOUBLE CHECK MANHOLE LAYOUTS ON ACTUAL IT SHOULD NOT BE OBSTRUCTED BY ANY UTILITIES NOR STRUCTURAL ELEMENT OF THE BUILDING, FOR CONFLICT IMMEDIATELY REPORT TO ARCHITECT OR ENGINEER IN CHARGE
 - MANHOLES SHOULD BE FREE FROM ANY DIRT BEFORE AND AFTER TURN OVER UNTIDY MANHOLES THAT CAN'T BE DONE THRU CLEANING WILL BE SUBJECT FOR REPLACEMENT CARE OF CONTRACTOR
 - F MANHOLES WILL HAVE A LOCKING MECHANISM CONTRACTOR IS REQUIRED TO PROVIDE KEY AND MANHOLE TAGGING TO BE APPROVED BY THE ARCHITECT OR ENGINEER
 - ENSURE PIPE CONNECTIONS, AND DO NOT PERMANENTLY SEAL CLEAN OUTS AREA

REPLAN

DRAWING PHASE



1 PROPOSED NEW EXHAUST SYSTEM
SCALE 1:150MTS

	PREPARED BY: [ORIGINAL SIGNED] MR. ALDO H. RAQUENO REGISTERED & LICENSED ARCHITECT TECHNICAL ASSISTANT II (ARCHITECT II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PREPARED BY: [ORIGINAL SIGNED] ENGR. EDUARDO A. DAVILES JR. REGISTERED CIVIL ENGINEER TECHNICAL ASSISTANT II (ENGINEER II) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMES MARIBEL L. ABALOS REGISTERED ELECTRICAL ENGINEER SENIOR TECHNICAL ASSISTANT II (ENGINEER III) EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	CHECKED BY: [ORIGINAL SIGNED] ENGR. JAMAINA ROSE G. ROLLOQUE REGIONAL ENGINEER II EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	RECOMMENDING APPROVAL: [ORIGINAL SIGNED] MRS. EULYDORA M. ZAPATA CHIEF EDUCATION SUPERVISOR EDUCATION SUPPORT SERVICES DIVISION DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	APPROVED BY: [ORIGINAL SIGNED] ATTY. ALBERTO T. ESCOBARTE, CESO II REGIONAL DIRECTOR OFFICE OF THE REGIONAL DIRECTOR DEPARTMENT OF THE EDUCATION REGIONAL OFFICE IV-A	PROJECT TITLE: RELC-NEAP WATERLINE AND SANITARY SYSTEM UPGRADE AND OTHER VARIOUS REPAIR GOVERNMENT AGENCY: REGIONAL EDUCATION LEARNING CENTER NATIONAL EDUCATORS' ASSOCIATION OF THE PHILIPPINES LOCATION: MALABO, BACANG	OWNER: DEPARTMENT OF EDUCATION REGIONAL OFFICE IV-A	SHEET NO.: 301 SHEET CONTENTS: AS SHOWN
	NOTE: PREPARATIONS OF PLANS, SUPERVISION OF INSTALLATION, APPLICATION OF THE ELECTRICAL CODE, - IT SHALL BE SOLEMNLY FOR ANY PERSON NOT AUTHORIZED UNDER THIS ACT TO PREPARE PLANS, ELECTRICAL VALUATIONS OR SPECIFICATIONS FOR ANY ELECTRICAL WIRING EQUIPMENT OR SYSTEM; AND NO INSTALLATION THEREOF SHALL BE UNDERTAKEN UNLESS THE PLANS, DESIGNS, VALUATIONS AND SPECIFICATIONS HAVE BEEN PREPARED BY OR UNDER THE RESPONSIBLE CHARGE OF, WHO IS/ARE AND SEALS BY A PROFESSIONAL ELECTRICAL ENGINEER, AND A CONSTRUCTION PERMIT FOR THE EXECUTION THEREOF IS FIRST SECURED; AND UNLESS THE WORK IS DONE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE AND IS OBTAINED UNDER THE RESPONSIBLE CHARGE OR SUPERVISION OF A PROFESSIONAL ELECTRICAL ENGINEER, A REGISTERED ELECTRICAL ENGINEER, OR A RESIDENT MASTER ELECTRICIAN, AS THE CASE MAY BE, AND THE RELEVANT PROS AND MINISTERIAL REGULATIONS OF THE GOVERNMENT AGENCY, IF ANY, EXERCISING JURISDICTION OVER THE PARTICULAR INSTALLATION HAVE BEEN COMPLIED WITH. - SEC. 24 OF REPUBLIC ACT NO. 7905.								

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.

**PROGRAM OF WORKS
BILL OF QUANTITIES
REPAIR 2024 - RIV-A - RELC-NEAP - 001**

Region : IV-A CALABARZON	Date:														
Project Title :	Budget Allocation:														
REPAIR, REHABILITATION AND MAINTENANCE OF NEAP FACILITY (REGION IV-A CALABARZON)	Engineering and Administrative Overhead:														
	Approved Budget for the Contract:														
	Completion Period: 135 Calendar Days														
	Minimum Required Manpower:														
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Electrical Engineer</td> <td style="width: 33%;">General Foreman</td> <td style="width: 33%;">Carpenter</td> </tr> <tr> <td>Civil Engineer/ Architect</td> <td>Master electrician</td> <td>Painter</td> </tr> <tr> <td>Safety Officer</td> <td>Master Plumber</td> <td>Scaffolder</td> </tr> <tr> <td>First Aider</td> <td>Welder</td> <td>Plumber</td> </tr> <tr> <td>Helper</td> <td>Mason</td> <td>Steelman</td> </tr> </table>	Electrical Engineer	General Foreman	Carpenter	Civil Engineer/ Architect	Master electrician	Painter	Safety Officer	Master Plumber	Scaffolder	First Aider	Welder	Plumber	Helper	Mason
Electrical Engineer	General Foreman	Carpenter													
Civil Engineer/ Architect	Master electrician	Painter													
Safety Officer	Master Plumber	Scaffolder													
First Aider	Welder	Plumber													
Helper	Mason	Steelman													
Location :	Minimum Required Equipment:														
P. Montecer St, Malvar, Batangas, Philippines	Hand Tools	Pipe threader	Power Tools												
	One-Bagger Mixer	PPR Fusion Weld													
	Welding Machine	Hydraulic Pressure Test Pump													
	Bar Cutter	Jack Hammer													

Item No.	Description	% of Total	Unit	Quantity	Direct Cost		Adjusted Unit Cost (8) / (5)	Adjusted Total Cost (9)
					Total Cost (6)	Unit Cost (7) (6) / (5)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
A.	Facilities for the Engineer							
A.1	Temporary Facilities		Month	4.50				
B.	Other General Requirements							
B.1	Fire Safety Inspection Certificate (FSIC)		lot	1.00				
SPL 1	Project Billboard		Each	1.00				
SPL 2	Construction Safety and Health		Month	4.50				
B.2	Security/ Bill Deposit		Ls	1.00				
B.3	Equipment Testing and Commissioning		Ls	1.00				
C.	Mobilization and Demobilization							
C.1	Mobilization and Demobilization		Ls	1.00				
1	Earthworks							
1 (a)	Clearing and Grubbing		sq.m	45.28				
20 (a)	Manual Soil Excavation		cu.m	108.88				
1 (c)	Backfilling of Excavated Materials		cu.m	101.99				
1 (d)	Gravel Bedding		cu m	20.73				
2	Concreting Works (3000 psi)							
2(a)	Demolition of Reinforced Concrete		cu m	33.34				
2 (b)	Structural Concrete (Footing and Slab on Fill) - 3000psi		cu m	46.78				
2 (c)	Structural Concrete (Footing Tie Beam, Column, Suspended Slab, Girder/ Beam) - 3000psi		cu.m	6.27				
2 (h)	Ramp on Fill - 3000psi		cu m	2.07				
3	Rebar Works							
21 (a)	Reinforcing Steel Bar, Grade 33		kg	2,881.00				
4	Formworks							
4 (a)	Installation and Removal of Formworks		sq.m	110.04				
5	Masonry Works							
5 (a)	Demolition of Masonry Wall		sq m	144.62				
5 (b)	Masonry (100 mm CHB)		sq.m	139.54				
5 (d)	Plain Cement Plaster Finish		sq.m	318.22				
6	Fabricated Materials and Hardware							
6 (a)	Removal of Door with Jamb		set	33.00				
6 (b)	Removal of Window with Jamb		set	2.68				
6 (d)	Wooden Panel Door		sq m	62.79				
6 (f)	Frames (Jambs, Sill, Head, Transoms, and Mullions)		set	31.00				
6 (g)	Ramp Rail		Ls	1.00				
6 (Ls-1)	Aluminum Door and Jamb Analok Finish, stainless steel hinges and lock		Ls	1.00				
6 (Ls-2)	Aluminum Sliding Window with Jamb, Analok/Bare Finish		sq m	3.00				
6 (Ls-3)	Relocation of Stainless Steel Letterings		Ls	1.00				
6 (Ls-4)	12mm tempered Glass Frameless Glass Door/ Glass Partition		Ls	1.00				
7	Steel Works							
7 (a)	Removal of Steel Trusses		kg	375.60				
7 (d)	Structural Steel Purlins		kg	5,018.94				
7 (g)	Metal Structure Accessories (Sag Rods)		pc	14.00				
7(Ls-1)	Rolled Shaped Steel		Ls	1.00				
7(Ls-2)	Steel Matting 2" x 2" x 3mm, 4ftx8ft		Ls	1.00				
7(Ls-3)	Repair of Water tank		Ls	1.00				
8	Roofing Works							
8 (a)	Removal of Metal Roofing		sq.m	34.69				

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UP		VAT (5%)	TOTAL INDIRECT COST	ADJUSTED TOTAL COST	ADJUSTED UNIT COST
					OCM	PROFIT	%	VALUE				
13 (c)	Metal Painting	1,594.95	sq.m									
14.0000	Tile Works											
14 (a)	Glazed Tiles and Trims	554.79	sq.m									
14 (b)	Unglazed Tiles/ Granite Tiles/ Synthetic Granite Tiles	1,141.35	sq.m									
14 (LS-1)	Removal of Tiles	1,262.67	sq.m									
15.0000	Mechanical Works											
15 (Ls-1)	Ceiling Exhaust Fans and Air Vent Ducting	1.00	Ls									
	TOTAL CONSTRUCTION COST										-	

Prepared by:

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. 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; **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; **and**
- (d) Special PCAB License in case of Joint Ventures **and** registration for the type and cost of the contract to be bid; **and**
- (e) 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; **and**
- (f) Project Requirements, which shall include the following:
- a. Organizational chart for the contract to be bid;
 - b. List of contractor’s key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
 - c. List of contractor’s major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**
- (g) 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

- (h) The prospective bidder’s computation of Net Financial Contracting Capacity (NFCC).

Class “B” Documents

- (i) 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

- (j) Original of duly signed and accomplished Financial Bid Form; **and**

Other documentary requirements under RA No. 9184

- (k) Original of duly signed Bid Prices in the Bill of Quantities; **and**
- (l) 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; **and**
- (m) Cash Flow by Quarter.

